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CANCER IN AFRICA: APPROACHES, COLLABORATIONS, IMPACT

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DEFINING THE CORRELATION BETWEEN IMMUNE-CHECKPOINT INHIBITORS-RELATED ADVERSE EVENTS AND SURVIVAL OUTCOMES: A SYSTEMATIC REVIEW AND METANALYSIS

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Background: The use of immune checkpoint inhibitors (ICIs) has become a standard treatment for many cancers. This study aimed to systematically review the literature to determine whether the development of immune-related adverse events (irAEs) resulting from ICIs was associated with survival outcomes.

Methods: Relevant articles assessing the association between irAEs and clinical outcomes were searched from Web of Science, Chochrane, Pubmed, and Embase (March 1st, 2016 until March 1st, 2021). Key bibliographies of included studies were also searched for relevant articles. Outcomes of measures of interest include Overall survival (OS) and Progression-free survival (PFS)

Results: Of the 2294 unique citations, 18 studies met inclusion criteria. The included studies' sample sizes ranged from 52 to 1959 patients (median n = 190 patients). 16 studies looked at distinct cancer types, and the remaining 2 studies looked at various tumors. Tumor-specific studies included Melanoma (n=4), Non-small cell lung cancer (NSCLC) (n=4), Renal cell carcinoma (n=2), Urothelial cancer (n=2), Head and neck cancer (n=1), Gastric cancer (n=2), all solid tumors (n=1), across various tumors (n=1). ICI agents used include Atezolizumab, Pembrolizumab, Nivolumab, Ipilimumab, and Durvalumab.
In a pooled analysis, the development of irAEs (versus without irAEs) was associated with better OS across various tumors (HR= 0.45; 95% CI=0.40-0.52). However, this was not translated in PFS (HR= O.92; 95% CI=0.92-2.20, p= 0.0001). Since the majority of the included studies were NSCLC studies, a subgroup analysis of NSCLC studies did not show a similar OS benefit (HR= 1.60; [95% CI= 0.14-18.4], p=0.71)

Conclusion: A positive association was noted between the development of irAEs and OS across various tumors. However, irAEs were not associated with positive PFS outcomes. A prospective tumor-specific study is necessary to find a true association between irAEs and clinical outcomes.

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RISK FACTORS FOR ABNORMAL CERVICAL CYTOLOGY IN WOMEN LIVING WITH HIV IN NIGERIA-DATA FROM U54 STUDY ON EPIGENOMIC BIOMARKERS OF HIV-ASSOCIATED CANCERS

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Introduction: In 2019, it was reported that 68% of the 38 million PLWH worldwide reside in Africa. Increasing use of ART has led to better control of HIV, aging of HIV-infected populations and declining deaths due to opportunistic infections, with attendant increase in cancer incidence and mortality. Higher incidence of squamous intraepithelial lesions of 20-30% has been reported. We evaluated the prevalence of precancerous cervical lesions among HIV-positive women on ART and associated risk factors.

Methodology: The subjects were 1,827 HIV-positive women on ART enrolled in the U54 study (from the Northern and Southern parts of Nigeria) and screened from 2018 to 2020. Ethical approval was obtained. We analyzed the cytologic features of Pap smears, age, parity, CD4 count, and viral load. Data was compared between those with and without epithelial abnormalities. Bivariate and multivariate statistical analysis of key variables were conducted.

Results: The mean age (SD) of the subjects was 43.38years(7.99), mean (SD) parity 4.2(6.29) and initial CD4 count; mean (SD) was 351(231.7). Of the 1,827 cases analyzed, 247(13.5%) had abnormal Pap smears (ASCUS, ASC-H, AGUS, LSIL, HSIL, Squamous cell carcinoma, Adenocarcinoma) while 1,580 (86.5%) cases were negative (NILM). An initial bivariate analysis showed that age (p<0.001), parity (p<0.001) and study site (p<0.001) were statistically associated with abnormal Pap smear. Multivariate analysis showed that with every increasing year of age, patients were 1.12 times more likely to have abnormal Pap smear, (95%CI: 1.02-1.46 p<0.001). Women recruited from the northern part of Nigeria were 3.59 times more likely to have abnormal Pap smear. (95%CI: 2.57-4.99 p<0.001)

Conclusion: Increasing age, parity and study site were significantly associated with abnormal Pap smear. Regular screening among older HIV positive women should be prioritized. Research into possible site-specific variations in patient characteristics may shed some light on the differences in Pap smear findings across sites.

Keywords- HIV-positive women, Abnormal Pap smear, CIN, precancerous lesions, CD4

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THE AFRECC GWAS OF ESOPHAGEAL CANCER IN AFRICA

The AfrECC GWAS Consortium[1,2,3,4]
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OBJECTIVE: Esophageal squamous cell carcinoma (ESCC) is a common cancer in Eastern and Southern Africa. Prior genome wide association studies (GWAS) in people of Chinese ethnicity suggest that this cancer is highly heritable. In addition to the etiologic insight that can be revealed by GWAS, the strengths of association in prior studies suggest that these results may serve as the basis for a polygenic risk score for ESCC.

METHODS: We are assembling ESCC cases and controls from sites recruiting subjects for epidemiologic studies in multiple countries including Ethiopia, Kenya, Tanzania, Zambia, and Malawi that collaborate in the African Esophageal Cancer Consortium (AfrECC) . The study will use DNA collected from blood or salvia and self-reported data on sex, age, ethnic group, tobacco smoking, and alcoholic beverage consumption. Biological samples and data are being consolidated at the US National Cancer Institute. Genotyping will be completed using the H3Africa Consortium Array, which contains >2.2 M markers. Analyses will use standard GWAS methods adapted for the substantial genomic heterogeneity across these diverse populations.

RESULTS: To date, we have identified and collected about 2000 cases and controls from case-control studies in the noted countries. Subject accrual continues at multiple sites, building a larger sample set for future discovery and validation studies. Additional esophageal cancer case and control samples from other study sites will be welcomed to enhance the overall study. An independent ESCC GWAS (Mathew CG personal communication) in South Africa will offer a chance for mutual replication.

CONCLUSIONS: The AfrECC consortium GWAS has assembled a large, diverse collection of ESCC cases and controls and should provide novel genetic insights into the esophageal cancer risk in Africa.

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HEPATOCELLULAR CARCINOMA (HCC) TREATMENT GUIDELINES FOR AFRICA

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HEPATOBILIARY CANCER Co-Convened by AORTIC and NCI, STREAM 1, November 7, 2021, 6:00 PM - 7:15 PM

HCC is the fourth most common cancer in Africa. The predominant risk factors of HCC in Africa are hepatitis B being the predominant risk factor in Sub-Saharan Africa and hepatitis C in Egypt. The accessibility and cost of prevention strategies, including vaccination against hepatitis B and the fight against aflatoxin, remain an impediment for the disease. The limited overall survival of 3 months is mainly driven by late-stage presentation and limited access to most of the novel therapeutic approaches. A steering committee that represents all Africa and consists of experts in all pertinent disciplines including epidemiology, hepatology, gastroenterology, surgery, interventional radiology, medical oncology was built two years ago. A virtual meeting will be held on October 19 and 20. All members of the healthcare field and with an interest in HCC are welcome to attend and contribute to the open discussions. At registration, a polling questionnaire will be be provided to all attendees to help build the real-world data experience and perspectives. The hands-on experience of members of the steering committee members and attendees will help develop guidelines designed specifically for Africa. The effort will help develop joint Africa continent HCC guidelines for surveillance and prevention, and for treatment. These guidelines will also be studied in the geo-economic GDP per capita three regions of Africa: North and south, east and west, and central Africa. In preparation for the event, the steering committee will continue to meet on regular basis, and plan to have a dry run of the meeting to ensure its success. It is a great honor to present the results of the effort at the AORTIC meeting in Dakkar, Senegal. Further plans for broadcasting, publishing the guidelines and a plan for annual updates will follow.

THE SOUTH AFRICAN HIV CANCER MATCH STUDY: CANCER INCIDENCE IN HIV-POSITIVE CHILDREN

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Objective:
We aimed to determine cancer incidence in a national South African cohort of HIV-positive children.

Methods:
The South African HIV Cancer Match Study (doi:10.31219/osf.io/w52sb) is a national cohort of people living with HIV with cancer outcomes created from HIV laboratory and South African National Cancer Registry records. For the current analysis, we included children aged 0-14 years at HIV first HIV-related laboratory record between 2004 and 2014. We defined time under observation from the date of the first HIV-related laboratory test to cancer diagnosis or last known HIV-related record. We calculated crude cancer incidence rates per 100,000 person-years and determined hazard ratios (HR) with 95% confidence intervals (CI) from Cox proportional hazard ratio models adjusted for age and CD4 count at HIV diagnosis, sex, year of cohort entry, CD4 count, socioeconomic status and rural/urban settings.

Results:
A total of 313,097 HIV-positive children were included in the study. In 802,030 person-years of follow-up, 743 incident cancers were diagnosed for an overall cancer incidence rate of 92.6/100,000 person-years. The majority (58.1%) of all diagnosed cancers were in males, incidence rate 111.8/100,000 person-years [95%CI: 101.7-122.8]. The most frequent cancer was Kaposi sarcoma (20.9%), with an incidence rate 19.3/100,000 person-years (95%CI:16.5-22.6). Children with CD4 counts between 50-99 cells/µl at baseline had a higher risk of developing cancer (aHR 1.73, 95%CI: 1.15-2.59) compared to children with CD4 counts of more than 700cells/µl at baseline. Children aged 10-14 years had the highest risk of developing cancer (aHR 1.64, 95%CI: 1.30-2.06) compared to children aged 0-4years old at entry into cohort.

Conclusions:
In our study, Kaposi sarcoma was the most common cancer in HIV-positive children, as similarly seen in adults living with HIV. The increasing cancer risk with older age at HIV diagnosis is likely due to delayed HIV diagnosis and initiation of ART among perinatally infected children. There is need to strengthen identification and treatment of HIV-positive children to reduce overall HIV related childhood cancer risk.

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THE SOUTHERN AFRICA CHILDHOOD CANCER REGISTRY

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CANCER REGISTRIES, STREAM 3, November 9, 2021, 12:30 PM - 2:00 PM

In Africa, population-level data on childhood cancers is sparse and incomplete, particularly information on staging and coding. Where population-based cancer registries (PBCRs) exist, they mainly focus on adult cancers. To address this issue, the Childhood Cancer Surveillance project aimed to establish national childhood cancer programme within five Southern African countries (Eswatini, Mozambique, South Africa (SA), Zambia and Zimbabwe).

All participating centres have functioning PBCRs with either national (SA, Eswatini and Zimbabwe) or regional (Mozambique and Zambia) coverage. Registrars were trained on the specifics of childhood cancer registration which included using the Tier 1 Toronto Childhood Cancer staging guidelines stage and to improve the accuracy of coding. All childhood cancers for the years 2018-2019 were retrospectively captured, staged, and information on treatment and vital status at end of 31 December 2021 were recorded where possible.

Cancer cases recorded ranged from 150 in Eswatini to over 800 in Mozambique and SA. The most common cancers varied by country; retinoblastoma in Zambia (17%), leukaemias in Eswatini (13%) and SA (21%), Wilms tumour in Zimbabwe (16%) and Burkitts lymphoma in Mozambique (11%). Staging was assigned for <10% of cases captured before the training. After the training, staging improved to ≈45-50% across the region. Treatment and outcome information was rarely recorded before the project started.

National childhood cancer registration is feasible and cost-effective when incorporated within a PBCR. Tailored training on staging can effectively enable cancer registrars to code stage on childhood cancers. Information on treatment (type and initial date) is hard to find where medical records are on paper form and stored in different systems. Active follow-up requires additional resources. Clinicians need training to include sufficient information on staging, treatment and survival in order to strengthen surveillance of childhood cancers.

FINANCIAL IMPLICATION OF PROSTATE CANCER HYPOFRACTIONATED RADIOTHERAPY

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Keywords- Prostate cancer, hypofractionation, financial implication.

Background-
Prostate cancer is the 2nd most common cancer in males, worldwide & not far behind lung cancer incidence. Radiation holds the potential to cure non-metastatic disease (T1b-T3a), however the old 8-week long conventional radiation treatment is too lengthy & costly for patients. Non-inferiority CHHiP trial established 4 week long hypofractionated radiation which provided a big relief to patients saving substantial cost & time.

Method-
In 2019 at HCGCCK Cancer Centre, Nairobi I had started the shorter 4-week regimen for all prostate cancer patients (T1b-T3a N0 M0) needing radiation & the expenditure, both direct as well as indirect was calculated. Direct cost includes cost of radiation, treatment planning & was obtained from hospital bills. Drug cost was excluded as the amount was too small & insignificant. Indirect cost includes the cost of staying in Nairobi, food & the cost of commuting (local patients) which were obtained from each patient. Total cost during radiation was compared for both 8 week & 4-week regimen. 10 patients participated in the study.

Result-
Direct cost had reduced from 1750 USD to 1100 USD favoring the shorter 4-week regimen. This translates to 37% cost reduction. Indirect cost was reduced by 50% as the duration of stay reduced from 51 days (8 weeks RT) to 26 days (4 weeks RT) for patients who are from other cities. Those from Nairobi had informed similar figure of commuting cost reduction.
Overall, the total cost (direct & indirect) of radiation treatment was reduced by 40%.

Conclusion-
All patients were glad to know the reduced duration of radiation treatment & 40% cost saving. The time factor has not been taken into account, few patients on job were able join their workplace 4 weeks earlier.

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ACCOMPAGNEMENT INFIRMIER DU PATIENT ATTEINT DE CANCER EN PHASE METASTATIQUE : EXPERIENCE DU SERVICE D'ONCOLOGIE DU CHU SO DE LOME

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OBJECTIFS
La prise en charge d'un cancer en phase métastatique a pour but de prolonger la survie et de maintenir la qualité de vie. Les patients atteints de cancer en phase métastatique présentent de nombreux symptômes qui entrainent une dépendance de la personne malade vis-à-vis de ses proches ou des soignants. L'objectif de cette étude était d'évaluer le comportement des infirmiers devant un patient en phase métastatique dans le service d'oncologie.

METHODES
Il s'est agi d'une étude transversale de type descriptive portant sur 30 patients et 8 infirmiers qui s'est déroulée du 27 Juillet au 27 Août 2020. Les caractéristiques socio-démographiques, les soins relationnels faits aux patients, les difficultés et émotions des infirmiers et l'appréciation du comportement des infirmiers par les patients ont été recueillis.

RESULTATS
L'âge moyen des infirmiers était 34,38 ans, il y avait 5 hommes et 3femmes soit un sexe ratio de 1,63. La majorité des infirmiers (87,5%) n'avaient pas reçu de formation en soins palliatifs. Les émotions exprimées face aux patients étaient le stress (100%), la tristesse (100%) et la peur (50%). Sur les 30 patients atteints de cancer en phase métastatique, il avait 22 femmes et 8 hommes. L'attente des patients de la part des infirmiers était le soutien psychologique et moral et le soulagement des douleurs. La majorité des patients (72, 3%) avaient affirmé n'avoir pas été bien informés par l'infirmier sur leur maladie mais plus des trois-quarts (76,6%) étaient satisfaits de l'aide apportée par l'infirmier.

CONCLUSION
L'accompagnement infirmier des patients en oncologie se heurte à de nombreuses difficultés. Cette étude souligne l'intérêt et la nécessité d'une formation en soins palliatifs des infirmiers exerçant en oncologie.

Mots clés : accompagnement, infirmier, cancer, patient

INCREASING ACCESS TO QUALITY RADIOTHERAPY DELIVERY THROUGH MULTI-STAKEHOLDER PLANNING

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OBJECTIVE

To present the process of preparing the radiotherapy development plan (RDP) for the city and the radiotherapy quality assurance (RQA) program to ensure radiotherapy is delivered safely and effectively.

METHOD

One of the foundational steps in the C/Can process is a data-driven needs assessment to identify key gaps and opportunities for improving access to quality cancer care. Radiotherapy professionals in cities from both public and private sectors analyzed the gaps and planned solutions which include mapping out partners availability. An average of 200 healthcare professionals from 38 institutions and 50 patients were involved in the process.

RESULTS

Main findings on needs and challenges identified in both Kumasi, Ghana and Kigali, Rwanda included the lack of radiotherapy services and quality assurance measures. To address them, a project was delivered to develop RDP and RQA.

● Review the current level of resources in city (infrastructure, human resources, patients), C/Can guides and international benchmarks

● Estimation of the demand for radiotherapy services based on international standards

● Develop initial draft by project team which was consulted with wider group of experts in cities to align with National Cancer Control Plan (NCCP) /Health Plan

● Consult with external experts nominated by International Atomic Energy Agency (IAEA) to align the plans with international benchmarks

● Final one will be submitted to the City Executive Committee (CEC) and relevant authorities for endorsement of implementation

CONCLUSION

The success of the process relies on local leadership and ownership of the CEC that oversees it, with support from the global City Cancer Challenge Foundation team. Project implementation is led by coordinators and a technical team. Strategy for political buy-in includes involvement of all relevant stakeholders (private and public), alignment with the NCCP, endorsement of outputs by relevant national authorities such the Ministry of Health, as well as advocacy and dissemination activities.

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ASSESSMENT OF ONCOLOGY TRAINING NEEDS OF CLINICIANS IN NIGERIA (ASOTECN)

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OBJECTIVE

Cancer is a leading cause of death globally with an increasing morbidity and mortality burden in Nigeria. There is an urgent need for effective responses and evidence-based actions to address this challenge. A critical requirement is the availability of a skilled workforce competent in cancer research and practice. This is aggravated by the lack of adequate training opportunities in oncology pathways towards towards independence in cancer research. The objective of this study is to investigate the status of training in oncology practice and research for clinicians (Medical Doctors, Nurses and Pharmacists) in Nigeria and their training needs to inform the development of a tailored capacity building program. This will strengthen and sustain the capacity for improved oncology care, research and practice.

METHODS

This research adopted a convergent parallel mixed method design with data collection from Nigeria six geopolitical zones using a semi-structured questionnaire and an in-depth interview guide via Survey Monkey. The minimum sample size for this study was 424; using the formula of a single population proportion: $n = [(Z\alpha/2)2\ p(1-p)/d2]$. Stratified sampling technique by profession using a ratio of 15 Nurses to 4 Doctors to1 Pharmacist based on literature. The tool assessed respondents' socio-demographic characteristics, opportunities for oncology-focused training, preparedness for oncology practice, research and specific cancer-focused training needs in combination with in-depth interviews. Data is currently being collected and the quantitative part will be analyzed using descriptive statistics and Chi-square tests. Independent factors associated with preparedness for cancer research and practice will be assessed using binary logistic regression model. Measures of effect will be reported as Odds Ratio with 95% Confidence Interval (95%CI). For the qualitative data, interview guide was used to conduct 30 key informant interviews with vital key stakeholders. The audio recordings will be transcribed verbatim and the transcripts will be coded using NVIVO 12.0 software. Subsequently, there will be a triangulation and integration of the qualitative and quantitative data to produce a single report. The protocol received approval from the UI/UCH Research Ethics Committee with written informed consent obtained from study participants.

RESULTS AND CONCLUSIONS

The outcome of this study is critical and will guide the development of tailored, training interventions aimed at building the clinical and research capacities of the next generation of cancer researchers and clinicians in Nigeria. Invariably, this will contribute an improvement in the health system and accelerate progress towards the reduction of the global disparties in cancer outcomes.

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STATE OF ONCOLOGY NURSING TRAINING AND PRACTICE IN A SOUTHWESTERN NIGERIAN TEACHING HOSPITAL

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Objective: Oncology nursing has been recognized as a nursing specialty but it is yet to come to stay in Nigeria. In most of the hospitals in Nigeria, non-specialist oncology nurses are the ones caring for the cancer patients hence this tends to affect the quality of nursing care rendered. The objective of this study is to examine the state of oncology nursing training and practice in Nigeria

Methods: A descriptive, cross-sectional study was used to assess 171 respondents' socio-demographic data, nature of oncology training received by nurses, nurses' practise and competency level using a self - developed questionnaire.

Results: only 3(1.8%) of the respondents had a degree in oncology and 89.9% had no formal training in oncology.13.5% of the respondents rated themselves as experts in oncology nursing practise. Majority of the respondents see the state of oncology nursing practice has been poor while the major challenge facing oncology nursing practice in Nigeria is unavailability of oncology nursing training institution.

Conclusion: With the menace of increasing incidence of cancer in Nigeria and the rise in number of new cases daily, there is need to have an established program to train health care professionals especially nurses in order to be able to respond to these rises. Nurses need to improve their level of education and skills in order to offer appropriate care to clients living with cancer in order to improve patient's outcome for cancer survivor ultimately enhancing their quality of life.

Keywords: Oncology Nurse; Oncology training; Competency; Practice.

PREVALENCE AND FACTORS ASSOCIATED WITH ANXIETY AMONG CAREGIVERS OF CANCER PATIENTS

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OBJECTIVE: The increasing incidence of cancer and the demands of accessing treatment for a family member with cancer has implication for the psychological health of caregivers. This study sought to determine the prevalence and factors associated with anxiety among caregivers of cancer patients

METHODS: Using a cross-sectional study design, we studied 203 eligible caregivers of patients with cancer assessing treatment at the University College Hospital, Ibadan. The caregivers' anxiety was assessed using the anxiety subscale of the hospital anxiety and depression scale (HADS). Data was analyzed using descriptive and inferential statistics on SPSS software version 23. The results were interpreted at 5% level of significance.

RESULTS: The mean age was 39.9 ± 12.8 years and majority were females (62.1%). Anxiety was prevalent among 76.85% of the caregivers, 23.15% having scores within normal range about one-third reported severe anxiety (36.45%). Caregivers anxiety was significantly associated with being female, older than 40years, lower level of education and financial challenges ($p<0.05$). Patients' being 12years or younger, single, more hospital admissions and receiving or not receiving treatments were significantly associated with caregivers' anxiety ($p<0.05$). Binary logistic regression analysis after adjusting for non-significant variables however showed that female caregivers were 3times significantly more likely to experience anxiety compared to males (OR: 3.100; 95% C.I: 1.128 – 8.520). There was also a weak but statistically significant increase in anxiety among caregivers who borrowed money to provide care compared to those who did not (OR: 0.197, 95% C.I: 0.053 - 0.726).

CONCLUSION: There is a high prevalence of anxiety among caregivers of patients with cancer which is significantly associated with being female and borrowing money to meet the treatment demands. Caregivers of cancer patients would benefit from the provision of psychosocial services to help manage their anxiety.

KEYWORDS: Anxiety Prevalence, Caregivers, cancer patients.

COLORECTAL CANCER PRESENTATION AND SURVIVAL OUTCOMES IN NIGERIA: A PROSPECTIVE MULTI-CENTRE COHORT STUDY OF 543 PATIENTS

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Objective: Prospective data on colorectal cancer (CRC) presentation and outcomes in Nigeria is limited, however emergency presentation with advanced disease is thought to be common. Using the African Research Group for Oncology's prospective, multisite database of CRC patients in Southwest Nigeria, we evaluated risk factors for emergency CRC presentation and effects on overall survival (OS).

Methods: Consecutive CRC patients presenting between XX 2013 and May 2020 to five referral sites were included. Demographic, socioeconomic and disease-related risk factors for emergency presentation were evaluated using univariate and multivariable logistic regression methods. We compared OS between emergency and elective patients, stratified for clinical stage, using Kaplan-Meier survival and Cox proportional hazards methods.

Results: Of 543 CRC patients, 168 (30.9%) presented emergently. Median age at diagnosis was 55 years, 53% were male, and 4.8% reported a family history of cancer. Patients presenting emergently were more likely to have cancers proximal to the splenic flexure (41.1% vs 24.6%, p<0.001), stage IV disease (62.7% vs 43.4%, p<0.001) use non-motorized transport (54.4% vs 37.7%, p=0.001), have a lower median household income (USD\$65/month vs \$USD79/month, p<0.04), and lower education level than those presenting electively. On multivariable regression analysis, only low BMI, stage IV disease, mode of transport and hospital site were significantly associated with emergency presentation.Median OS was a median of 6 months shorter in the emergency compared to elective presentation group. After adjustment for clinical stage at diagnosis, emergency presentation was still associated with significantly worse OS (HR 1.52; 95% C.I. 1.36-1.63, p<0.001).

Conclusion: A high proportion of CRC patients in Nigeria present emergently, with advanced disease. Even after adjusting for clinical stage, these patients have worse overall survival. Earlier detection of cancers, including removing barriers to timely presentation and diagnosis, should be a focus of cancer control efforts.

MITOQUINOL MESYLATE IMPROVES PROGNOSIS AND HEMATOLOGICAL ABERRATION IN CIRRHOTIC-HEPATOCELLULAR CARCINOGENIC RATS

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INTRODUCTION: The safety and efficacy of Mitoubiquinol Mesylate (MitoQ) in attenuating the progression of HCC in Wistar rats has previously been reported by our team. However, the effects of MitoQ on prognostic and hematological indices in cirrhosis and HCC have not been fully investigated. The present study sought to investigate the potential of MitoQ in improving the prognosis and hematological profile of diethyl nitrosamine (DEN)-induced cirrhotic-HCC rats.

MATERIAL AND METHOD: One hundred male Wistar strain albino rats were randomly divided into five groups and were subjected to different combinations of DEN and MitoQ. Time series blood samples from each group were collected to evaluate the levels of COL-IV, AFP-L3, GPC-3, Nrf2 and hematological parameters.

RESULTS AND DISCUSSION: Administration of MitoQ improved the prognosis of HCC rats as shown by significant ($p < 0.05$) decreases in the levels of Nrf2 and cirrhotic-HCC biomarkers in a time-dependent manner. The erythrogram parameters were continuously deranging with the progression of HCC in Wistar rats. Also, the levels of white blood cells, differential leucocytes counts and platelets were significantly reduced in the DEN group compared to healthy control at the advanced HCC stage. Interestingly, mitoQ interventions significantly ($p < 0.05$) reversed alterations in hematological indices induced by DEN toxicity

CONCLUSION: Our findings suggest that MitoQ is safe and capable of improving prognosis and alleviating hematological abnormalities associated with cirrhosis and hepatocellular carcinoma.

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TREATMENT OUTCOMES AMONG HUMAN EPIDERMAL GROWTH FACTOR RECEPTOR 2 POSITIVE BREAST CANCER PATIENTS: A SYSTEMATIC REVIEW

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Objective: The incidence of human epidermal growth factor receptor 2 (HER 2) positive breast cancers is rapidly rising worldwide. Although there have been many studies on HER 2 breast cancer treatment and management in recent years, there is a lack of comprehensive reports on the treatment outcomes and disparities within the available literature. Hence, this review aimed to determine the treatment outcomes and their associated factors among patients with HER2-positive breast cancer.

Methods: A computer-based systematic literature search was conducted using PubMed, EMBASE, and Google scholar databases of articles published from 2000 to 2020. The following key terms (HER 2 positive breast cancer, predictor, determinant, associated factor) and Medical Subject Headings (MeSH) terms (breast neoplasms, treatment outcome, and risk factors) were used to search the English language published articles.

Results: In most studies, trastuzumab was the most commonly used treatment regimen in combination with chemotherapeutic agents. Generally, most of the studies (15 studies) showed that the overall survival outcome was relatively higher after treatment among HER2 positive breast cancer patients. Nonetheless, two studies showed that the absence of significant change in the overall survival despite adequate treatment was given to the study participants. In addition, three studies demonstrated a partial response after treating HER2-positive breast cancer patients.

Conclusion: Generally, the overall survival outcome was relatively higher after treatment among HER2 positive breast cancer patients. The addition of trastuzumab in most of the studies has shown improvement in the overall survival and the disease-free survival rate of the study patients.

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PRECISION MEDICINE IN CANCER; IS AFRICA READY FOR A PARADIGM SHIFT IN CANCER MANAGEMENT

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Objective
Treatment paradigms are rapidly changing for most cancers especially those that are refractory to treatment. Genomic assays are recently demonstrating new novel actionable targets in approaching these cancers. Precision medicine tailor's new treatments based on a person genetic makeup or genomic profile based on the particular cancer they have. We study over a year thirty cases of cancers in our institution that had chemotherapy/radiotherapy without any precision treatment.
Method
Thirty cases of diagnosed cancer patients were randomly selected from our departmental archives. Data on investigation done, type of cancer diagnosed, method of histological diagnosis, treatment received and follow up for nine months were all documented.
Results
Of the thirty patients studied (age range 5-72 years), most 40% were having breast cancer, 24% prostrate cancer, pediatric cancer 18% and soft tissue malignancies. Routine H&E was the method of diagnosis in almost all cases of these cancers with immunohistochemistry done only on breast cancers. High mortality 70% were seen in pediatric cancer patients as they commence chemo/radiotherapy, followed by patients with advance breast cancer.
Conclusion
Africa is still lacking behind in terms of cancer management due to multiple factors with the attainment of bench to bedside precision medicine a far dream in most African settings. We advocate for a holistic approach to these issues for decrease mortality in our cancer patients.

A COMPARISON OF CLINICOPATHOLOGIC FEATURES OF PROSTATE CANCER BETWEEN NIGERIAN AND SOUTH AFRICAN BLACK MEN

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BACKGROUND: Globally, prostate cancer (PCa) is known, with little reasons, to be more aggressive among black men. This disproportionate pattern of PCa especially among black men resident in Africa calls for a closer look. The present study investigated the clinicopathologic behaviour of PCa among Nigerian and South African black men and the relationship between the disease and socio-demographic characteristics alongside medical co-morbidities.

METHODS: A retrospective cross-sectional study was undertaken in which de-identified records of 234 black men with pathologically confirmed PCa between 2007 and 2017 from two tertiary hospitals, in Nigeria (National Hospital, Abuja) and South Africa (Tygerberg Hospital, Cape Town), were reviewed.

RESULTS: Median age at presentation from both countries was 66years (Interquartile Range, IQR 61-73years) while the median PSA at presentation was 46ng/ml (IQR 16-336.5ng/ml). Half of the men (117/234) presented with locally advanced disease while metastatic disease was observed in 65.9% (27/41) of Nigerian men and 34.1% (14/41) of South African men. Thirty-three percent of the men presented with organ-confined disease. Overall, Nigerian men presented with less organ-confined disease and significantly higher stage of disease (p<0.001).

Risk stratification using PSA, Gleason scores and T-staging showed that 84.2% (n=197) of all the men presented with high-risk PCa disease. There was a statistically significant difference between Nigerian and South African black men (p=0.003) in terms of disease risk at presentation.

Logistic regression analysis showed that age (Adjusted OR=1.053(95% CI:1.003-1.106), p=0.003) and country of residence (Adjusted OR=4.281(95% CI:1.690-10.844), p= 0.002) had a statistically significant relationship with high-risk PCa while disease co-morbidities and rural/urban location in both countries did not.

CONCLUSIONS: Disparities exist between PCa presentation and clinicopathologic behaviour among Nigerian and South African black men. Nigerian men showed higher disease risk at presentation. Environmental-genetic interactions need further exploration in the aetio-pathogenesis of PCa among black men resident in Africa.

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CERVICAL SMEAR ABNORMALITIES AMONG WOMEN PRESENTING FOR CERVICAL SCREENING IN A TEACHING HOSPITAL SOUTHWEST NIGERIA

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OBJECTIVES: Neoplastic and non-neoplastic cervical lesions, mostly detectable by cytology are major causes of preventable morbidity and mortality in women. This study reviewed the pattern of cervical abnormalities among women presenting for cervical screening at the University College Hospital, Ibadan.

METHODS: The records of all women that presented for cervical screening at the University College Hospital and their cytology results over a period two years (2013-2015) were reviewed retrospectively. The frequencies for the age, relevant gynaecological history, the outcomes of the visual inspection with acetic acid and pap smear tests were retrieved and reviewed. Data analysis was conducted using the Statistical Package for Social Science version 20.

RESULTS: A total of 1,821 screening outcomes were analyzed. Age range was 20-78 years with mean age of 45.1±10.3 years. On visual inspection, 11.3% showed significant findings with 42.9% positive to acetic acid, 34.1%- cervical erosion, 12.7% -Nabothian cyst, 9.3%- cervical polyps and 1%- vulva wart. Only 5.5% had abnormal pap smear result, of these, LGSIL constituted the highest proportion of 46%, 30% had HGSIL and 12%- ASCUS (12%). Those positive to Visual inspection with acetic acid had abnormal pap smear results. Infections reported included Trachomoniasis (6%), Gardnerella vaginalis (4%), and HPV related changes (2%). Statistically, age, parity and contraceptive method did not show any significant relationship with pap smear outcome.

CONCLUSION
Cervical screening remains a vital Key to cervical cancer prevention. More coordinated health education and promotion on cervical screening is necessary to improve uptake of cervical screening thereby reducing the incidence of new cases of cervical cancer.

Key words: cervical smear, abnormalities, cervical screening, cytology

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LE ROLE DES COMMUNAUTAIRES DEPISTAGE DES CANCERS DU COL DE L'UTERUS

Aka H[1]
[1]Hope Life

1.   Objectif

Hope Life a expérimenté l'impact que peuvent avoir les communautaires dans la mobilisation des femmes pour le dépistage des cancers du col de l'utérus en Côte d'Ivoire du 09 au 14 mars 2020.

2.   Méthodologie

La méthodologie pour la réalisation pour la réussite de ce projet à consister à:

•   Choisir le centre de santé (Centre de Santé Communautaire de Gonzagueville),

•   Rencontrer les autorités sanitaires (Directeur départemental, Médecin chef, le Comité de gestion du centre) pour la présentation du projet,

•   Recruter et Former les communautaires sur les moyens de prévention du cancer du col de l'utérus.

Avec le chargé de mobilisation du district sanitaire, nous avons fait des équipes de communautaires et les avons affectés dans les différents quartiers de Gonzagueville. Il y avait au total quatre équipes de cinq personnes. Chaque équipes étaient équipées de :

•   mégaphones,

•   dépliants sur les cancers du col de l'utérus,

•   fiches d'inscriptions,

•   T-shirts.

Les communautaires ont fait du porte à porte et à chaque niveau, ils ont sensibilisé les femmes sur les facteurs de risque, les signes d'alerte et les moyens de prévention.

3.   Résultats

Avec les communautaires nous avons rencontré en deux jours 2471 femmes dont 1947 personnes ont accordé un entretien aux communautaires soit un taux d'acceptabilité de 78.79 %. Nous avons le jour du dépistage reçu 786 femmes qui ont pu se faire dépister.

Pour la vaccination contre le HPV, nous avons enregistré 50 filles là où le centre était à une dizaine de filles vaccinées depuis le mois de novembre.

4.   Conclusion

Avec les communautaires, on est au contact direct de la cibles. Ils ont un grand rôle à jouer dans la lutte contre le cancer du col de l'utérus surtout au niveau de la mobilisation.

Ceux-ci seront d'un appui inestimable pour la mobilisation du projet « SUCCESS » qui est un projet de dépistage et de traitement des lésions précancéreuses.

PREDICTORS OF BURDEN OF CARE IN CAREGIVERS OF CANCER PATIENTS

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Objective: The roles played by caregivers of cancer patients are recognized but the burden is poorly understood. This study therefore assessed the burden of care and its predictors among caregivers of cancer patients.

Methods: Data for this descriptive questionnaire based cross-sectional study was collected from 203 randomly sampled and consenting caregivers of cancer patients at the University College Hospital, Ibadan. The Zarit's Caregiver Burden Scale (ZCBS) and caregiver/patients' socio-demographic and patients' clinical profile form were used in data collection. Data was analyzed using descriptive statistics, chi-square and binary logistic regression analysis on SPSS 23.

Results: The caregivers had a mean age of 39.99 ± 12.8 with a median monthly income of N20,000. Parents of cancer patients made up 42.4% of caregiver, 62.6% of caregivers spent more than 20% of their time providing care and 79.3% borrowed money to assist with the care. The mean score on the ZCBS was 38.42 ± 20.53 out of a maximum obtainable score of 88. Majority of the respondents (35.0%) experienced mild to moderate burden, followed by 22.7% with moderate to severe burden and 21.0% with severe burden. Bivariate analysis revealed that finance related caregiving factors, cancer patients' marital status and receiving of radiotherapy treatment were significantly associated with burden of care (P>0.05) but caregivers' sociodemographic characteristics were not (P>0.05). Binary logistic regression showed that caregivers who indicated being negatively financial affected by caregiving and those caring for separated/widowed patients were thrice (OR: 3.205, 95% C.I: 1.055 - 9.709) and almost 4 times (OR:3.676; 95% C.I: 1.357 - 9.901) respectively more likely to experience burden of care compared to their counterparts (p<0.05).

Conclusion: Caregivers of cancer patients experience high burden of care. Psychosocial support should focus on training caregivers on accessing/sourcing soft financial aids for patients care and strategies for managing burden of care.

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AN ASSESSMENT OF KNOWLEDGE, ATTITUDE AND PRACTICE OF CERVICAL CANCER SCREENING USING THERMAL ABLATION AND VISUAL INSPECTION WITH ACETIC ACID IN KEBBI STATE AND FCT, NIGERIA

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Low-and Middle-Income Countries (LMICs) are the worst hit by cervical cancer mortality. Routine screening is effective for treatment and reduction of related deaths, the use of thermal ablation machines, due to its effectiveness, simplicity, portability, and Visual Inspection using Acetic Acid (VIA) is convenient for remote health facilities in LMICs. Common screening methods as mentioned depend on skilled personnel and substantial financial resources making them difficult to carry out in resource constrained settings. The WHO global strategy of 90-70-90 to eliminate cervical cancer by 2030, requires such affordable techniques and skilled manpower in order to be achievable in LMICs. Thus, a cohort of health personnel from the FCT and Kebbi state were trained in VIA and thermal ablation; and were assessed regarding Knowledge, attitude and practice using a pre- and post-test in order to guide subsequent training activities.

Objectives: The objectives of the training were to assess and increase knowledge of the use of thermal ablation machine and VIA for screening; boost the capacity of health workers; train the health workers to identify precancerous lesions early for treatment and; contribute to reduction in cancer burden in Nigeria in line with the National cancer control plan.

Method: A cohort of 90 Healthcare workers in Kebbi State and FCT, Nigeria consisting of community health extension workers (CHEWs), nurses, and doctors were trained in the conduct of VIA and use of thermal ablation machine for pre-cancerous lesions. Using structured questionnaires pre-training and post-training assessments were conducted to assess knowledge, attitude and practice of cervical cancer screening and control.

Result: We found that, there was a gap in the knowledge of cervical cancer treatment between health workers. The average for pre-training scores were 28.54 and 70.54 in Kebbi and FCT respective. After the training, post training average scores were 70.54 (Kebbi) and 82.4 (Abuja). As a result, training on the development of cancer research improved the knowledge and capacity of health personnel.

Conclusion: The use of thermal ablation and VIA in the screening of cervical cancer lesions is easily accepted and absorbed to health workers and will accelerate the collective effort to curtail cervical cancer in Nigeria.

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PILOT HPV VACCINATION PROGRAMME IN NORTH-WESTERN NIGERIA.

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Background: Cervical cancer is the second most frequently diagnosed cancers among females in LMICs, yet it is one of the vaccine preventable human malignancies. Outside sub-Saharan Africa, universal HPV vaccination of adolescent girls is now a part of the routine immunization schedules of most countries. Medicaid Cancer Foundation's pilot school-based HPV vaccination programme was carried out by using the cervarix® vaccine in a three-dose regimen at GGSS, Yauri, Kebbi state.
Objectives: The programme aimed to investigate knowledge, acceptability, and affordability of HPV vaccination amongst parents in North-West Nigeria. It further sought to create awareness about the vaccines to community gate keepers, Parent Teachers Association (PTA), education board and traditional rulers
Methodology: A purposive sampling technique was used to select 300 secondary school girls who were between the ages of 9-18years in the remote boarding school in Yauri, to respond interviews and questionnaires administered. The data collected was analysed using tables and graphs to achieve the raised objectives.
Result: The study following are our findings: (i) 44 out of 100 scored 90 and above on the knowledge assessment (ii) there was a general acceptability of the vaccine uptake in the community. (iii) The overall coverage rate of students fully vaccinated was 100%.
Conclusion: The study provides a model which Nigeria can adopt when planning a national roll-out of HPV vaccination. It is important to establish close collaboration, a manageable project plan, assignment of clear roles and responsibilities, close coordination and supervision, promotion of an overall enabling environment by engagement with stakeholders are critical to a successful HPV vaccination. There is a general acceptability in vaccine uptake. And a need to upscale school-based HPV-vaccine project among secondary schools.

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PROSTATE CANCER SENSITISATION AND SCREENING EXERCISE IN KEBBI STATE

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Background: Prostate cancer is the most common form of cancer diagnosed among men. For Nigerian men, prostate cancer is also the deadliest cancer. 15,306 cases were recorded in 2020, with 16.3 deaths per 100,000 men. An estimated 80 percent of Nigerians with prostate cancer are diagnosed late when the disease has advanced to an incurable stage. The need for routine screening and early detection becomes imperative to control this burden.

Objectives: The objectives of the exercise were to, (i) assess the knowledge of participants on prostate cancer (ii) sensitise participant on prostate cancer and benefits of screening (iii) screening participants (iv) identify the values of prostate cancer among the participants. Data was gathered through interviews and survey.

Methodology: A purposive sampling technique was adopted with a clear inclusive criterion to select 537 men who are 40 years and above in 4 emirates – Yauri, Gwandu, Argungu and Zuru – Kebbi state. The data was analysed descriptive statistics.

Findings: The exercise found that: (i) There is a poor knowledge of prostate cancer and screening among participants. (ii) After sensitisation, most participants were willing to be screened. (iii) Among the participants 449 recorded low PSA (0ng/mL - 4ng/mL), 47 had moderate PSA value (4ng/mL - 10ng/mL), and 31 were found to have high (10ng/mL and above) PSA values.

Recommendations: The following recommendations were arrived: there is a need to increase sensitisation of prostate cancer among men in Kebbi state; Screening should be advocated to prevent advancement of prostate cancer into a late stage; 78 men with moderate and high PSA values are in need of intervention. Finally, there was a high acceptability of the screening exercise uptake in the communities.

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HOW COMORBIDITIES INFLUENCE CANCER ETIOLOGY, BIOLOGY, AND SURVIVORSHIP

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COMORBIDITIES AND CANCER | Co-convened by AORTIC and NCI, STREAM 3, November 7, 2021, 1:45 PM - 3:00 PM

Comorbid chronic diseases affect cancer patients with an increasing frequency as populations get older. They affect underserved populations more so than the affluent. Recent surveys in South Africa showed that many cancer patients experience at least one comorbidity. Co-infections involving different viruses, or the combination of viruses and bacterial infections are particularly common in low-income countries and lead to a weakened immune system and chronic inflammation in affected individuals which are both predispositions for cancer. Comorbidities like diabetes, chronic cardiovascular, liver and renal diseases, autoimmune diseases and chronic stress are well known to modify cancer risk and negatively affect cancer outcomes. Notably, co-morbidities and cancer have common risk factors. Recent data have shown that many of these co-morbidities can have a direct influence on the microbiome, the immune response, and tumor biology. Nevertheless, comorbidities are frequently ignored in the decision process of how cancer patients are treated. In my overview, we will discuss broadly the influence of co-morbidities on cancer susceptibility, the burden of co-morbidities in cancer patients, and how co-morbidities may influence cancer etiology, biology, and survivorship.

CASE BASED TELEMENTORING FOR CANCER CARE DELIVERY IN LMICS: PROJECT ECHO

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BEST OF THE BEST ABSTRACTS (2), STREAM 3, November 8, 2021, 11:00 AM - 12:00 PM

OBJECTIVE
Significant disparities exist in cancer outcomes world-wide. The Project ECHO modelTM (Extension for Community Healthcare Outcomes) reduces health disparities by creating technology enabled human networks to democratize implementation of specialized knowledge through guided practice. The aim of this study was to understand the impact of ECHO on the cancer workforce.

METHODS
The ECHO Institute launched a 5-year project to improve the capacity of local providers to bring cancer prevention, diagnostic, treatment, survivorship and palliative care knowledge to rural and underserved populations. Through ECHO's all teach all learn model, local providers collaborate with experts at National Cancer Institute–designated Comprehensive Cancer Care Centers, academic medical centers and large nonprofit originations (hubs) for ongoing telementorship. Using a central data repository, we quantified the reach of the Cancer ECHO Initiative globally.

RESULTS
Since 2016, the ECHO model has been replicated by 85 hubs in 14 countries that are operating 155 cancer programs. This includes 7 hubs located in Africa, and many more programs dedicated to audiences on the continent. These 155 programs focused on diverse cancer prevention and treatment topics, including increasing clinical trial enrollment, cancer control and research, tobacco cessation, cancer care during COVID-19, survivorship, palliative care, organizational strengthening and more. Globally, we observed 43,000 Cancer ECHO attendances with over 8,000 unique learners. To date, 39 peer-reviewed publications have documented the ECHO model's efficacy in improving the use of best practices in cancer care and expanding access to care in low-resource settings.

CONCLUSIONS
The ECHO model is successfully strengthening the cancer health system and accelerating the transmission of best practice cancer care from cancer centers to health care workers in underserved communities. Ongoing evaluation of the Cancer ECHO program will provide insight around the impact of this initiative.

IMPROVING PATIENTS' CLINICAL OUTCOMES BY ATTENDING TO THEIR DISTRESS

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SPECIAL INTEREST GROUP: PSYCHO-ONCOLOGY, STREAM 2, November 6, 2021, 3:00 PM - 5:00 PM

Cancer diagnosis and treatment create a lot to burden for patients and their caregivers and this may impart negatively on health, function, coping and quality of life of cancer patients. Assessing the distress of patients on both outpatients and inpatients is a positive step to take steadily in improving clinical outcomes of patients care on a regular basis. Distress has been defined as a multi-determined unpleasant emotional experience of a psychological nature which has cognitive, behavioural, emotional, social and spiritual dimensions. This may interfere with the ability to cope effectively with cancer, its physical symptoms and its treatment. A substantial percentage of cancer patients suffer from psychosocial distress to severe mental disorders and psychosocial crisis during the course of the illness and cancer treatment. Several screening instruments have been used in assessing distress in cancer patients both during diagnosis and treatment of cancer such as distress thermometer, Hospital Anxiety and Depression scale (HADS), Brief Symptom Inventory and the M.D. Anderson Symptom Inventory. Distress Thermometer: I s a paper and pencil scale, which ranges from 0-10. Scores of 4 and above should have further evaluation. This instrument is made up of possible problems and these problems are practical, family, emotional, spiritual and physical challenges. If the patient ticks on any of the items under emotional, then other instruments such HADS and Zung Depression Rating Scale for more specific assessment will be used. All the patients should be screened for distress at their first visit and as clinically indicated. The importance of distress assessment on mental health of the cancer patients cannot be over emphasized.

MONEY WAS THE PROBLEM: CAREGIVER SELF-REPORTED REASONS FOR ABANDONING THEIR CHILDREN'S CANCER TREATMENT IN UGANDA

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Introduction - Treatment abandonment contributes significantly to poor survival of children with cancer in low-middle-income countries (LMICs). In order to inform an approach to this problem at our Cancer Unit, we investigated why caregivers withdraw their children from treatment.

Methods – In a qualitative study, in-depth interviews were conducted with caregivers of children who had abandoned cancer treatment at the Paediatric Cancer Unit (PCU) of Mbarara Regional Referral Hospital (MRRH) in South Western Uganda, between May 2017 and September 2020. Recorded in-depth interviews with caregivers were transcribed and analyzed to identify themes of caregiver self-reported reasons for treatment abandonment.

Results - Seventy-seven out of 343 (22.4%) children treated for cancer at MRRH abandoned treatment during the study period; 20 contactable and consenting caregivers participated in the study. The median age of children's caregivers was 37 years and most (65%) were mothers. At the time of this study, eight (40%) children were alive and 5 (62.5%) were males; with a median age of 6.5 years. Financial difficulties, other obligations, the child falsely appearing cured, preference for alternative treatments, belief that cancer was incurable, fear that the child's death was imminent and chemotherapy side-effects were the caregivers' reasons for treatment abandonment.

Conclusions and Recommendation – Treatment abandonment among children with cancer in Uganda is, most times, as a result of difficult socio-economic conditions beyond the caregivers' control and needs to be approached with empathy and support other than judgment and condemnation

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CLOSING THE GAP IN ACCESS TO QUALITY CANCER CARE THROUGH PARTNERSHIPS

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OBJECTIVE
Evaluate and review the model of C/Can in closing the gap in access to quality cancer care in cities through partnerships.

METHOD
One of the foundational steps in the C/Can process is a data-driven needs assessment to identify key gaps and opportunities for improving access to quality cancer care. Professionals in cities from both public and private sectors analyzed the gaps and plan for solutions which include map out the availability of partners. An average of 200 healthcare professionals from 38 institutions and 50 patients were involved in the process. The City Executive Committee convenes a multi-disciplinary Technical Committee with expertise in the quality, management and delivery of cancer care.

RESULTS
As a result of needs assessment, there is a few findings in quality of cancer care sessions that were common in both Kumasi and Kigali included: limited equipment and facilities that are often poorly maintained; no comprehensive cancer services in the city; no national essential medicine list including palliative care medicines; limited human resources in cancer care including for nuclear medicine, surgery, medical oncology, radiation oncology, and palliative care; poor insurance coverage for cancer; multidisciplinary team meetings not routine practice; cancer registry unit not properly integrated into the health system; no electronic medical record system; delays due to doctor-patient ratio and financial constraints make it difficult for patients to receive comprehensive care.
Solutions planning is owned by the city stakeholders, and supported by C/Can and its network of external experts from C/Can partners.

CONCLUSION
C/Can encourage city-led approach in identifying the needs and planning the solutions which are delivered through projects. The Foundation brings the expertise of its partner institutions to the cities through a partnership approach to contribute in an attempt to close the gap in cancer care in cities.

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THE MULTIMORBIDITY PROFILE OF WOMEN NEWLY DIAGNOSED WITH BREAST CANCER IN SUB-SAHARAN AFRICA

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COMORBIDITIES AND CANCER | Co-convened by AORTIC and NCI, STREAM 3, November 7, 2021, 1:45 PM - 3:00 PM

The presence of pre-existing morbidities poses a challenge to cancer patient care. It may delay presentation, affect treatment decisions and outcomes. There is little information on the profile and prevalence of multi-morbidities in breast cancer patients across middle-income countries (MIC) to lower income countries (LIC) in sub-Saharan Africa (SSA).

The African Breast Cancer–Disparities in Outcomes (ABC-DO) breast cancer cohort is a prospective hospital-based study that spans upper MICs South Africa and Namibia, lower MICs Zambia and Nigeria, and LIC Uganda. Seven pre-existing morbidities were assessed at cancer diagnosis: obesity, hypertension, diabetes, asthma/chronic obstructive pulmonary disease, heart disease, tuberculosis, and HIV. Logistic regression models were used to assess determinants of ≥2 of the seven above-mentioned conditions (defined as multimorbidity) and the influence of multimorbidity on advanced stage (stage III/IV) breast cancer diagnosis.

Among 2189 women, morbidity prevalence was the highest for obesity (35%, country-specific range 15-57%), hypertension (32%, 15-51%) and HIV (16%, 2-26%) then for diabetes (7%, 4%-10%), asthma (4%, 2%-10%), tuberculosis (4%, 0%-8%) and heart disease (3%, 1%-7%). Obesity and hypertension were more common in upper MICs and in higher socioeconomic groups. Overall, 27% of women had multimorbidity. Older women were more likely to have obesity (odds ratio: 1.09 per 10 years, 95% CI 1.01-1.18), hypertension (1.98, 1.81-2.17), diabetes (1.51, 1.32-1.74), and heart disease (1.69, 1.37-2.09) and were less likely to be HIV positive (0.64, 0.58-0.71). Multimorbidity was not associated with stage at diagnosis, with the exception of earlier stage in obese and hypertensive women.

Breast cancer patients in higher-income countries and higher social groups in SSA face the additional burden of pre-existing non-communicable diseases, particularly obesity and hypertension, exacerbated by HIV in Southern/Eastern Africa. While HIV is not thought to contribute to breast cancer development, reports suggest that HIV-positive patients have a poorer prognosis.

ENQUÊTE NATIONALE DE SURVEILLANCE ÉPIDÉMIOLOGIQUE DU TABAGISME CHEZ LES ENFANTS EN MILIEU SCOLAIRE AU SÉNÉGAL (ENQUÊTE GYTS SÉNÉGAL)

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Introduction:
Les jeunes constituent une population vulnérable et une cible importante pour de l'industrie du tabac. Cette enquête Les nationale de surveillance épidémiologique du tabagisme en milieu scolaire communément appelé « Global Youth Tobacco Survey (GYTS) est la 4è de genre du Sénégal.
Méthodes
Objectifs: Evaluer l'usage du tabac chez les élèves âgés de 13 à 15 ans par l'enquête GYTS, un système mondial de surveillance du tabagisme (GTSS), suivre les indicateurs clés de la lutte antitabac
Méthodologie:
Enquête transversale nationale, menée dans les écoles du du 3 au 31 janvier 2020.La méthodologie est standardisée et comprend un plan d'échantillonnage en deux étapes des écoles et des classes. Les élèves des classes sélectionnées remplissent un questionnaire anonyme pour mesurer les principaux indicateurs de la lutte antitabac. Un facteur de pondération a été appliqué pour refléter la probabilité d'échantillonnage. L'analyse statistique été a été réalisée avec un intervalle de confiance de 95%.
Résultats
Le taux de participation des établissements est de 94%.Au total, 4 320 élèves ont répondu à l'enquête, dont
 2 524 étaient âgés de 13 à 15 ans.9,2% des élèves consomment du tabac sous diverses formes, 11,6% de garçons et 6,9% de filles.7, 2% des élèves fument la cigarettes et 3,4% utilisent d'autres formes de tabac. Comparativement à la dernière enquête GYTS 2013, on note une baisse significative de la prévalence globale de 2,8% et de l'usage de la cigarette respectivement de 1,8%,2,6% chez les garçons et chez les filles.78,6% des élèves souhaitent arrêter de fumer.25,3% des élèves ont été exposés à la fumée secondaire de tabac dans les lieux publics.61,8% des enfants interrogés ont rapporté des messages anti-tabac dans les médias et 21% des message de promotion pour le tabac sur les lieux de ventes.46,6% d'entre eux pensent que le tabagisme des autres est nuisible pour leur santé et 53,8% sont pour l'interdiction de fumer dans les lieux publics fermés.
La politique antitabac du Sénégal commence à porter ses fruits avec une tendance à la baisse de prévalence du tabagisme chez les enfants en milieu scolaires mais l'interdiction de fumer dans les lieux publics n'est pas toujours respectée.
 Conclusion
La politique antitabac du Sénégal commence à porter ses fruits avec une tendance à la baisse de prévalence du tabagisme chez les enfants en milieu scolaires mais l'interdiction de fumer dans les lieux publics n'est pas toujours respectée
Mots clefs : Enquete GYTS Epidémie-Tabagisme-Jeunes-Sénégal

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CURRENT STATUS OF CANCER IMAGING IN GHANA

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CURRENT STATUS OF CANCER IMAGING IN AFRICA, STREAM 3, November 10, 2021, 12:00 PM - 1:00 PM

Introduction: Currently Multi disciplinary team (MDT) is used in the management of cancers in Ghana. It Composes of;
1. Oncologist
2. Pathologist
3. Radiologist
4. Nutritionist
5. Surgeon in that specialty

Screening programs: No national screening programmes are available as at now.

Intervention
City cancer challenge a project with the engagement as follows;
1. Needs assessment
2. Activity planning
3. Implementation planning.
4. Implementation

Current status of cancer imaging
Imaging modalities available in ghana include the following;
1. Plain X-ray
2. Mammogram without tomosynthesis,stereostatic biopsy or wire localization.
3. Ultrasound (superficial & Endoluminal)
4. Barium & intravenous pyelography (IVP) study under flouroscopy
5. Endoscopy
6. Computed tomogram (CT) Scan
7. Magnetic Resonance Imaging (MRI)
o SPECT computed tomogram two are under installation in the country.
o PET CT in the long term as part of the city cancer challenge.

Case presentation
o A 40 year old G4P3 woman was seen at the gynaecology MDT with cervical cancer at 20 weeks gestation.
o She had never had screening for cervical or breast cancer.
o MRI was used for tumour staging and USG for follow up until delivery.
o She was managed with chemoterapy and delivered a health baby to a healthy mother at 37W4D through caesarian section (C/S).
o Hysterectomy with BSO were done as definative management after delivery.
o Patient and baby are still well 4 years post intervention and delivery.

Conclusion
MDT is needed for accurate diagnosis and management of our cancer cases.
Standard guidelines and SOP's are to be adhered to for accurate patient management.

EPIDEMIOLOGIE DESCRIPTIVE DES CANCERS DE L'ESTOMAC AU BURKINA FASO DE 1988 A 2018

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OBJECTIF : cette étude avait pour objectif de décrire le profil épidémiologique des cancers de l'estomac au Burkina Faso dans le but d'en améliorer la prise en charge.
METHODE : Il s'est agi d'une étude transversale et descriptive d'envergure nationale. Elle a porté sur les cancers de l'estomac diagnostiqués dans tous les laboratoires d'anatomie et de cytologie pathologiques du Burkina Faso de 1988 à 2018. L'âge, le sexe, la nature des prélèvements, les types histogénétiques et histologiques ont été étudiés. Les considérations éthiques ont été respectées.
RESULTATS : en 31 ans, 946 cancers de l'estomac ont été diagnostiqués soit une incidence annuelle de 31,5±27,8 cas. Ils représentaient 36% de l'ensemble des cancers digestifs. L'âge moyen des patients était de 56,8±13,6 ans. Les âges extrêmes étaient de 7 et 90 ans. Le sex-ratio était de 1,5. Chez les hommes, l'âge moyen était de 56,9±13,8 ans et chez les femmes de 55,9±13 ans. Les prélèvements étudiés étaient des pièces de biopsie endoscopique dans 87% des cas. Dans 78,3% des cas, le diagnostic de cancer gastrique a été posé dans un laboratoire privé. Les carcinomes ont constitué 92,7% des types histogénétiques. L'adénocarcinome était le type histologique dans 83,9%.
CONCLUSIONS : les cancers de l'estomac sont la première entité de cancer digestif au Burkina Faso. Les patients sont relativement jeunes. L'adénocarcinome constitue le principal type histologique. L'opérationnalisation du registre du cancer, des études d'épidémiologies analytiques permettraient de déterminer les facteurs de risque au Burkina Faso et d'envisager la prévention.

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HIGH URINARY 11-DEHYDRO THROMBOXANE B2 ASSOCIATES WITH LETHAL PROSTATE CANCER IN AFRICAN AMERICAN MEN AND INVERSELY CORRELATES WITH ASPIRIN USE.

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Purpose: We assessed the role of thromboxane A2 (TXA2) in the development of lethal PC and the potential benefit of aspirin for prevention of lethal PC in African American men through inhibition of TXA2 synthesis.

Method: TXA2 is unstable so we measured its corresponding primary metabolite, urinary 11-dehydro thromboxane B2 (TXB2), to examine the relationship of TXA2 with PC. TXB2 was measured in cases (977) and controls (1022) from the NCI-MD PC Case Control study using a mass-spectrometry-based assay. TXB2 levels were modeled into low (≤median) and high (>median) levels.

Results: We observed increased TXB2 levels in cases and an inverse relationship between levels of TXB2 and aspirin use in both cases and controls. For cases who used aspirin, the odds of having high TXB2 were reduced when compared to non-users (OR 0.46 95%CI, 0.34-0.61). This observation remained significant when stratified by race/ethnicity (AA: OR 0.36 95%CI, 0.23-0.54; EA: OR 0.58 95%CI, 0.38-0.88), indicating significant inhibition of TXB2 formation by aspirin, most notably in AA men. Further analysis showed that high TXB2 is associated with a PC case status in AA men (OR 1.44 95%CI, 1.08-1.93) but not EA men (OR 1.07 95%CI, 0.83-1.93), indicating increased TXA2 synthesis in AA men with PC compared to AA men without the disease. Also, men with high TXB2 were more likely to be diagnosed with metastasis compared to men with low TXB2 (OR 4.27 95%CI, 1.48-12.29), indicating more aggressive disease for cases with high TXB2. Furthermore, high TXB2 was associated with all-cause mortality (HR 1.56 95%CI, 1.05-2.33) and PC mortality (HR 4.02 95%CI, 1.46-11.07; SHR 2.89 95%CI, 1.03-8.11) in AA men only. Our findings indicate a distinct association between TXA2 and PC outcomes in AA men.

Conclusion: Aspirin use inversely associates with high urinary TXB2. This is of clinical interest as we report that increased TXB2 associates with PC in AA men, with aggressive PC, and with PC death which disproportionally affects AA men. These findings are consistent with our previous findings that aspirin may reduce lethal PC in AA men and highlights the potential benefit of aspirin for prevention of lethal PC in this high-risk group of men through inhibition of TXA2 synthesis.

EFFICACITÉ ET TOLÉRANCE DU CYCLOPHOSPHAMIDE MÉTRONOMIQUE PER OS DANS DES TUMEURS SOLIDES LOCALEMENT AVANCÉES OU MÉTASTATIQUES: ETUDE PROSPECTIVE

Baldé Baldé S[1], Elghissassi I[2], Layachi M[2], Sawssane R[2], Errihani H[2]
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La chimiothérapie métronomique consiste à administrer de faibles doses de chimiothérapie sans interruption prolongée. Elle permet d'empêcher la croissance tumorale en minimisant les toxicités qui lui sont habituellement associées.

Le Cyclophosphamide est un agent alkylant actif dans de nombreuses tumeurs solides. L'administration selon un schéma métronomique est associée à une meilleure efficacité anti-angiogénique et immunomodulatrice dans plusieurs essais cliniques.

Notre étude est prospective portant sur 69 patients colligés au service d'oncologie médicale à l'institut national d'oncologie entre Juillet 2012 et décembre 2019, évaluant la toxicité et la tolérance du Cyclophosphamide dans des localisations tumorales solides. Il s'agit de cancer du sein dans 29 cas (42%), de cancers gynécologiques dans 16 cas (24%), 8 cancers ORL (11%) et 16 patients (24%) avaient d'autres localisations tumorales où le Cyclophosphamide est actif.

Le taux de bénéfice clinique à 6 mois qui constituait l'objectif primaire de l'étude, était de 53.6%. Ce taux paraît intéressant, malgré l'absence de réponse objective, partielle ou totale, chez des patients présentant une masse tumorale importante et qui étaient lourdement prétraités avec. La tolérance du Cyclophosphamide métronomique était acceptable, une seule interruption prolongée ou arrêt du traitement pour toxicité avait été notée.

En conclusion, la chimiothérapie métronomique par Cyclophosphamide pourrait être considérée comme une alternative moins coûteuse, moins toxique, facile à administrer et assez efficace dans de nombreuses localisations tumorales. Ces résultats doivent nous pousser à explorer d'avantage son potentiel en particulier dans notre contexte socio-économique mais aussi en oncogériatrie.

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LES DYSGENESIES SEXUELLES : A PROPOS D'UN CAS D'HERMAPHRODISME VRAI

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Objectif : Les dysgénésies sexuelles sont rares, mais il importe d'en faire le diagnostic le plus précocement possible en vue de réduire les complications qui peuvent se manifester dans l'enfance ou même à l'adolescence.

Méthodes : Nous rapportons ici le cas d'un enfant de 17 mois, A. M., de sexe externe masculin, amené en consultation par ses parents pour suspicion d'ectopie testiculaire gauche. Des analyses ont été faites, comportant des échographies testiculaires et pelviennes, une IRM abdominale centrée sur les testicules et une analyse cytogénétique. Le patient a subi une intervention chirurgicale et la pièce opératoire a été analysée.

Résultats : L'échographie testiculaire a conclu à une cryptorchidie testiculaire droite, de siège inguinal et un testicule gauche non retrouvé. A l'IRM, il a été retrouvé un scrotum vide d'image testiculaire, avec un testicule droit baladeur, de morphologie normale, et un testicule ectopique gauche peu vascularisé. L'analyse cytogénétique a conclu qu'il s'agissait d'un sujet de sexe masculin 46XY.
La pièce opératoire reçue au laboratoire d'Anatomie et Cytologie Pathologiques du Centre Hospitalier Universitaire Départemental du Borgou-Alibori (CHUD/BA - BENIN) était une pièce d'hystérectomie totale, avec annexectomie bilatérale de 8 cm de long et pesant 18g. L'utérus était hypoplasié. Les annexes étaient des ovotestis.

Conclusion : Les dysgénésies sexuelles sont des pathologies dont le diagnostic nécessite une complémentarité des diverses spécialités médicales et un travail en équipe. Il importe d'en faire un diagnostic précoce.

Mots clés : Dysgénésies sexuelles, hermaphrodisme, anatomie-pathologique.

MORTALITE LIEE AUX CANCERS DANS LE SERVICE D'ONCOLOGIE ET HEMATOLOGIE CLINIQUE DU CENTRE HOSPITALIER ET UNIVERSITAIRE BOGODOGO AU BURKINA FASO

Bambara H[1], Kinda A, Sanou F, Ouedroago A
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Centre Hospitalier Universitaire Bogodogo du 1er mai 2017 au 30 avril 2019 afin d'améliorer la prise en charge des cancers.

METHODES : Etude transversale descriptive menée chez des patients âgés d'au moins 15 ans et décédés de cancer dans le service d'oncologie et hématologie clinique du centre universitaire et hospitalier de Bogodogo allant du 1er Mai 2017 au 30 Avril 2019.

RESULTATS : 216 décès par cancer soit un taux de létalité de 36,36% au cours de notre étude. L'âge moyen était de 49,82 ans [15 ans -90 ans]. Le sexe féminin était prédominant avec 117 cas (54,17%). Selon la classification OMS de l'état général, 102 cas (47,22%) étaient au stade III, 44 cas (20.37%) au stade IV. Le siège primitif le plus fréquent était les cancers gynéco-mammaires avec les cancers du sein dans 39 cas (17,94%) suivi du foie, 40 cas (18,40%). La chimiothérapie, la radiothérapie et l'hormonothérapie ont été instaurées respectivement chez 63 patients (29,16%), 06 patients (02,77%) et 11 patients (05,09%). Les décès par cancers étaient du fait des métastases dans 115 cas (53,24%). Les permanences et les gardes (12h-08h du matin) ont été les périodes pendant lesquelles le nombre de décès était le plus enregistré (177 cas soit 78,95%). Les décès sont principalement survenus dans des tableaux de détresse respiratoire et d'insuffisance hépatocellulaire dans respectivement 86 cas (39,56%) et 30 cas (13,81%). La durée moyenne de survie des patients décédés de cancer a été de 9 mois 13 jours 12 heures. La durée moyenne du séjour hospitalier a été de 12 jours.

CONCLUSION : La forte mortalité liée au cancer était en rapport avec les stades avancés et l'insuffisance de plateau technique associée à non accessibilité aux anticancéreux.

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UNDERSTANDING THE EVOLVING PRACTICE OF CLINICAL RESEARCH NURSING IN SUB-SAHARAN AFRICA

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BEST OF THE BEST ABSTRACTS (4), STREAM 2, November 9, 2021, 6:30 PM - 7:30 PM

INTRODUCTION: There is a need for cancer-focused clinical trials in low-middle income countries (LMIC). Clinical studies from high-income countries (HIC) are not always relevant to cancer care in LMIC, as LMIC populations have lifestyles and health care systems distinct from those in HIC. As such, building clinical research nurse (CRN) capacity to provide specific skills to conduct clinical trials in LMIC is imperative and essential to effective clinical research, timely treatments, and symptom management. An emerging role, CRNs play a vital tripartite role in research enterprise, serving as an expert nursing care giver, member of scientific team conducting the study, and research participants' advocate throughout the study. However, to date there have been few nurses in sub-Saharan Africa (SSA) trained in this specialty.
The purpose of this study is to explore the knowledge, attitudes, and practices of CRNs practicing at Obafemi Awolowo University Teaching Hospital and Aga Khan Hospital in Nairobi, Kenya to inform future training initiatives.
METHODS: To understand how nurses conceptualize their role, we engaged CRNs in an autoethnography, a qualitative approach that includes focus group discussion and self-documentation techniques. CRNs respond to researcher prompts on a WhatsApp discussion thread, encouraging reflection on research activities, emerging challenges, and new learnings. Participants engage in monthly focus groups via videoconference using semi-structured guide. Text from discussions are iteratively coded using a thematic analysis approach.
RESULTS: The study is ongoing; themes from monthly discussions will be presented as well as key learnings related to long-distance qualitative research, including adaptions in response to the COVID-19 pandemic.
CONCLUSION: Clinical research nursing is an innovative and emerging role for oncology nurses in SSA. Building CRN capacity provides specific skills to conduct clinical trials in SSA is imperative and essential to effective clinical research, timely treatments, and symptom management.

BRIDGING THE GAP IN IMPLEMENTATION SCIENCE IN CANCER RESEARCH IN AFRICA: THE CAPTC TRAINING PROGRAMME

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BEST OF THE BEST ABSTRACTS (2), STREAM 3, November 8, 2021, 11:00 AM - 12:00 PM

Implementation science is an emerging field of study that seeks to bridge the research-to-practice gap via integration of research findings and other evidence-based practices into routine care and services. Implementation science is a rather new field that addresses an old question: How is research translated into practice? Implementation science in resource-poor countries and communities offers important opportunities for future discoveries and reverse innovation. However, it is one field in which the continent is lagging behind in as most of the current activities taking place are in South Africa and in Uganda. The Prostate Cancer Transatlantic Consortium (CaPTC) is filling this gap by forming the Implementation science team, through the African Behavioural Research Center under the leadership of Dr. Catherine Oladonyinbo and Dr. Ernest Kaninjing. Seven Vibrant groups consisting of Clinicians, basic scientists, behavioural scientists and policy makers (drawn from Nigeria, Cameroun and Ghana) have been formed. All members of the groups have training course on Dissemination and Implementation Research, from the National Cancer Institute in the United States. The Training Institute for Dissemination and Implementation Research in Cancer (TIDIRC) offers six modules that provide an overview to dissemination and implementation (D&I) research. Each module serves as an introduction to the fundamental terms, concepts, and principles of D&I with examples of their application. The modules include videos, additional resources and reading. All groups have formulated pilot projects which will be presented during this conference and those judged worthy will be awarded pilot funding by the founder and overall PI of CaPTC Prof. Folakemi Odedina. it is hoped that the Implementation Science group grows to a point where it becomes self-sustaining through grants and funding and perhaps blossoms into a full-fledged Master's programme domiciled at one of the CaPTC sites.

ZINC, SELENIUM, CADMIUM AND VITAMIN E IN NIGERIAN PROSTATE CANCER PATIENTS UNDERGOING ANDROGEN DEPRIVATION THERAPY.

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OBJECTIVE: The pathology of cancer has been linked to nutritional elements/micronutrients-antioxidant vitamins and trace elements. Few human and animal studies have indicated association between trace elements, antioxidant vitamins and prostate cancer. In this study, the levels of zinc, selenium, cadmium and vitamin E were evaluated in Nigerian prostate cancer patients undergoing androgen deprivation therapy (ADT).
METHODS: A total of one hundred and fifty-two male subjects (152) were consecutively recruited in this case control study. Seventy-six (76) of them were prostate cancer patients and seventy-six (76) controls. Prostate cancer patients grouped into treatment-naïve and ADT-treated cases and also into those with PSA values ≤4ng/ml and PSA values >4ng/ml. Blood samples were collected, anthropometric parameters and blood pressure were measured; body mass index and waist-hip ratio were calculated for all the participants recruited for the study. Zinc, cadmium and selenium were estimated using atomic absorption spectrophotometry. Vitamin E was determined using high performance liquid chromatography.
RESULTS: The treatment-naïve and treated prostate cancer cases had significantly lower (p=0.0001) zinc and vitamin E and higher (p=0.0001) cadmium and selenium levels higher compared to the controls. The treatment naïve cases also had significantly lower cadmium levels (p<0.013) and selenium levels (p<0.035) than the treated cases. No significant differences were observed in these parameters between the prostate cancer patients with PSA values ≤ 4ng/ml and those with PSA values >4ng/ml.
CONCLUSIONS: Findings from this study suggest that zinc and vitamin E were reduced in prostate cancer patients, while the levels of cadmium and selenium were increased among these patients compared to the controls.

DETERMINANTS OF BREAST CANCER SURVIVAL IN BATNA, ALGERIA, 2010-2012

Beichi F[1], Nourani I[2], Oudjehih M[3], Benbrahim W[4], Deltour I[5]
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Introduction: Breast cancer is the first female cancer and a public health problem in Algeria. The goal of this study was to estimate the survival rate and its determinants among breast cancer patients living in the state of Batna.

Methods: Prognostic study conducted among patients diagnosed with breast cancer from 2010 to 2012, living in Batna, recorded in the local cancer registry. The date of inclusion in the study corresponded to the date of histological confirmation of the cancer. Information on vital status was obtained through an active research on medical files, hospital mortality registers, by calling the patients or their relatives, and as a last resort, we made a research at local Civil registry Center.

The medical records of patients were made in 2018 to get info on disease stage and treatments. 5-year survival was estimated by the Kaplan Meier method. The log rank test and the Cox model were used to study determinants of survival.

Results: 396 cases of breast cancer were included in the study, of which 21.49% had died (N=77), and 08.3% were lost to follow up (N=33) before 31 Dec. 2017. The clinical stage was recorded for 275 patients, stage III and IV represent 49.4% and 5.8% respectively.

Overall survival was 78.5% at 5 years (95%CI 72,0-81,6). In analyses, 5-year survival was significantly lower in patients with advanced clinical stage ($p<10-4$), metastases (HR =7, 95%CI [3,39-14]), not operated, not treated with chemotherapy , radiotherapy or hormonal therap

Conclusion: The advanced clinical stage and the presence of metastases were factors of poor prognosis of female breast cancer, in Batna as elsewhere. Early detection, and timely access to treatments are essential in order to improve the survival of our patients.

EPIDEMIOLOGICAL PROFILE OF COLORECTAL CANCER IN THE STATE OF BATNA, ALGERIA, BETWEEN 2006 AND 2015

Beichi F[1], Nourani I[2], Maatar R[3], Bouznita Z[4], Benkharour A[5], Maaref A[6], Oudjehih M[7], Benbrahim W[8], Deltour I[9]

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Introduction:
Colorectal cancer is a public health problem, its occurrence is increasing steadily in Algeria and more generally in Africa. Data from the last years of local cancer registry (from 2012) show that It took the first place before bronchial cancer in men and the second place after breast cancer in women.
70% of colorectal cancers are recorded in people over 50 years old, 63% of those tumors are located in the colon
Our work aims to explore the occurrence of colorectal cancers in local citizens, based on cancer recorded data between 2006 and 2015.
Materials and Methods:
The used data are taken from local cancer registry, including medical (histological type, location of primary tumor, stage...etc.) and socio-demographic (sex, age, location…etc.) characteristics, excluding metastatic tumors and anal cancers.
Occurrence rates have been standardized to WHO 2000-2025 population and expressed per 100,000 person-years.
Results and Conclusion:
The annual number of cases increased steadily from 52 cases in 2006 to 128 in 2015. The age standardized incidence rates were 11/100,000 men and 9.8/100,000 women corresponding to a sex ratio of 1.09.
The average age of diagnosis was 59 for men and 58 for women.
The most affected anatomical parts were the rectum (ASR: 3.06/100,000 men, 2.53/100,000 women) and the sigmoid (ASR : 2.26/100,000 men, 2.06/100,000 women).
The epidemiological profile of colorectal cancer makes it possible to implement preventive actions, organized screening and early diagnosis.

EPIDEMIOLOGY OF FEMALE THYROID CANCER, A RETROSPECTIVE STUDY OVER 21 YEARS IN THE STATE OF BATNA, ALGERIA, BETWEEN 1995 AND 2015

Beichi F[1], Nourani I[2], Maatar R[3], Bouznita Z[4], Maaref A[5], Oudjehih M[6], Deltour I[7]

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Objective:

To study the epidemiological characteristics of female thyroid cancer, in the state of Batna between 1995 and 2015.

Methods:

A descriptive retrospective study of female thyroid cancer cases. The data used have been obtained from Batna cancer registry, for a period of 21 years (1995-2015). Age-standardised incidence rates were calculated using direct standardization method.The reference used population was WHO's (World Health Organization) 2000-2025.

Results:

During the study period, in Batna, 386 new cases of thyroid cancer were recorded, with an overall age standardized incidence rate of 4.1 cases / 100,000 women. Between 1995 and 2015, the rate of female thyroid cancer increased by almost 10 times, from 1.3 / 100,000 in 1995 to 11.9 / 100,000 in 2015. The average age at onset was 45.0 years (sd = 0.8 years).

The predominant histological type was papillary adenocarcinoma (38.3%), and only 10% of the cases had a marked grade, of which 4.4% were grade I.

Conclusion:

In latest years in Batna as all other parts of the country, the number of thyroid cancer diagnosed women has been remarkably increasing.

PROFIL EPIDEMIOLOGIQUE ET ANATOMOPATHOLOGIQUE DES POLYPES DU TUBE DIGESTIF A THIES (SENEGAL) : A PROPOS DE 56 CAS.

Bentefouet T[1]
[1]Tonleu Linda Bentefouet, [2]Mame Diarra Fall, [3]Assane Sow, [4]Madocky Magatte Diop, [5]Ibou Thiam

Objectif : Le polype correspond à des lésions en relief dans la lumière du tube digestif. Certains polypes classés comme bénins peuvent évoluer vers des lésions dysplasiques, puis vers un cancer. L'objectif de ce travail était d'étudier les aspects épidémiologiques et anatomopathologiques des polypes du tube digestif à Thiès ; d'évaluer la fréquence et le degré de dysplasie dans les différentes lésions observées.
 Méthodes : Il s'agit d'une étude rétrospective sur une période de 5 ans (2016 à 2020). Les données ont été collectés à partir des dossiers des patients au niveau du laboratoire d'anatomie pathologique de la région de Thiès. Pour chaque patient, nous avons établi une fiche d'exploitation comportant l'âge, le sexe, les circonstances de découverte, le siège du polype, le nombre de polype, l'aspect macroscopique, et le type histologique. Les données ont été saisies et analysées par le logiciel Excel 2010 et SPSS.20. Les tableaux et graphiques ont été conçus sur WORD 2013 et EXCEL 2010.
Résultats : Nous avons colligé au total 56 cas de polypes du tube digestif. Le sex-ratio était de 1. L'âge moyen était de 38 ± 24 ans [3-84 ans]. Les épigastralgies et les rectorragies, constituaient les principales circonstances de découverte. Les polypes siégeaient dans l'ensemble du tube digestif à des proportions variables. Il s'agissait le plus souvent de polypes uniques avec dans la majorité des cas une taille supérieure ou égale à 10 mm (48% des cas). Les types histologiques étaient variés et les lésions dysplasiques étaient retrouvées dans 6 cas (10,7%).
Conclusion : Le dépistage et la résection précoce des polypes dysplasiques permet de prévenir la survenue de certains cancers digestifs gastriques et colorectaux.

Mots clés : polypes ; tube digestif ; histopathologie ; Thiès.

PROGNOSIS AND SEVERITY RISK FACTORS OF COVID 19 INFECTIONS AMONG CANCER PATIENTS: A MONOCENTRIC RETROSPECTIVE STUDY

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Objective:
We aimed to evaluate the impact of COVID infection on cancer patients and to identify different severity and mortality risk factors.
Methods:
We conducted a monocentric retrospective study between November and Mars 2021 in the medical oncology department of Ariana, Tunisia. This study included 39 cancer patients who had a confirmed infection with COVID 19. Data regarding their symptoms, radiological findings and evolution under treatment were obtained from medical records. Chi-square test was used to analyze severity and mortality risk factors.
Results:
Median age was 56.6 years [29 -77] with female predominance (sex ratio: 0.39). Fifty six percent (n=22) had a medical history of hypertension or diabetes and 61% (n=24) were at least overweight. Fifty one percent (n=20) had asymptomatic to moderate infection (asymptomatic: 18%, mild: 16%, moderate: 18%). Severe acute respiratory syndrome coronavirus 2 was seen in 48% of the cases (n=19) and mortality rate was 12% (n=5). Age influenced significantly the COVID19 mortality with 61% of case-fatality among patients aged above 50 years old (p=0.04). Overweight or obesity were significantly associated with a high rate of severe COVID19 infection (p=0.05). Patients with pulmonary cancer had a severe COVID 19 infection in 80% of the cases (p=0.071). Sex, smoking and cancer stage did not impact significantly COVID 19 severity or mortality. When asked after remission from the COVID 19 infection, 79% of patients (n=31) reported symptoms of depression and anxiety.
Conclusion:
Patients with cancer who were infected with SARS-COV-2 have a higher risk of severe infections with a high probability of mortality. Due to this poor outcome, cancer patients should be privileged for anti-COVID vaccine.

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ASSOCIATIONS BETWEEN DISTANCE AND STAGE AT BREAST CANCER DIAGNOSIS AMONG PATIENTS AT BUTARO CANCER CENTER OF EXCELLENCE, RWANDA

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Objective
Travel distance to health facilities can be an important barrier to timely breast cancer diagnosis, particularly in low-income rural regions where patients often live far from cancer facilities. Rwanda's first public cancer facility, Butaro Cancer Center of Excellence (BCCOE), provides highly subsidized cancer care to low-income patients. We sought to determine if longer travel distances to local health centers (HCs) and BCCOE are associated with advanced-stage disease at diagnosis.

Methods
Using a database of all patients treated for breast cancer at BCCOE from 2012-2016, we included 446 patients receiving no prior treatment. We calculated patients' travel distances to HCs and BCCOE using AccessMod5, a spatial analytic software, and examined distance as a continuous variable and in quartiles. Following descriptive analysis, we used Chi-square tests and multivariable logistic regression to examine the association of distance and other patient characteristics with advanced-stage presentation.

Results
Median age of patients in the cohort was 49.5 years (IQR=40.0-58.0); median sector-level poverty rate was 41.3% (IQR=29.2-48.8). Three-quarters were diagnosed with stage III/ IV disease. Median distance to local health center was 2.97 km (IQR=1.68-5.05). Univariate analyses showed no association between distance quartile from the HC and stage (p=0.38). Median distance to BCCOE was 90 km (IQR=55-139). In multivariable logistic regression, odds of late-stage diagnosis were 2.35 (95% CI: 1.14–4.96) times higher among those in distance quartile four versus distance quartile one (>139 km versus <55 km) from BCCOE. Poverty was also significantly associated with advanced-stage presentation, with each percent increase in sector-level poverty associated with a 1.03 times higher odds of late-stage diagnosis (95% CI: 1.01–1.05).

Conclusions
In Rwanda, longer travel distance to tertiary facilities, but not HCs, is associated with late-stage presentation. Optimizing travel distance through decentralized diagnostic testing or transport subsidies should be prioritized in early detection interventions.

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HEPATOCELLULAR CARCINOMA IN THE HEPATITIS B VACCINATED AND NON-VACCINATED AGE GROUPS IN THE GAMBIA

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INTRODUCTION: Hepatitis B vaccination was started in The Gambia in July 1986 and nationwide coverage was achieved in February1990. However not much is known about its effect in the prevention of Hepatocellular carcinoma (HCC) in The Gambia.

OBJECTIVE: We assess the differences in the features of HCC in both the Hepatitis B vaccinated and non-vaccinated age groups in The Gambia.

METHOD: Patients with suspected HCC who were referred to the main liver clinic at the Medical Research Council, Gambia Unit (MRCG) were recruited from June 2011 to September 2019. The diagnostic criteria for HCC comprised of ultrasound demonstration of liver mass ≥2 cm with or without clinical features combined with alpha-fetoprotein (AFP) level of ≥200 ng/ml and/or histopathological confirmation. Clinical, radiological, fibroelastrography and laboratory data were collected in all patients.

RESULTS: Five hundred and forty two patients were recruited into the study. The majority (91.3%) of the patients were in the non-vaccinated age group and most (88.8%) were born in The Gambia. Those born outside The Gambia were mostly Senegalese (61%), Sierreleonean (16.4%), and Guineans (14.7%). The patients with HCC in the vaccinated age group were much younger 23.4 vs. 44.4 years ($p<0.001$) and less likely to be born in The Gambia ($p<0.001$). They were also more likely to have higher AFP levels ($p=0.002$), positive HBsAg ($p=0.007$) and a lower creatinine level ($p<0.001$) as compared to those patients in the non-vaccinated age group. There was no difference in clinical manifestations, Liver Function tests and median survival.

CONCLUSIONS: The early introduction of Nationwide Hepatitis B vaccination in 1990 into the EPI program in The Gambia may have had a positive effect in the incidence of Hepatocellular Carcinoma in the vaccinated age group. Compared to neighbouring countries, The Gambia seems to be leading the path for Hepatitis B elimination. To strengthen these gains, a nationwide screening and treatment program needs to be implemented for those in the non-vaccinated age groups.

CLINICAL, PATHOLOGICAL AND THERAPEUTIC CHARACTERIZATION OF BREAST CANCER PATIENTS DIAGNOSED AT HOSPITAL AGOSTINHO NETO, CAPE VERDE FROM 2015 TO 2021.

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i) OBJECTIVE:
To study the profile of breast cancer patients diagnosed at the oncology unit of Hospital Agostinho Neto in Cape Verde, from 2015 to 2021.

ii) METHODS:
Evaluate the clinical, pathological, therapeutic characteristics and outcomes of breast cancer patients admitted at Hospital Agostinho Neto, from 2015 and 2021.

iii) RESULTS:
The series consists of 167 women and 4 men. The median age was 54 years (minimum 17 and maximum 91 years). From these patients, 67% were domestic workers and 30% were from another Island.
The main diagnosis methods were Primary Tumour Histology (92%), Cytology (6%), and Metastasis Histology (2%). Ninety-nine percent of patients had breast cancer histological confirmation, 57% were differentiated poorly, 17% moderately, 4% well-differentiated and 21% were unknown. In 83% of the patients, the breast cancer was NST (Invasive ductal carcinoma). Immunohistochemistry analysis was performed on 64 patients and 42.3% were Luminal A, 23.6% Luminal B, 11% Luminal B/HER2, 1.6% HER2, 21.5% Triple Negatives. In the series 23% were on stage I, 15% on Stage II, 34% on stage III, 18% on stage IV, and 10% were unknown.
Frequently applied treatments were: surgery (13%), chemotherapy (9.94%), and surgery and chemotherapy combined (10.53%). Six percent of patients were not treated. Regarding overall survival, 95% of the patients survived beyond 40 months.

iv) CONCLUSIONS:
At the time of diagnosis, 99% of patients had breast cancer histological confirmation, most of which (87%) were invasive ductal carcinoma. Fifty-seven percent of these were cancers were poorly differentiated. The main applied diagnosis method was primary tumor histology. Laminal A and Triple-negative breast cancer were the most frequent subtypes. Surgery and chemotherapy and their combinations were frequent treatments. Ninety-nine percent of patients survived beyond 40 months.

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HOSPITAL-BASED CANCER REGISTRY DATA FROM HOSPITAL AGOSTINHO NETO IN CAPE VERDE (2019 - 2020)

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Hospital-based cancer registry data from Hospital Agostinho Neto in Cape Verde (2019 and 2020)
Hirondina Borges Spencer (1), Danielson Veiga(2), Venulda Mendes(3), Carla Barbosa(4), Lúcio Lara Santos(5) e Victor Costa(6)
 1-Médica Oncologista CV(Cabo Verde)   4-Médica Patologista CV
2- Cirurgião -CV
3- Médica Patologista –CV   6- Cirurgião –CV
5- Professor de oncologia e cirurgia da universidade do Porto, especialista em Oncologia cirúrgica - Portugal

Cancer registries
i) OBJECTIVE: To study the profile of patients admitted and treated in the oncology unit of Hospital Agostinho Neto, Praia, Santiago Island in Cape Verde with the aim of defining the necessary resources for cancer care in the future.
ii) METHODS: Evaluate the clinical, pathological, therapeutic characteristics and outcomes of the 182 cancer patients admitted and treated in 2019 and 2020 based on hospital-based registration
iii) RESULTS:
The series consists of 112 women and 70 men. The median age was 55 years (minimum 2 and maximum 90 years). Of the patients studied, 33.5% were patients from other islands. The locations of malignant tumors were in order of frequency: breast (29.1%), gynecological tumors (18.1%), upper digestive tract (11.5%), colorectal (10.4%), head and neck (9.9%), urological (6.6%), hemato-oncological (4.4%), hepato-bilio-pancreatic (3.8%), lung (3.3%), sarcoma (1.6%) and melanoma (1.1%). The stage of the tumors at diagnosis was: I (8.2%), II (18.7%), III (24.2%), IV (47.3%) and unknown (1.6%). Regarding treatment: surgery and chemotherapy (36.81%), surgery, radiotherapy and chemotherapy (15.94%), chemotherapy and radiotherapy (12.64%) and chemotherapy alone (34.61%). Radiotherapy was performed abroad. The mortality rate was 18.1%. In 64 cases we studied the phenotypic profile by immunohistochemistry (Luminal A 42.3%, Luminal B 23.6%, Luminal B / Her2 11.0%, Her2 1.6% and triple negative 21.5%).
iv) CONCLUSIONS: Most tumors are diagnosed at an advanced stage. Surgical treatment, systemic treatment (chemotherapy, immunotherapy and hormone therapy) and radiotherapy are the necessary therapeutic options. The acquisition of radiotherapy in the country is urgently needed.

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ÉTUDE DU PROFIL ÉPIDÉMIOLOGIQUE DES CANCERS CUTANÉS AU NIVEAUV DE LA WILAYA DE TLEMCEN (OUEST ALGÉRIEN) ENTRE 2012 ET 2016

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Les cas de cancer de la peau se multiplient en Algérie. Il est en nette augmentation dans notre pays chez toutes les catégories d'âge durant ces dernières années. L'objectif de ce travail consiste à réaliser une évaluation du profil épidémiologique des cancers cutanés au niveau de CHU de Tlemcen (ouest Algérien) entre 2012 et 2016.

Au total, 499 cas de cancers cutanés ont été colligés au niveau du service d'Épidémiologie - CHU de Tlemcen sur les cinq années de l'étude, dont 88,8% étaient de type carcinome. Le pic majeur a été obtenu au cours de l'année 2014 avec 27,1%. Les patients les plus touchés appartenant à la tranche d'âge de 60 à 70 ans avec un âge moyen de 64 ans, et les hommes sont les plus atteints par le cancer cutané avec un sex-ratio de 1,14.

Les conditions géographiques et météorologiques de la région de Tlemcen, caractérisées par un ensoleillement important et prolongé pendant une longue période de l'année sont sans aucun doute responsables de ces tumeurs. L'étude des facteurs de risque des cancers cutanés notamment leur liaison avec les papillomavirus humains serait intéressante pour une prévention contre ce type de cancer.

Mots clés : Cancers cutanés, épidémiologie, Dermatologie

BURDEN AND DETERMINANTS OF SELF-REPORTED ARM & SHOULDER PROBLEMS IN BREAST CANCER SURVIVORS IN SUB-SAHARAN AFRICA: THE AFRICAN BREAST CANCER – DISPARITIES IN OUTCOMES COHORT STUDY

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Objective: Arm & shoulder problems (ASPs), which may include lymphoedema, are common among women with breast cancer in high-income countries, and result in poorer quality of life as they affect daily life activities. However, in Sub-Saharan Africa, the burden and determinants of ASPs remains unclear and need to be investigated.

Methods: All women newly diagnosed with breast cancer recruited across the Namibian, Ugandan, Nigerian, and Zambian sites of the African Breast Cancer Disparities in Outcomes cohort study were included in this analysis. At each 3-month follow-up interview, women answered the EORTC-BR23 questionnaire and self-reported arm or shoulder pain, stiffness, and swelling occurrence and intensity. We estimated the cumulative incidence of first and chronic ASPs at three years since diagnosis, overall and for each study site, taking competing deaths into account. To identify sociodemographic factors, and tumour and treatment characteristics associated with the occurrence of ASPs, we estimated cause-specific hazard ratios using univariate and multivariate Cox models stratified by study site.

Results: At three years post-diagnosis, of the 1475 women included in this study, 42.3% (95% CI: 39.6-45.1), 35.5% (32.8-38.2) and 21.8% (19.5-24.3) had experienced at least once a arm/shoulder pain, stiffness and arm/hand swelling respectively. These were 20.2% (18.0-22.5), 19.0% (16.8-21.3) and 8.9% (7.4-10.7) for self-reported chronic ASPs (multiple reports within 12 months). Although risks of self-reported ASPs differed between sites, being diagnosed with a higher stage tumour was the most important risk factor of all ASPs.

Conclusion: ASPs are very common in breast cancer survivors in Sub-Saharan Africa and their risk factors differ from that of high-income countries. There is a need to raise awareness and improve management of ASPs within the African setting.

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FROTTIS CERVICO UTERIN DE DEPISTAGE : EXPERIENCE DU LABORATOIRE D'ANATOMIE PATHOLOGIQUE DU CENTRE HOSPITALIER UNIVERSITAIRE DEPARTEMENTALE (CHUD) DU BORGOU ALIBORI DE 2010 A 2019

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Objectif : Déterminer les aspects épidémiologiques et cytopathologiques des lésions pré cancéreuses du col de l'utérus dans le service d'anatomie pathologique du CHUD/ Borgou Alibori, de 2010 à 2019.

Méthodes : Il s'est agi d'une étude transversale descriptive et analytique à recueil rétrospectif. La collecte des données a intéressé les résultats anatomopathologiques selon Bethesda 2001, des patientes reçues pour frottis cervico utérin, durant la période du 1er Janvier 2010 au 31 Décembre 2019.

Résultats : Au total 1187 Frottis Cervico utérins (FCU) consécutifs ont été recensés chez 981 femmes en 10ans. L'âge moyen des patientes au moment du FCU était de 40,19±10,16ans. Les femmes âgées de moins de 30 ans (35,47%) étaient les plus représentées. La fréquence des lésions précancéreuses était estimée à 19,55%. Les LSIL constituaient la lésion précancéreuse la plus fréquente (n=117soit 51,77%). L'âge, la situation matrimoniale et le statut hormonal étaient significativement associées aux lésions précancéreuses (p< à 0.05). Des 981 femmes ayant effectués les 1187 FCU consécutifs en 10 ans, seulement 29,11% se sont soumises régulièrement au FCU (au moins 2 FCU), et 04,71% ont effectuées des biopsies et examens anatomopathologiques conformément aux suggestions et recommandations du pathologiste.

Conclusion : La fréquence des lésions précancéreuses du col utérin dans le laboratoire d'anatomie et de cytologie pathologique de 2010 à 2019 est relativement élevée. Les recommandations et suggestions du pathologiste ne sont généralement pas respectées.

Mots clés : Dépistage, col utérin, frottis cervico utérin, lésions précancéreuses, Bénin

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GYNECOLOGIC CANCER TREATMENT TOXICITIES AND RELATIONSHIPS WITH THE VAGINAL MICROBIOME IN AFRICAN AMERICAN WOMEN

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Gynecologic cancer survivors may live for decades with persistent radiotherapy induced symptoms including pain, dyspareunia and sexual dysfunction. The vaginal microbiome (VM) has been associated with vaginal symptoms related to menopause (ie dryness). Here we explore the association of the VM of African American women treated for cervical or endometrial cancer, pre and post radiotherapy, compared to healthy controls in association with persistence of vaginal symptoms.

We studied the VM of 66 subjects, (34 pre and post radiotherapy; 32 age-matched healthy controls), using 16S-rRNA-sequencing. Vaginal symptoms were measured by validated instruments, including PRO-CTCAE, CTCAE and FSFI.

African American women exhibit high diversity VMs and a variety of vaginal community types that are not dominated by healthy Lactobacilli, with extensive VM variation ¬between individuals. VMs of cancer patients were highly unstable compared to controls: ie, 43% of patients changed from one VM community type to another after radiotherapy, compared to only 15% of controls. Vaginal symptoms prevalent in cancer patients included vaginal pain (40%), hemorrhage (35%), vaginismus (28%) and inflammation (20%), while lack of lubrication (33%) and dyspareunia (32%) were equally prominent in healthy women. Symptom persistence was strongly inversely correlated with VM stability, ie patients with persistent dryness and have the most unstable microbiomes (Fisher's exact test, p=0.014 and 0.002). Associations were identified between vaginal symptoms and individual bacterial taxa, including: Prevotella with vaginal dryness (p=0.0004), Delftia with pain following vaginal intercourse (p=0.0006), and Gemillaceaea with low levels of lubrication during intercourse (p=0.0002).

Differences in the VM among healthy and gynecologic cancer patients are prominent after radiotherapy, including enrichment of opportunistic bacterial pathogens. Highly unstable microbiomes are typical in cancer patients and were associated with symptom persistence. The literature suggests these pathogens may also be related to HPV persistence which warrants further attention in larger and culturally diverse populations.

EVALUATION OF THE ACCEPTABILITY AND VALIDITY OF THE SERIOUS ILLNESS CONVERSATION GUIDE IN ONCOLOGY PATIENTS IN SOUTH AFRICA

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Background: Advance care planning (ACP) is the process through which a health care professional (HCP) guides a patient with a life-threatening illness to better understand their disease and to make value-concordant decisions for their future medical care including their end-of-life (EOL) care. The Serious Illness Conversation Guide (SICG, Ariadne Labs 2017) was developed and validated as a structured guide for HCPs when having ACP conversations with patients. Decision-making near the end of life is influenced by many factors including health status, socio-economic status, culture, ethnicity, and decisional control preferences. To our knowledge no study has explored the acceptability and validity of the SICG (Ariadne Labs) or the preferences, goals, and values for EOL care and decision-making in cancer patients in South Africa.

Objectives: The aim of this study is to explore the local acceptability as well as the face and content validity of an internationally validated serious illness conversation guide for use in advance care planning conversations in South African patients with advanced cancer.

Methods: We will develop a cross-culturally adapted version of the SICG in 3 local South African languages (isiXhosa, Afrikaans, and English) through the conduct of focus-group discussions with patients, family members and health care professionals. Then we will explore the acceptability and content validity of these adapted SICGs in South African patients with cancer through the conduct of cognitive interviews and thematic analysis of the interview responses.

Results: We will report on the rigorous translation and cultural adaptation process as well as the preferences, goals, and values for EOL care and decision-making of interviewed patients.

Conclusion: The locally adapted conversation guide developed through this study is hoped to lead to the increased uptake of ACP in South Africa and further research into EOL care preferences for South Africans.

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BRIDGING THE RADIOTHERAPY EDUCATION GAP IN AFRICA: LESSONS LEARNT FROM THE CAPE TOWN ACCESS TO CARE TRAINING PROGRAMME OVER THE PAST 5 YEARS (2015 – 2019)

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BEST OF THE BEST ABSTRACTS (1), STREAM 2, November 7, 2021, 10:00 AM - 11:00 AM

OBJECTIVE:
The Access to Care (A2C) Cape Town radiotherapy (RT) training programme was created in 2014 to supplement basic practical RT training in the region. The aim of this paper is to report on the activities of the Access to Care Cape Town Radiotherapy training programme for the time-period 2015 – 2019.
METHODS:
This study was undertaken to review the programme in terms of programme design, educational instruments, teaching platform and methodology, geographic reach, and participant feedback.
RESULTS:
The A2C training programme is a hybrid e-learning and on-site radiotherapy training programme. It gives qualified radiotherapy professionals access to 17 days of practical skills training, focusing on 3D conformal radiotherapy. A total of 13 teams from eight countries in Africa attended the course between 2015 and 2019, with each team including a radiation oncologist, medical physicist, and radiation therapy technologist. Up to 52 hours of each course was dedicated to contouring and planning clinical cases with an additional 18 hours per course dedicated to clinical protocol development. Pre-course online learning on the LäraNära platform was only successful once active progress tracking mechanisms were put in place, with an improvement from 33.8% to 76% in test completion rate. Only one team did not proceed with installation of new equipment, and do not currently have access to machines less than 10 years old.
CONCLUSION:
The programme proved to be valuable in assisting teams in Africa to transition from 2D to 3D conformal radiotherapy. However, delays between course attendance and clinical use of the equipment have shown to be detrimental to knowledge retention, with some departments having to send a second team to attend prior to clinical implementation. The course will be modified for remote teaching in 2021, to make provision for the travel challenges associated with the pandemic.

PATHOLOGY CHARACTERISTICS OF LYMPHOMAS IN RWANDA

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OBJECTIVES: To describe pathology characteristics of lymphomas in Rwanda based on Hematoxylin & Eosin (H&E) stained glass slides and immunohistochemistry (IHC), and classify them according to clinical aggressiveness.

METHODS: We conducted a retrospective observational and descriptive study from January 2013 to December 2019. Lymphoma cases were retrieved together with relevant clinical information, H&E and IHC stained section reviewed by independent pathologists. Histological diagnosis classified according to the 2008 World Health Organization (WHO) system according to clinical aggressiveness.

RESULTS: Three hundred and six lymphoma cases were enrolled. Males were more affected than females (57% versus 43%) and the majority of patients were young (54% of patients were aged ≤35 years). Approximately 62% of cases were nodal lymphomas. Approximately 18% of lymphoma cases were HIV positive. Most (70%) cases were NHLs, with predominance (77%) of the aggressive forms. Among 164 cases of aggressive NHLs, diffuse large B cell lymphoma (DLBCL) was the leading subtype (55.5%), seconded by solid lymphoblastic lymphoma (19.5%) and Burkitt lymphoma (10.4%). Among all Hodgkin lymphoma (HL) cases, 97% were classical HL, with predominance of nodular sclerosis subtype. At diagnosis, HL patients were younger compared to NHL patients (mean age of 24.78±16.3 years versus 38.6±22.5 years, p=0.000).

CONCLUSIONS: Lymphoma cases in Rwanda show an over-representation of HIV positivity than in the general population. Interestingly, NHLs in Rwanda are predominated by the most aggressive forms, and these mostly affect a younger population compared to other countries. Optimal characterization of such cases, using advanced methods, is recommended.

RESILIENCE AND ADAPTATION IN CERVICAL SCREENING DELIVERY IN MALAWI IN THE PRESENCE OF THE COVID-19 PANDEMIC

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OBJECTIVE
Cervical cancer 'screen and treat' programmes are operating in many countries in sub-Saharan Africa. In Malawi, MALSCOT is a nationwide project delivering screening using visual inspection with acetic acid (VIA) and treatment with thermal ablation for VIA-positive lesions. Screening is provided at clinics at rural hospitals ('Hubs') and associated health centres. In response to the covid-19 pandemic, Malawi introduced restrictions on non-essential travel. This had the potential to adversely affect the number of women attending screening clinics.

METHODS
Local implementing teams re-evaluated their screening delivery plans: while maintaining facility-based services, teams added sensitisation and provision of cervical cancer screening to routine mother and infant sessions at remote outreach posts. Messages about covid-19 protection were included. Hubs prepared monthly COVID impact assessments, and monthly reports on numbers of women screened. A Whatsapp group enabled mutual support and encouragement across project sites. Mentoring materials were updated to include covid-19 guidance.

RESULTS
Up to 50 outreach screening sessions were held per month, from 21 health centres. 23,744 women attended MALSCOT clinics (static or outreach) from April 2020 to March 2021: this comprised 21,786 first screening attenders and 1958 additional visits (follow-up reviews after previous thermal ablation treatment, or women presenting with gynaecological symptoms). 587 women with VIA-positive lesions received treatment with thermal ablation; 287 women were referred with suspect cancer.

CONCLUSIONS
The ongoing pandemic is likely to affect routine delivery of cancer screening in health centre clinics for some time: adapting the service in order to reach rural women closer to their own villages and integrated with other health services will be important to ensure continued delivery of screening. This approach also provides opportunities to raise awareness of the covid-19 vaccine, and address community misconceptions about screening. There is an ongoing need to support screening providers with PPE and IP measures.

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IMPACT OF HIV ON BREAST CANCER SURVIVAL ACROSS DIFFERENT PATIENT AND TUMOUR CHARACTERISTICS AND SUB-SAHARAN AFRICAN SETTINGS

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Objective: Studies have shown increased mortality among HIV-positive women with breast cancer compared to HIV-negative women with breast cancer; however, none examined how the effect of HIV on survival varies by patient or breast tumour characteristics.

Methods: African Breast Cancer-Disparties in Outcomes study is a prospective cohort of women with incident breast cancer diagnosed between 2014-2017 across Namibia, Nigeria, South Africa, Uganda and Zambia. Detailed demographic and clinical data were collected at baseline. Participants were actively followed-up via 3-monthly telephone calls. Using Cox regression, we examined differences in overall survival by HIV status across the cohort, in each country and across patient subgroups, adjusted for age and stage at diagnosis.

Results: The present analysis is based on 1,635 women, 313 (19%) were HIV-positive, 1,184 (72%) were HIV-negative and 138 (9%) HIV-unknown. HIV-positive women were younger and had lower BMI than their HIV-negative counterparts, but had similar tumour stage, grade and receptor subtypes. At 3-years or the end of the follow-up (January 1, 2019), a higher proportion of HIV-positive women (137 (44%)) had died compared to HIV-negative women (432 (37%)). Three-year overall survival was 9% lower for HIV-positive women (46% vs. 55% for HIV-negative women) all settings combined. The HIV effect was stronger in women with non-metastatic breast cancer (1·67 (1·31-2·11)), whilst HIV-positive and HIV-negative women with metastatic cancer had as low survival as each other. There was no clear evidence that the HIV effect on overall survival differed by breast tumour subtype, tumour grade, age or BMI.

Conclusions: HIV-positive women with breast cancer had lower overall survival than their HIV-negative counterparts, especially amongst those with non-metastatic disease at diagnosis. More research is needed to better understand reasons underlying these differentials (e.g. underlying biological mechanisms, differential treatment access, detrimental HIV-breast cancer treatment interactions, or simply higher background mortality associated with HIV).

GENOME-WIDE ASSOCIATION STUDY OF AFRICAN ESOPHAGEAL SQUAMOUS CELL CARCINOMA

Chen W[1,2], Brandenburg J[2], Ramsay M[2], Parker M[3], Lewis C[4], Mathew C[2,4], ERICA-SA Consortium *[5]
[1]National Health Laboratory Service, [2]University of the Witwatersrand, [3]University of Cape Town, [4]King's College London, [5]South African Medical Research Council

Objective:
Oesophageal squamous cell carcinoma (OSCC) has a high incidence in sub-Saharan Africa but little is known about the genetic contribution to OSCC susceptibility in this region. We carried out a genome-wide association study (GWAS) in the South African Black (SAB) population to identify genetic risk factors for African OSCC.

Methods:
Samples from 1,686 OSCC cases and 3,217 population controls were genotyped on the 2.3 million H3 Africa SNP Illumina array and additional SNPs imputed using the Wellcome Sanger Institute imputation service. After correction for population substructure, the final imputed dataset of 14.4M SNPs was used in linear-mixed model analysis, using GEMMA to test for association. A meta-analysis with 4.85 million SNPs common to both our study and a GWAS of 2,013 Chinese OSCC cases and 2,701 controls was done using METAL.

Results:
The OSCC GWAS in the SAB population detected two association signals at or near genome-wide significance. One was upstream of the FAM120A gene on chromosome 9 (rs12379660, $p=4.58 \times 10^{-8}$), and the other in a region spanning the MYO1B and STAT4 genes on chromosome 2 (rs142741123, $p=5.49 \times 10^{-8}$) with SNPs unique to African populations. In addition, a total of 62 SNPs from 29 independent potential risk loci showed suggestive association with OSCC ($P < 5 \times 10^{-6}$). In the meta-analysis, 12 SNPs were associated with OSCC at genome-wide significance. These included rs12379660 (chr9: p-value_meta=9.36×10^{-10}), which is the novel locus identified in our African OSCC GWAS, rs7099485 (chr10: p-value_meta=1.48×10^{-8}) in PLCE1, and rs1033667 (chr22: p-value_meta=1.47×10^{-9}) in CHEK2.

Conclusions:
This study is the first GWAS for OSCC conducted in an African population and has detected two novel risk loci for OSCC, one of which is likely specific to African populations. It also demonstrates the power of trans-ethnic meta-analysis to identify common or distinct risk loci in populations of diverse ancestry.

GENOME-WIDE ASSOCIATION STUDY OF AFRICAN OESOPHAGEAL SQUAMOUS CELL CARCINOMA

Chen W[1,2], Brandenburg J[2], Ramsay M[2], Parker M[3], Lewis C[4], Mathew C[2,4]
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OESOPHAGEAL CANCER Co-convened by AORTIC and NCI, STREAM 2, November 7, 2021, 1:45 PM - 3:00 PM

Objective:
Esophageal squamous cell carcinoma (ESCC) has a high incidence in sub-Saharan Africa but little is known about the genetic contribution to ESCC susceptibility in this region. We carried out a genome-wide association study (GWAS) in the South African Black (SAB) population to identify genetic risk factors for African ESCC.

Methods:
Samples from 1,686 OSCC cases and 3,217 population controls were genotyped on the 2.3 million H3 Africa SNP Illumina array and additional SNPs imputed using the Wellcome Sanger Institute imputation service. After correction for population substructure, the final imputed dataset of 14.4M SNPs was used in linear-mixed model analysis, using GEMMA to test for association. A meta-analysis with 4.85 million SNPs common to both our study and a GWAS of 2,013 Chinese ESCC cases and 2,701 controls was done using METAL.

Results:
The ESCC GWAS in the SAB population identified a total of 62 SNPs from 29 independent potential risk loci showing suggestive association with ESCC (P<5x10-6). Association signals at or near genome-wide significance were observed upstream of the FAM120A gene on chromosome 9 (rs12379660, p=4.58x10-8), and in a region spanning the MYO1B and STAT4 genes on chromosome 2 (rs142741123, p=5.49x10-8) with SNPs unique to African populations. In the meta-analysis, 12 SNPs were associated with ESCC at genome-wide significance. These included rs12379660 (chr9: p-value_meta=9.36x10-10), which is the novel locus identified in our African ESCC GWAS, rs7099485 (chr10: p-value_meta=1.48x10-8) in PLCE1, and rs1033667 (chr22: p-value_meta=1.47x10-9) in CHEK2.

Conclusions:
This study is, to our knowledge, the first cancer GWAS conducted in a resident African population and has detected two novel risk loci for ESCC, one of which is likely specific to African populations. It also demonstrates the power of trans-ethnic meta-analysis to identify common or distinct risk loci in populations of diverse ancestry.

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EPIDEMIOLOGICAL CHARACTERISTICS OF CHILDHOOD CANCER IN NORTHERN TUNISIA

Cherif I[1], Khiari H[1], Mallekh R[1], Hsairi M[1]
[1]Department of Epidemiology, Salah Azaiez Institute of Tunis

Objectives:
We aimed in this study to describe the epidemiological characteristics of childhood cancer in Northern Tunisia in 2010-2014.
Methods:
Data were used from the North Tunisia cancer registry. Cancers were classified according to the international classification of diseases for oncology (ICD-O-3) and converted to international childhood cancer classification. Crude and standardized age incidence rates of childhood cancers among children aged under 15 years old were calculated. Data were analyzed using the SPSS software.
Results:
During the 2010-2014 period, 591 new cases of childhood cancers were recorded representing 1.4% of the total number of cancers for the same period. Majority were boys (59.9%). The age standardized incidence rate was equal to 12.0 per 100000 person years (py) for boys and to 8.6 per 100000 py for girls. The most frequent childhood cancers types were malignant epithelial neoplasms (22.0% in boys and 32.7% in girls), lymphoid leukemia (14.5% in boys and 13.6% in girls), Hodgkin's lymphoma (10.2% in boys and 4.7% in girls) and brain cancers (8.5% in boys and 5.5% in girls).
Conclusions:
Cancers among children aged under 15 years were relatively rare. Given that most of childhood cancers are generally not preventable, prompt diagnosis, improving healthcare access and an effective evidence-based treatment for children with cancer are highly recommended.

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INCIDENCE AND TRENDS OF COLON CANCER IN NORTHERN TUNISIA

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[1]*Department of Epidemiology, Salah Azaiez Institute of Tunis*

Objectives:
We aimed to determine the age standardized incidence rates (ASR) of colon cancer in northern Tunisia and to analyze its trends between 1994 and 2014.
Methods:
Data were used from the North Tunisia cancer registry. All confirmed cases of colon cancer that were recorded in northern Tunisia were collected. Cancers were classified according to the international classification of diseases for oncology (ICD-O-3). Crude and ASR of colon cancer were computed for the 2010-2014 period. The joint point software was used for trend analysis.
Results:
In 2020-2014, 2943 new cases of colon cancer were recorded with a mean age of 61.5 ± 14.8 and a sex-ratio equal to 1.1. This cancer ranked fourth for incidence among men and second among women. The most frequent histological type was signet ring cell carcinoma. The ASR of colon cancer was equal to 12.2 per 100000 person years (py) among men and to 10.3 per 100000 py among women. The trend analysis showed a significant increase in the ASR of colon cancer with an annual percentage change (APC) of 5.2% [4.3-6.1] and of 5.0% [4.1-5.9]   among men and women respectively.
Conclusions:
We found a significant increase in colon cancer incidence between 1994 and 2014 for both sexes. This highlights the need for promoting healthy lifestyle measures and strengthening colon cancer screening program.

INCIDENCE AND TRENDS OF GYNECOLOGICAL CANCERS IN NORTHERN TUNISIA

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Objectives:
We aimed to determine the age standardized incidence rates (ASR) of gynecological cancer among Tunisian women in northern Tunisia and to analyze their trends between 1994 and 2014.
Methods:
Data were used from the North Tunisia cancer registry. All histologically confirmed cases of breast, cervical and ovarian cancers that were recorded in northern Tunisia were collected. Crude and ASR of these cancers were computed for the 2010-2014 period. The joint point software was used for trend analysis.
Results:
In 2020-2014, the most frequent gynecological cancer was breast cancer with an ASR of 45.5 per 100000 person years (py), followed by cervical cancer (ASR= 5.4 per 100000 py) and ovarian cancer (ASR=4.3 per 100000 py). Breast, cervical and ovarian cancers were diagnosed at a local stage in 39.0%, 68.1% and 41.1% of cases respectively. The average size at diagnosis of breast cancer was equal to 2.9 cm.
The trend analysis showed an increase in the ASR of breast cancer with an annual percentage change (APC) of 2.1% [1.4-2.8], a decrease in the ASR of cervical cancer (APC= -2.3% [-3.7-1.0]) and a stable ASR of ovarian cancer (APC= 0.5% [-0.6-1.6]).
Conclusions:
Gynecological cancers were relatively frequent in North Tunisia, particularly breast cancer, which increased between 1994 and 2014. Strengthening the awareness campaigns about the necessity of a regular breast cancer screening and the promotion breast cancer early detection program are necessary.

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INCIDENCE, TREND AND PROJECTION FOR LUNG CANCER IN NORTHERN TUNISIA

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Objectives:
We aimed in this study to describe age standardized incidence rate (ASR) of lung cancer in 2010-2014, its trends between 1994 and 2014 and its projection by 2040.

Methods:
Data were extracted from the North Tunisia cancer registry. Cases were classified according to the international classification of diseases for oncology. Trends analysis and projection were performed using the Join point software and an age period cohort analysis based on Poisson regression respectively.

Results:
During the 2010-2014 period, 5593 new cases of lung cancer were recorded with a mean age of 60 years and a sex ratio equal to 8.7. The ASR of lung cancer was equal to 38.4 per 100000 person years (py) in men and 4.3 per 100000 py in women. The most frequent histological type was non-small cell carcinoma. Trends in lung cancer ASR increased significantly between 1994 and 2014 mainly among women with an annual percentage change of 0.6% [0.0%-1.2%] and of 3.0% [1.6%-4.5%] among men and women respectively. By the year 2040, the estimated ASR of lung cancer would be of 54.1 per 100000 py among men and of 12.5 per 100000 py among women.

Conclusions:
Between 1994 and 2014, we found an increase in the lung cancer ASR mainly among women. In addition, without effective interventions, this rate is expected to be multiplied by 4 and 1.4 among Tunisian women and men respectively by 2040. Enhancing anti-tobacco laws application and encouraging smokers to quit tobacco mainly through the reimbursement of smoking cessation treatments is highly recommended to decrease lung cancer incidence.

INCIDENCE, TREND AND PROJECTION FOR NON-HODGKIN LYMPHOMA IN NORTHERN TUNISIA

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Objectives:
The aim of the present study was to determine Non-Hodgkin Lymphoma (NHL) incidence rate in 2010-2014, to analyze its trend between 1994 and 2014 and a projection until 2040.

Methods:
Data were used from the North Tunisia cancer registry. Cancers were classified according to the international classification of diseases for oncology (ICD-O-3). The joint point software was used for trend analysis. To perform age standardized incidence (ASR) projection, an age period cohort analysis based on Poisson regression was used.

Results:
During the 2010-2014 period, 685 new cases of NHL were recorded. Majority were aged 50 years or older (53.0%) and were men (58.0%). The ASR of NHL was equal to 5.7 per 100000 person years (py) and 3.9 per 100000 py among men and women respectively in 2010-2014. The most frequent subtype of NHL was the diffuse large B-cell lymphoma. Trends in NHL incidence rate increased significantly between 1994 and 2014 with an annual percentage change of 3.8% [1.7-5.8] among men and 5.5% [3.5-7.4] among women. The estimated ASR for 2040 was of 10.6 per 100000 py and 9.0 per 100000 py in men and women respectively.

Conclusions:
We found an upward trend in the incidence of NHL between 1994 and 2014. The estimated ASR for 2040 is also much higher than that found during the 2010-2014 period. Such results draw attention to the increasing burden of this disease. Further etiological research on NHL are needed.

CAN A SYMPTOMATIC APPROACH PREDICT ANAL HPV STATUS?

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i) OBJECTIVES
We sought to identify clinical symptoms that are significantly associated with a positive anal swab HPV test result in women living with HIV. Anal cancer is increasingly diagnosed in this population and is preceded by HPV infection. A low-cost symptomatic approach may help triage patients to HPV testing and clinical evaluation.

ii) METHODS
One hundred and thirteen participants were recruited into a study on prevalence and clearance of anal HPV. They were drawn from HIV management clinics at two tertiary hospitals in Harare, Zimbabwe, beginning 1 October 2018. Eligible women were HIV-positive, 18 years and older, with no previous or current diagnosis of anal cancer. Written informed consent was obtained from each participant. Symptoms relevant to possible anal cancer were captured as part of a structured medical history through an interviewer-administered questionnaire. An anorectal swab sample was collected at baseline from each participant. HPV genotyping was done on the Atila Biosystems © platform. Pearson's Chi-square was used as a test for significance at a level of 0.05.

iii) RESULTS
All participants were Black African women. Mean age was 41 years (range 23-70). HPV DNA was detected in 51 of 113 anal samples (45.1%). At least one high-risk HPV type (hHPV) was detected in 45 samples (40.2%). Multiple high-risk HPV types (mHPV) were detected in 26 samples (23%). HPV 16 was detected in 8 samples (7.1%). An anal mass, perianal pruritus and weight loss was significantly associated with mHPV ($p=0.04$, $p=0.01$, $p=0.01$ respectively) but not with hHPV or detection of HPV 16 alone. Rectal bleeding, rectal discharge, tenesmus, constipation, incontinence, and perianal pain were not associated with HPV positivity.

iv) CONCLUSIONS
No single symptom is sufficiently predictive of HPV positivity. However, an anal mass, perianal pruritus and weight loss should trigger a more focused assessment for presence of HPV related disease.

SUPPORTING NATIONAL CANCER CONTROL PLAN DEVELOPMENT, IMPLEMENTATION, AND EVALUATION THROUGH THE INTERNATIONAL CANCER CONTROL PARTNERSHIP (ICCP) TECHNICAL ASSISTANCE PROGRAM

Cira M[1], Romero Y[2], Tittenbrun Z[2], Hohman K[3], Given L[3], Duncan K[1]
[1]US National Cancer Institute Center for Global Health, [2]Union for International Cancer Control, [3]Strategic Health Concepts

OBJECTIVE
The International Cancer Control Partnership (ICCP) is a coalition of 19 organizations supporting cancer control planning efforts globally. One of the strategic goals led by the ICCP technical assistance (TA) workgroup is to provide guidance on development and implementation of evidence-based National Cancer Control Plans (NCCPs). This abstract outlines ICCP's technical strategy and initial results from the 2018-2020 period.

METHODS
The ICCP technical assistance approach includes: 1) Country engagement: Countries contact ICCP via the ICCP Portal or via individual ICCP partners for TA in NCCP development and implementation. Requests are reviewed to ensure government-level leadership support and circulated with UN Agencies (i.e. WHO, IAEA) and regional partners to ensure coordination with existing efforts. NCCP reviews are conducted utilizing the validated NCCP analysis tool from the global review of NCCPs. 2) Knowledge Exchange: The ICCP TA group developed a web-based collaborative learning program in partnership with Project ECHO™ on NCCP implementation (ICCP ECHO). The ICCP ECHO convenes countries to discuss with each other and global experts about the barriers and facilitators to and strategies for NCCP implementation. A mixed method program evaluation approach is utilized to measure program outcomes.

RESULTS
From 2018 to 2020, 16 NCCP reviews, including 11 for Africa, were conducted and reports issued, and 15 countries (11 in Africa) received NCCP TA. In 2020 the ICCP ECHO launched with 8 participating countries, including 7 in Africa, active in NCCP implementation. Specific examples of NCCP strengths and areas of growth, types of TA provided, and key barriers and facilitators to NCCP implementation will be presented.

CONCLUSIONS
The ICCP uses various evaluation metrics including the outcomes of the ICCP ECHO program evaluation to measure effectiveness in and informing future program directions for reaching the aim to support countries to strengthen their cancer control response.

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LA DETECTION DU PAPILLOMAVIRUS HUMAINS DANS DES TISSUS DE CANCER COLORECTAL

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OBJECTIVE :L'infection par le HPV semble être l'agent étiologique central pour le développement de la plupart des cas de cancer du col de l'utérus ainsi que des tumeurs malignes de plusieurs autres organes, y compris la vulve, le vagin, l'anus et l'oropharynx …., mais la question de savoir si les VPH ont un rôle dans le cancer colorectal reste controversée.
Le but du présent travail est d'évaluer la présence de génotypes de papillomavirus humains dans les muqueuses malignes du côlon et du rectum afin de déterminer s'il existait une relation entre l'infection à HPV et les néoplasmes du côlon.
METHODE : 36 ADN extrait des coupes de tissus d'adénomes colorectaux fixés au formol et inclus dans de la paraffine sont analysé par réaction en chaîne de la polymérase (PCR)en utilisons des amorces spécifique(my09 et my11)
RESULTATS : tous les échantillons étaient négatifs pour HPV (100%)
CONCLUSION : malgré le total des tests sont négatifs pour l'infection par HPV certaines études suggérant une association entre le VPH et la néoplasie colorectale, de vastes études bien conçues sont nécessaires pour tester cette hypothèse de manière rigoureuse.

BREAST CANCER, AGE DISTRIBUTION AND ETHNICITY BY HIV STATUS IN SOUTH AFRICA: CROSS-SECTIONAL STUDY

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[1]Swiss Tropical And Public Health Institute, Basel, [2]Graduate School of Health Sciences, University of Bern, [3]University of Basel, Basel, [4]Graduate School for Cellular and Biomedical Sciences, University of Bern, [5]National Cancer Registry, National Health Laboratory Science, Johannesburg, [6]School of Public Health, University of the Witwatersrand, Johannesburg

Objective
We determined the age distribution of breast cancer (BC) cases by HIV status and ethnicity in South African (SA) women.

Methods
This cross-sectional study evaluated women aged ≥15 years diagnosed with BC in the SA public health sector from 2004-2014. We obtained BC data from the National Cancer Registry, and HIV status from routinely collected HIV related laboratory records from the National Health Laboratory Service. We compared age distribution, ethnicity and year of BC diagnosis by HIV status.

Results
From 2004-2014, in total 41,498 BC cases were diagnosed in women aged ≥15 years. Of these, 74% (n=30,557) had unknown HIV status, 19% (n=7,744) and 8% (n=3,197) were HIV negative and positive, respectively. The median age at BC diagnosis in HIV negative women was 55 years (interquartile range (IRQ): 42-68) and 45 years (IQR: 34-56) in HIV positive women. 40% (n=3,094) of all HIV negative women and 71.6% (n=2,291) of all HIV positive women were 50 years and younger. The percentage of HIV positive BC patients 50 years and younger was 72.6% (n=1,946) for Black, 68.5% (n=150) for Coloured, 58.6% (n=17) for Asian, 59% (N=106) for White and 80% for (n=72) Unknown ethnicity (X² p-value ≤0.001). Odds of being HIV positive among women with known HIV status were higher for Black women compared to other ethnicities, for women aged 30-34 years compared to 35-39 years old, and those diagnosed with cancer in the latest calendar period (2011-2014).

Conclusion
The majority of HIV positive women with BC were 50 years and younger and diagnosed 10 years earlier compared to HIV negative women. Many women with BC were unaware of their HIV status. Both BC and HIV have high burden in SA, therefore exploring the BC comorbidity in HIV positive women and opportunities to integrate HIV and BC control programs are needed.

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ACCESS TO ESSENTIAL CHILDHOOD CANCER MEDICINES IN EAST AFRICA: RESULTS FROM A MULTI-CENTRE PROSPECTIVE MIXED-METHODS STUDY

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[1]The Hospital For Sick Children

PAEDIATRIC CANCER, STREAM 3, November 8, 2021, 1:00 PM - 2:45 PM

Equitable access to essential medicines is a critical component of childhood cancer care and vital to improved global outcomes for children with cancer. Little rigorous data exists on the nature and determinants of access to childhood cancer medicines in African health system contexts. This session will review new data from a multi-centre prospective mixed-methods study of access to essential cancer medicines for children in five East African countries, to inform discussion about challenges in achieving sustained access to vital childhood cancer treatments in the region and opportunities to address them through evidence-informed policies.

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DIAGNOSTIC ET IMMUNOPHÉNOTYPAGE DES TUMEURS DE L'ENFANT, L'ADOLESCENT ET LE JEUNE ADULTE AU SÉNÉGAL DANS LE CADRE DU CRDCE

Dial C[1], Raphael M[2], Coulomb-L'Hermine A[3], Diagne F[4], Diouf N[4], Sow A[1], Cherqaoui F[1], Toure A[1], Sall A[1], Auberger E
[1]Université Cheikh Anta Diop, [2]AMCC, [3]Hôpital d'enfants Armand Trousseau, [4]Hôpital Aristide le Dantec

Objectif : Le CRDCE (Centre de référence pour le diagnostic des cancers de l'enfant) s'est mis en place à Dakar en 2020 et s'est fixé pour objectif un diagnostic optimisé des cancers pédiatriques, c'est-à-dire diligent et complet incluant leur immunophénotypage. L'objectif de cette étude est de rapporter les données rétrospectives et prospectives du profil épidémiologique et des aspects anatomo-pathologiques des tumeurs de l'enfant durant la première année d'activité du CRDCE au laboratoire de pathologie de l'université cheikh Anta Diop (UCAD) de Dakar.

Patients et Méthode : Cette étude est basée sur une série de 59 enfants recensés sur une année (janvier 2020 à décembre 2020). Les biopsies et les pièces opératoires étaient prises en charge selon la technique histologique standard protocolaire complétée au besoin par l'immunohistochimie.

Résultats : Cette série comportait 54% de filles et 46% de garçons. Les tumeurs représentaient 81%. Les tumeurs malignes formaient 62,7% des cas. Seulement 14 enfants (35% des cancers) âgés en moyenne de 5,5 ans avaient bénéficié d'une chimiothérapie néo adjuvante protocolaire. Les tumeurs rénales étaient plus fréquentes dominées par le néphroblastome dans 45% puis les autres formes histologiques : sarcome à cellules claires du rein dans 3% des cas et tumeur rhabdoïde du rein dans 3%. La deuxième tumeur était le rétinoblastome (17%) suivi des lymphomes (7%). Dans 8 cas un immunophénotypage était nécessaire dont 3 Lymphomes.

Résumé : Les tumeurs malignes de l'enfant sont des pathologies graves nécessitant un diagnostic précis et rapide pour une prise en charge protocolaire optimisée. Elles représentent une part non négligeable des prélèvements pédiatriques à Dakar. La mise en place du CRDCE permet leur prise en charge prioritaire selon les normes de l'OMS.

MOTS CLES : CRDCE- Cancers –Enfants-Sénégal

ÉTUDE DES FACTEURS PRONOSTIQUES DU CANCER DU SEIN A L'INSTITUT JOLIOT CURIE DE DAKAR EN 2016

Diallo A[1], Thiam J[1], Ba M[1], Dieng P, Ka S[1], Dem A[1]
[1]Institut Joliot Curie de Dakar

OBJECTIF

Rechercher les facteurs pronostiques des cancers du sein à l'institut Joliot Curie

Méthodes :

Une étude prospective descriptive et analytique a été menée entre le 1er Janvier et le 31 Décembre 2016. Une confirmation histologique était nécessaire à l'inclusion. Les données ont été recueillies sur les dossiers médicaux. Une analyse descriptive et analytique a été réalisée grâce au logiciel R studio.

Résultats :

Nous avons inclus 313 patientes avec 86 décès (27,5%), 32 perdues de vues (10,2%). L'âge moyen était de 46,6 ans +/-12,90. Les patientes habitaient hors de Dakar dans 79,6% des cas. La gestité moyenne était de 4 avec des extrémités de 0 et 12. Les patientes étaient ménopausées dans 43,8% des cas. Les tumeurs de plus de 5 cm représentait 87,9%. Le carcinome canalaire infiltrant était le type histologique le plus fréquent (94,2%). Le grade SBR II était présent dans 60,4%. Il n'y'avait pas de récepteurs hormonaux chez 15 patientes. Il y'avait un envahissement ganglionnaire chez 88,2% des patientes. Des métastases étaient retrouvées dans 45,7% des cas. Les patientes ont eu une chimiothérapie dans 94,6%, une chirurgie première dans 3,2 %. La médiane de survie des patientes était de 22 mois. Les facteurs pronostiques retrouvés étaient l'âge, le grade SBR, les métastases.

Conclusion :

L'étude des facteurs pronostiques du cancer du sein permet identifier le profil de nos patients, garant d'une meilleure prise en charge.

MANAGEMENT OF GASTRIC CANCER IN AFRICA: SYSTEMATIC REVIEW AND META-ANALYSIS

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[1]Institut Joliot Curie de Dakar

Objective: To make an overview of the management of gastric cancer in Africa.

Methods: Relevant articles published between January 1st, 2000, and December 31st, 2020 on gastric cancer were identified. We evaluated full papers published in English and French. Two reviewers independently evaluated the studies. We included cohort studies, case-control studies, cross-sectional studies, and case series. For each study, methodological quality was assessed according to the Newcastle-Ottawa Scale (NOS). Meta-analysis was performed using five-year survival. A p-value ≤of 0.05 was interpreted as confirming heterogeneity among studies. Forest plots were used to visually assess the overall survival estimates and corresponding 95% confidence intervals.

Results: Forty-two studies were included for the systematic review and eight for the meta-analysis. The sample size of the included studies ranged from 26 to 394 patients with a total population for the systematic review of 5796 patients. Sixty-two percent (62%) of patients were male. The mean age of included patients was 55.1+/-4.34 years.

For all studies, the histological type mainly found was adenocarcinoma. Stage IV represented 1199 patients (54,17%), and stage III was 21,8%. Surgery (palliative or curative) was commonly the first treatment receive by patients (92%). Neo-adjuvant chemotherapy was used in few cases (11.12%) and it was the same for radiotherapy (4.1%). Surgical complications were over 30% and mortality 40%. Five-year survival data were identified in eight studies. The overall survival rate was 11.74%.

Conclusion: Surgery occupies a central position, but the increased use of adjuvant or neoadjuvant therapies may improve the poor prognosis. A better organization of service and the creation of guidelines that took count of the reality of the practice of medicine in Africa are a part of the solution.

ETUDE CYTOGENETIQUE MOLECULAIRE DES CHORIOCARCINOMES UTERINS AU CENTRE HOSPITALIER UNIVERSITAIRE DE DAKAR

Diatta A[1]

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OBJECTIF: Le choriocarcinome est une tumeur hautement maligne se développant le plus souvent après une grossesse môlaire et rarement en dehors de toute grossesse.
Le but de cette étude est de déterminer l'origine génétique du choriocarcinome et la nature de la grossesse en cause et de proposer des mesures préventives.

METHODES: Nous avons réalisé une étude descriptive portant sur seize choriocarcinomes analysés après confirmation histologique.
L'ADN des choriocarcinomes a été extrait des coupes ultrafines réalisées à partir des blocs de paraffine contenant le tissu tumoral ayant servi au diagnostic des choriocarcinomes. L'ADN des parents a été extrait des échantillons de sang veineux par la méthode phénol-chloroforme.
Le génotypage des ADN tumoraux et parentaux ont été réalisés par onze marqueurs microsatellites amplifiés par la réaction PCR. Pour déterminer l'origine parentale des allèles présents dans l'ADN tumoral, nous avons comparé les résultats obtenus en se basant sur la similitude de taille des allèles estimée en paires de bases.

RESULTATS: Parmi les 16 choriocarcinomes analysés,7(43,8%) choriocarcinomes étaient d'origine androgénique monospermique présentant un seul allèle de type paternel. La grossesse en cause était une môle complète. Trois(18,8%) choriocarcinomes ont présenté un profil hétérozygote à 3n chromosomes. Ces choriocarcinomes se sont développés à partir d'une môle partielle.
Un(6,2%) choriocarcinome était d'origine biparentale. Ce choriocarcinome faisait suite probablement à une grossesse avortée, génétiquement normale. Il présentait deux allèles dont l'un est d'origine paternelle et l'autre de type maternel.
Cinq(31,2%) choriocarcinomes ont présenté que des allèles de type maternel. Il s'agit, probablement, de choriocarcinomes non-gestationnels.

CONCLUSIONS: Le choriocarcinome est une tumeur maligne le plus souvent d'origine gestationnelle. Le génotypage moléculaire est nécessaire à la détermination de la nature de la grossesse en cause et du profil génétique du choriocarcinome qui dérive de cette grossesse. Cette recherche étiologique des choriocarcinomes a des implications diagnostiques, pronostiques, thérapeutiques et préventives.

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ETUDE HISTOLOGIQUE DES PIECES OPERATOIRES D'HYSTERECTOMIE POST-MOLAIRE AU CENTRE HOSPITALIER UNIVERSITAIRE DE DAKAR

Diatta A[1]

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OBJECTIFS: L'examen histologique représente une étape importante dans la prise en charge des maladies trophoblastiques gestationnelles.
Cette étude a pour but de confirmer le diagnostic d'une tumeur trophoblastique évoquée au bilan bioclinique afin de permettre une prise en charge adéquate des patientes atteintes.

METHODES: Il s'agit d'une étude prospective portant sur 56 pièces opératoires d'hystérectomie. L'examen histologique a été réalisé après une intervention chirurgicale pratiquée devant les signes biocliniques et échographiques évocateurs d'une tumeur trophoblastique gestationnelle ou devant un risque élevé de survenue de choriocarcinome chez les patientes suivies pour un avortement môlaire, selon le score pronostique de surveillance de la pathologie môlaire utilisé à Dakar.
Les pièces opératoires étaient examinées macroscopiquement et microscopiquement selon les étapes de la méthode d'étude histologique à la paraffine après fixation au formol de la pièce opératoire ouverte, confection du tissu tumoral, inclusion à la paraffine, réalisation des coupes, coloration, montage lame-lamelle, observation microscopique.

RESULTATS: Trente-six pièces opératoires présentaient une tumeur à l'ouverture de la pièce, parmi lesquelles; 20 pièces présentaient une tumeur nécrotico-hémorragique, infiltrant la paroi utérine à la coupe ; 7 tumeurs bourgeonnantes, hémorragiques envahissant la paroi utérine et contenant des vésicules môlaires, 10 pièces opératoires présentaient une tumeur nodulaire intracavitaire, à surface irrégulière, hémorragiques par endroit et une pièce opératoire était envahie par une volumineuse tumeur occupant toute la cavité utérine.
L'examen microscopique a révélé 17 choricocarcinomes,9 môles invasives, 3 tumeurs du site d'implantation, 6 cas d'endométrite syncytiale, 5 cas d'adénomyoses intra-murales, 5 cas de léiomyomes utérins, 11 pièces à la limite histologique normale.

CONCLUSIONS: Le diagnostic d'une tumeur trophoblastique gestationnelle passe par le dosage plasmatique de l'hormone chorionique gonadotrophique. Cependant, l'examen histologique reste incontournable dans la prise en charge des tumeurs trophoblastiques, car il permet de confirmer le diagnostic d'une tumeur trophoblastique maligne et de déterminer l'entité histologique en cause.

MULTIMORBIDITY OF CANCER IN SUB-SAHARAN AFRICA:SYNTHESIS OF EVIDENCE FROM A SYSTEMATIC LITERATURE REVIEW

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Objective: The prevalence of non-communicable diseases (NCDs) such as cancer, diabetes, and cardiovascular disease is rising across sub-Saharan Africa (SSA), alongside the already existing high burden of chronic communicable diseases such as HIV and TB. Many individuals with a diagnosis of cancer have pre-existing chronic conditions. This study aims to review and summarise the evidence on cancer comorbidity and multimorbidity in sub-Saharan Africa.

Methods: We systematically searched electronic databases including MEDLINE, EMBASE, CINAHL, Global Health, PsycINFO, African Journals Online, Google Scholar, as well as organisational and international websites to identify grey literature. Inclusion criteria were observational studies reporting on the prevalence, patterns, and epidemiology of multimorbidity and comorbidities in SSA, published between 01 January 2000 and 31 August 2020, with no language restrictions. Multimorbidity studies focused on multiple chronic conditions holistically without reference to a specific condition; comorbidity studies described the co-occurrence of multiple chronic conditions in reference to an index condition. Two reviewers independently screened abstracts and full-texts articles.

Results: Our search identified 727 potentially eligible articles after removal of duplicates and non-relevant studies, 663 of which were categorised as comorbidity studies, and 64 as multimorbidity studies. 19 comorbidity studies focused on cancer as an index condition: ten (52.6%) reported about the prevalence of HIV as a comorbid condition, four (21%) diabetes, four (21%) hypertension, and other conditions included heart disease, depression, TB, chronic kidney disease, cerebrovascular disease, and obesity. Six (31.6%) of these studies were conducted in Nigeria, four (21%) in South Africa, and the rest from eight different countries in the region. Nine (9.3%) of the multimorbidity studies included cancer in the list of conditions studied.

Conclusion: Understanding the prevalence and patterns of cancer, comorbidity and multimorbidity in SSA for both NCDs and communicable disease is essential to inform prevention activities, and planning of health services.

ASSESSMENT OF KNOWLEDGE, ATTITUDE AND PRACTICE OF PROSTATE CANCER SCREENING AND RISK FACTORS AMONG HEALTH WORKERS IN MAIDUGURI, NORTHEASTERN NIGERIA

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BACKGROUND:
Cancer of the prostate is the most commonly diagnosed cancer in men worldwide and ranked second as the cause of cancer-related deaths. In sub-Saharan Africa, Nigeria ranked first. Recent data from Nigeria had shown an increasing incidence of prostate cancer. Majority of patients in this sub-region present late for which reason such as ignorance and poverty, absence of screening programs, inadequate diagnostic facilities and lack of health education. Health workers continue to be an important source of information regarding health issues in our community.

MATERIALS AND METHODS:
The study design employed was a cross sectional descriptive survey aimed at assessing the knowledge, Attitude and practice of prostate cancer screening and risk factors among male health workers in two tertiary health institutions in Maiduguri Northeastern Nigeria. The study was carried out over a period of six weeks. A questionnaire was designed and employed as the research instrument for the study which was self-administered. It was structured in simple English language consisting of open and closed ended questions.

RESULTS:
A total of 400 questionnaires were administered among male health workers. Majority of the respondent 367 (95.3 per cent) are aware of prostate cancer. More than two-third of the respondents (83.9%) in our study were aware of prostate cancer screening (PCS) out of which 60.8% correctly identified PSA and/or DRE as a PCS screening method. Age is the most common risk factor of prostate cancer identified by 84.2 per cent of the respondents

CONCLUSION:
The study attempts to correlate the knowledge of the various risk factors of prostate cancer i with the knowledge, attitude and practice of prostate cancer screening among male health workers.
Cancer screening facilities should be made available, affordable and accessible for all men within the age group of screening.

INSIGHTS FROM THE AFRICAN BREAST CANCER - DISPARITIES IN OUTCOMES (ABC-DO) STUDY AND THEIR RELEVANCE TO PALOP COUNTRIES

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AORTIC-PALOP, STREAM 2, November 8, 2021, 10:00 AM - 11:00 AM

Breast cancer is currently the most common female cancer in sub-Saharan Africa (SSA), and the second leading cause of female cancer deaths. With the number of breast cancer deaths in SSA projected to more than double by 2040, effective strategies to improve survival from the disease across the region are urgently needed if premature deaths from this potentially curable cancer are to be prevented.

The African Breast Cancer – Disparities in Outcomes (ABC-DO) study, the largest breast cancer survival cohort in SSA, was set up to identify modifiable and non-modifiable drivers of the poor survival from the disease in the region. Women with a newly-diagnosed breast cancer were recruited between September 2014 and December 2017 in eight hospitals across five sub-Saharan countries (Namibia, Nigeria, South Africa, Uganda and Zambia) chosen to represent populations at different stages of the demographic and epidemiological transitions, varying HIV prevalence, and diverse health care systems. The cohort benefits from a wealth of clinic-epidemiological data on the women's socio-economic status, breast cancer awareness, barriers to timely diagnosis and treatment, tumour characteristics, and treatment as well as data on both survival and survivorship outcomes. Study implementation was through a specifically-tailored m-health application to ensure effective study management and high-quality data collection across all participating centres whilst minimizing losses to follow-up. The cohort is being followed-up to the end of 2022 to allow calculation of standard 5-year survival estimates.

In line with the rest of SSA, breast cancer is the second most important cause of female cancer deaths in Portuguese-speaking African countries (PALOPs) but little survival data are available on which to draw locally-appropriate cancer control strategies. In this talk, we will highlight the strengths and limitations of the ABC-DO methodology, and their potential relevance for the design and conduct of breast cancer survival studies in the PALOPs.

CROSS-BORDER COMPLEMENTARITY IS NECESSARY WHEN CARE SUPPLY IS INCOMPLETE: THE EXAMPLE OF FRENCH GUIANA AND SURINAME

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IMPLEMENTATION SCIENCE: NUTS AND BOLTS FOR AFRICAN PRACTICE Co-convened by AORTIC and NCI (Part 2), STREAM 3, November 6, 2021, 1:00 PM - 5:00 PM

Objective: to analyze the management of the large Surinamese population living in the basin of the Maroni river; radiation therapy is available in Suriname (Academisch Ziekenhuis Paramaribo – AZP) to citizens with minimum state social security coverage. Patients can receive medical treatments at Saint-Laurent du Maroni Hospital (SLMH) as part of urgent care.

Methods: we reviewed the files of patients treated for malignancies from 2015 to 2020 at SLMH and analyzed the information concerning patients treated at AZP. In October 2018, an unconventional cooperation policy was initiated between AZP and SLMH.

Results: until September 2018, 10/299 (3%) patients and from October 2018, 32/274 (12%) patients benefited from contacts between the two institutions. A total of 42 patients were concerned: median age 45 years (14-69); 19 men / 23 women. Surinamese nationality: 39/42 patients. Administrative documents valid in French Guiana: 9, in Suriname: 19, none: 11 patients. Health coverage: full: 7, minimum: 7, none: 28 patients. Nine patients were referred to AZP radiotherapy center (head and neck cancers: 4, uterus: 2, breast, esophagus, anus, one patient each. Two patients had brachytherapy. Seven patients are potentially cured. Fifteen patients were scheduled to receive radiotherapy at AZP without being treated: disease progression: 7, transfer to mainland France: 3, refusal: 2, board decision, no funding lost to follow-up, and ongoing process, one each. Overall, treatments at AZP were diagnostic procedures: 14, radiotherapy: 13, surgery: 10 and chemotherapy: 9 patients, respectively.

Conclusion: more than 12% of cancer patients at SLMH are Surinamese. Since the informal contacts, the number of joint patients has increased, it was possible to organize a coherent curative management of 9 patients, 7 of whom are disease-free. This collaboration deserves to be the subject of a partnership agreement and could serve as an example for other tropics regions of the world.

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GERIATRIC PROFILE OF OLDER PATIENTS WITH CANCER IN MARONI RIVER BASIN IN FRENCH GUIANA

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Objective: to characterize health status of older patients with cancer in a multicultural and poor region of South America.

Methods: We reviewed the clinical files of 107 patients over 70 years of age among a 574 (18.6%) patients data base with malignancies in West Guiana. The population is multicultural: maroon, 40%, Native Amerindian, 9%, Creole, 23%, Hmong 5% and other, 23% of patients. In French Guiana 50% and 23% of people live below the national and local poverty threshold, respectively. This is most obvious in West Guiana. We collected the basic data useful in geriatrics and made 42 (39%) multidimensional geriatric assessments (MGA).

Results: median age 75 years, (70 - 94), 67 men, 40 women; 9% have an hemopathy and 99 a solid tumor: prostate cancer: 35, lung: 14 patients but only 3 cervix and 5 breast cancers. PS > 2 in 38 patients; no comorbidity: 18%, 1-2: 55% (majority of hypertension): obesity (BMI ≥ 30: 12%) and overweight 50% of patients. Analysis of 42 MGAs shows: altered Activity Daily Living (ADL) and instrumental ADL in 28 and 12 patients, respectively. Cognition and mood are impaired in 12 and 13 patients, respectively. Gait is impaired and incontinence is observed in 29 and 22 patients, respectively. According to Balducci's classification 12 patients are classified fit, 5 vulnerable and 28 frail. The process of MGA was difficult due to the clinical setting and language barrier in 18 and 28 patients, respectively. Finally, 11 and 12 patients were able to receive curative and palliative anticancer medical treatment respectively (55%)

Conclusion: older patients with cancer may benefit from geriatric assessment. But clinical and cultural contexts require to adapt the MGA. This must be the goal of research in geriatric oncology

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LIMITS OF G8 FRAILTY SCREENING IN OLDER PATIENTS WITH CANCER IN FRENCH GUIANA

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BEST OF THE BEST ABSTRAC

S (3), STREAM 3, November 9, 2021, 6:30 PM - 7:30 PM

Objective: the G8 score was constructed in Western countries to screen the need for geriatric assessment in older patients with cancer: is it applicable in multicultural and multilingual countries?
Methods: the G8 score was achieved in 116 out of 203 and 78 out of 107 older patients with cancer at Cayenne (CH) and Saint-Laurent du Maroni (SLMH) hospitals, respectively. The passage of the test was non-directive at CH, directive at SLMH. French Guiana is a multicultural territory. The details of the cultural, social, and administrative status of the patients are known at the SLMH: 20% and 80% of the patients were respectively of Western and Maroon, Native Amerindian, or Creole cultures. About 20% of patients did not have social security or administrative documents.
Results: In both populations the median G8 score was 10/17 and 15% of patients had a G8 score ≥ 15/17. But within the G8 score items, we observed that to the question "In comparison with other people of the same age, how does the patient consider his / her health status? ", 64% and 20% of patients at CH and SLMH respectively cannot respond.
Conclusion: we have seen half the number of patients with a normal G8 score than in the original test validation study. The inability of many patients to answer the question about self-rated health may result in an underestimation of the score. However, the directive passing of the G8 score instructions can modify the discriminating quality of the score. Finally, the question on self-assessment of health status may not be compatible with cultural vision of health by the patients of non-Western culture. We conclude that research on adapting frailty screening to the cultural context and performing test-taking procedures is needed.

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EVALUATING A PROJECT ECHO VIRTUAL COMMUNITY OF PRACTICE TO SUPPORT NATIONAL CANCER CONTROL PLAN IMPLEMNTATION

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OBJECTIVE
The International Cancer Control Partnership (ICCP) ECHO Program is using the Project ECHO® technology-enabled collaborative learning model to foster knowledge exchange for countries implementing national cancer control plans (NCCPs). Using a mixed-methods pre-post study design we will evaluate the utility of the Project ECHO model in developing a virtual community of practice that can assist NCCP implementation in the countries participating in the ICCP ECHO program and to identify contextual factors that influence NCCP implementation.
METHODS
Participants (n=61; 8 country teams) completed a survey measuring baseline knowledge of, confidence using, and behaviors related to 12 evidence-based strategies that can support implementation of NCCPs. Country teams also participated in focus group discussions to select priority focus areas and anticipated challenges during the 12-month program. A 3-point Likert scale was used to score pre-ICCP ECHO knowledge, confidence, and behavior for 12 statements regarding each implementation strategy, where 1 was lowest and 3 was highest. Following the completion of 12 sessions, an end-point survey will measure changes in these areas.
RESULTS
On the pre-test, respondent knowledge and confidence scores were lowest for planning for costing/financing (2.17 ± 0.74; 2.17 ± 0.76, respectively); behavior score was lowest for raising funds to implement NCCP (1.96 ± 0.79). The top cited challenge to NCCP implementation was raising funds to implement their NCCP (74% strongly agreed or agreed this was a challenge). The top priority areas selected by teams included cancer prevention strategies, national cancer registry development, and cancer control research to inform priorities. Baseline survey results and priority areas informed curriculum design. Additional results will be shared following the completion of 12 sessions.
CONCLUSIONS
This mixed-methods evaluation will assess the ICCP ECHO program based on changes in participants' knowledge and utilization of implementation strategies and will contribute to understanding country-level barriers and facilitators that influence NCCP implementation.

LEVERAGING INNOVATIVE WHITEBOARD TOOLS TO CONVEY PALLIATIVE CARE AS A PRIORITY FOR CANCER IN AFRICA AND BEYOND.

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BEST OF THE BEST ABSTRACTS (4), STREAM 2, November 9, 2021, 6:30 PM - 7:30 PM

With Covid-19 impacting cancer patients across Africa and globally, innovative forms of rapid communication that can reach multi-lingual audiences are necessary. For the Union for International Cancer Control (UICC)-sponsored World Cancer Day 2021, the Walther Center in Global Palliative Care & Supportive Oncology at Indiana University launched a novel text-based Whiteboard video to convey the benefits of quality palliative care for cancer services in Low and Middle Income Countries (LMICs) and globally.

Objectives: (1) Provide an easily accessible visual product for clear communication of global disparities in access to essential medicines for cancer pain; (2) address the specific topics of palliative care, advocacy as well as psycho-oncology themes.

Methods: a series of 5 team-based strategy sessions were held to develop key messaging to integrate UICC's World Cancer Day sub-topic on 'equity in access to cancer services' with a specific focus on palliative care. These strategy sessions included subject matter experts to address the following aims:
a) Identification of misconceptions around palliative care, specifically addressing disparities in essential medicines for cancer pain.
b) Development of a key message: Palliative Care is always a priority, with substantiating facts such as: 70% of people around the world don't have access to standard clinical interventions for cancer.
c) Engagement in an iterative process to refine visuals and pace of graphics to captivate a general audience, in addition to clinical cadres and policy makers.

Results: The Whiteboard product was produced over 3 weeks. Following launch, it received over 1,200 organic views on social media platforms, namely: Twitter, YouTube and Facebook. The Whiteboard has recently been translated to French and Arabic, increasing opportunities for dissemination across African countries.

Conclusions: With African health care systems struggling to maintain cancer care services amidst the Covid-19 response, clear communication around palliative care's offerings is of essence. Leveraging a cost-effective software for text-based motion graphics can facilitate messaging that is both appealing and accessible to multi-lingual African audiences through social media dissemination.
Link to 1.5 minute whiteboard: https://www.youtube.com/watch?v=fMv-ySLuO6Y

ASSESSMENT OF DEPRESSIVE SYMPTOMS AMONG CAREGIVERS OF CANCER PATIENTS IN RADIATION ONCOLOGY DEPARTMENT, UCH, IBADAN

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Abstract

OBJECTIVE: Many cancer patients are provided with supportive care by friends and family members whose psychological burdens go unrecognized. The objective of this study was to ascertain the prevalence and predictors of depressive symptoms among caregivers of cancer patients.

METHODS: The study was a hospital-based cross-sectional study employing a quantitative method of data collection. A simple random sampling technique was used to select 203 eligible caregivers of patients accessing treatment at the radiation oncology department of the university college hospital, Ibadan. Depressive symptoms among caregivers were measured using the depression subscale of the hospital anxiety and depression scale (HADS). Ethical approval was obtained to conduct this study.

RESULTS: Most of the caregivers were 40 years old and younger (53.2%,). Results showed that 74.88% of the respondents experienced depressive symptoms. Bivariate analyses showed that female gender, lower educational attainment, spending more than 20% of the time caring for the patient, having to borrow money to assist with care and being concerned about treatment related cost were significantly associated with depressive symptoms amongst caregivers of cancer patients ($P<0.05$). Also, age of patient, being single, ill and more hospital admissions were significantly associated with depressive symptoms. However, binary logistic regression analysis after adjusting for non-significant variables revealed that caregivers who indicated caregiving was affecting attention to own financial needs were 5 times more likely to experience depressive symptom disorder (OR: 5.312; 95% C.I: 11.337 – 21.277) compared to those who did not($p<0.05$).

CONCLUSION: Caregivers of cancer patients should be provided with financial support by NGOs and the relevant government agencies to reduce the financial burden of care, while affordable psycho-oncological services should be made available to help caregivers manage their depressive symptoms.

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POSSIBLE STRATEGIES FOR HARMONISATION OF TRAINING IN AFRICA: THE PROMISE FOR REGIONAL AND CONTINENTAL COLLABORATIONS

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TRAINING THE WORKFORCE: EXPERIENCES FROM AFRICAN COUNTRIES, STREAM 1, November 10, 2021, 1:00 PM - 2:00 PM

This is a panel discussion on harmonization of oncology training in the continent. In particular:
A. Providing or suggesting guidelines for a harmonised oncology training
B. Enhance student mobility between 'equivalent' institutions.
C. Facilitate fellowship, preceptorship and observership opportunities within the continent

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RESOURCES (HUMAN AND INFRASTRUCTURE) FOR MANAGING IMMUNOTHERAPY-RELATED TOXICITY

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SPECIAL INTEREST GROUP: MEDICAL ONCOLOGY, STREAM 1, November 6, 2021, 3:00 PM - 5:00 PM

With the advent of immunotherapeutic agents, durable and dramatic responses have been observed in several hard-to-treat malignancies, outlining a roadmap to conquering cancer. Immune checkpoint inhibitors (ICPi) are a class of immunotherapeutic agents that attack the tumor cells by reinvigorating the suppressed immune system. However, the unbridled T-cell activity disrupts the immune homeostasis and induces a unique spectrum of side effects called immune-related adverse events (irAEs). These irAEs are distinct from the side effects produced by traditional chemotherapeutic agents. The management of irAEs has been challenging to the patients, caregivers and the healthcare providers alike. With increasing use of ICPis, the incidence of irAEs will undoubtedly increase. There is a compelling need to develop measures and resources to effectively manage irAEs, both in the community settings and in cancer centers alike.

PERIOPERATIVE FLOT EXPERIENCE IN RESECTABLE GASTRIC ADENOCARCINOMA: PATHOLOGICAL REGRESSION AND TOXICITY

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Objective : To improve survival of gastric cancer, a multidiscipllinary strategies including perioperative chemotherapy with FLOT protocole (fluorouracil plus leucovorin, oxaliplatin, and docetaxel) as the current standard. We report our experience in perioperative chemotherapy with FLOT in resectable gastric adenocarcinoma patients stage cT2 or cN +, to evaluate the toxicity and the tolerability, clinical and pathological response

Methods : It's a descriptive and prospective study, 46 patients have been treated in the medical oncology department of Oran against cancer center of Algeria between January 2018 and december 2020.

Results: The median age at diagnosis was 58,9 years (36 -75), and most patients were women 52% (n =24), the common symptom was epigastralgia in 31 patients (67%) associated or not with other symptoms like vomiting, melena, anorexia. Performance status (PS) prior to treatment were 0 (n=7, 15%), 1 (n = 39, 85%), clinical tumor stage : cT2 in 9 patients (19.5%), cT3 in 21 patients (45.6%), cT4a in 16 patients (34.7%), clinical node positive in 41 patients (89%), the tumor is antro-pyloric in 28% of cases.
40 patients (87%) completed 4 preoperative cycles and three patients (6%) discontinued treatment because of toxic deaths and toxicities . 44 patients (95.6%) were able to undergo surgery and R0 was achieved in 43 patients (97.7%) compared with 85% in the AIO-FLOT4 trial, total gastrectomy was performed in 21 patients (51%), lymphadenectomy D2, D1.5 and D1 in 20 (49%), 18 (44%), 3 (7%) patients respectively. Pathological regression with FLOT patients was detected with a proportion of postoperative stage ypT1, ypT2, or ypT3 tumours in 28 patients (68.2%) contrasted with 58% in the AIO-FLOT4, Pathological nodal stage ypN0 was reached in 26 patients (63.4%). According to Tumour regression grade(TRG), there was no complete histological response (TRG 1a), Pathological subtotal regression (TRG 1b) was reached in five patients (12%), partial tumor regression (TRG2) in 17 patients (41%) and no regression (TRG 3) in 13 patients (32%).
12 patients (29%) did not start postoperative FLOT (PS 2/3). 14 patients (34%) completed 4 postoperative cycles and 15 patients (37%) discontinued postoperative FLOT because of toxic effects. The most common grade ¾ toxicities were neutropenia , diarrhoea , fatigue and anorexia

Conclusion:
FLOT is the new standard of perioperative chemotherapy for gastric cancer and has been integrated into European standards, it improve pathologic response rate, and the toxicity was controlled

REFLECTION ON IMPLEMENTATION

Fasawe O[1], Ameyan L[1], Wiwa O[1]
[1]Chai

CURRENT STATUS OF CERVICAL CANCER IN AFRICA, STREAM 1, November 8, 2021, 4:45 PM - 5:30 PM

In support of the WHO 2030 goal towards the elimination of cervical cancer as a public health problem, Unitaid-CHAI seek to accelerate access and scale up the use of optimal tools through the cervical cancer prevention program in Nigeria. The program is working in close collaboration with the Federal and State Ministries of Health in Lagos, Rivers and Kaduna states to screen and treat 430,000 women in two years. The goal of the program is to scale up routine screening and treatment of pre-cancerous lesions across public health facilities in the country.

In Nigeria, access to effective secondary prevention has been constrained by some factors including low disease awareness, lack of routine screening and treatment, lack of trained personnel, and cumbersome treatment methods. This phase of the program is focused on addressing these critical barriers to access with targeted efforts on demand generation, capacity building of healthcare workers, screening and diagnosis, appropriate treatment, and establishing robust patient tracking systems in country.

So far, approximately 80,000 women have been screened. Insights from program data shows an overall positivity rate of 5.5%. with HPV positivity being significantly higher in WLHIV; and most prevalent in the 35-39 age group for WLHIV with 17% positivity rate.

Some of the key lessons learned from program implementation include:

1.   Integration of cervical cancer screening and treatment into existing health services provides immediate entry points
2.   Adequate provision of consumables and supplies is crucial for the success of any screen and treat program
3.   Same day screen and treat to be implemented where feasible to reduce loss to follow up
4.   Continuous on the job training and mentoring for HCWs is important
5.   HPV self sampling is the most practical screening method with the COVID-19 pandemic
6.   Strengthened national M&E system is required to monitor national progress

BREAST CANCER MANAGEMENT IN THE AFRICAN BREAST CANCER – DISPARITIES IN OUTCOMES STUDY: A COMPARISON TO NCCN GUIDELINES

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Background: To improve breast cancer (BC) survival in SSA, timely and quality treatment is needed. The NCCN harmonized guidelines© were developed to guide BC management in SSA. The adoption and adherence to these guidelines remains unclear, as detailed treatment data are lacking.

Methods: Since 2014 the hospital-recruited African Breast Cancer Disparities in Outcomes (ABC-DO) cohort follows-up women diagnosed with BC in five SSA countries. Treatment data are obtained from medical records and via three-monthly follow-up calls with the patient. Data on surgery, chemotherapy, endocrine therapy and radiotherapy include, amongst others, dates of administration, chemotherapy regimen and cycles, and treatment completion. Further, ABC-DO collected detailed information on social and demographic, as well as diagnostic factors.

Results: Of 1807 ABC-DO women with invasive non-metastatic BC, 67% (from 48% in Zambia to 90% in Namibian non-black) received surgery (of these, 71% mastectomy), 71% (from 48% in Nigeria to 79% in Namibian black) received chemotherapy (of all, 57% completed), 52% (from 33% in Nigeria to 78% in Namibian non-black) endocrine therapy, and 32% (from 3% in Nigeria to 65% in Namibian non-black) radiotherapy. Potentially curative treatment (surgery plus systemic treatment) was initiated by 61% (40% in Nigeria to 87% in Namibian non-black) of women. This proportion was higher in women with localised (72%) compared to locally advanced tumours (50%). Immunohistochemistry, a minimal requirement in the NCCN guidelines, was routinely available in two of five countries. Median time to first treatment was 1.4 months (IQR: 0.8–3) and differed between countries (1.1 (0.6–1.7) in Namibian non-black to 3 (1.5–4.3) in Uganda).

Conclusion: Interventions to increase the proportion of women initiating and completing potentially curative cancer treatment are needed in sub-Saharan Africa.

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THE IMPACT ASSESSMENT OF A 12-PART HEALTH RESEARCH METHODS COURSE ON PAEDIATRIC ONCOLOGIST TRAINEES IN SIX SUB-SAHARAN AFRICAN COUNTRIES.

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OBJECTIVE: A paucity of locally relevant childhood cancer research in Africa is in part due to a shortage of clinicians with training in relevant methodology. We developed and evaluated the impact of a 12-part research methods course for paediatric oncology trainees in six sub-Saharan African countries.
METHODS: We developed and virtually delivered a biweekly 12-part research methods course to trainees in Cameroon, Ghana, Liberia, Malawi, Sierra Leone, and Zambia. Course objectives were defined according to trainee program requirements and expert consensus of participating faculty and consultants. Before each session, trainees anonymously completed a pre-training survey consisting of three relevant content questions. An aggregate set of similar questions were sent to the trainees midway into the course (post lecture 6) and at the end (post lecture 12) for post-training assessments. Trainee satisfaction was also assessed via surveys after each lecture. We conducted descriptive analysis and compared pre- and post-training assessments using independent t-tests.
RESULTS: Mean attendance for the biweekly lectures was 25 trainees. The overall mean completion rate for 46% for pre-evaluation questions and 40% for post-evaluation questions. Overall mean post-evaluation scores (1.98 ± 0.89) were higher than the mean pre-evaluation scores (1.79 ± 0.94), though the observed differences did not meet the threshold for statistical significance (p = 0.12). Post-satisfaction surveys showed that 91% of trainees thought the presenters were stimulating and adequately prepared, while 98% thought the course achieved its desired objectives.
CONCLUSION: Our findings suggest potential utility in a broad research methods course in targeting paediatric oncology trainees in LMICs, and that such training holds significant appeal among trainees. The course will be repeated this year incorporating modifications to address trainee feedback, and a more detailed course evaluation.

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HOW INTERNATIONAL JOURNALS CAN SUPPORT THE PUBLICATION OF AFRICAN RESEARCH

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[1]Ecancer

PUBLISHING IN GLOBAL ONCOLOGY, STREAM 2, November 8, 2021, 11:00 AM - 12:00 PM

Ecancer is a UK charity with a mission to raise the standards of care for cancer patients across the world through education. ecancer's journal, ecancermedicalscience, only accepts submissions which feature at least one author from a Lower and Middle Income Country (LMIC), or which have a significant impact on under-resourced settings. This pioneering approach was taken in order to help break down barriers for LMICs authors and facilitate the publication of high-quality research from the areas of the world with the highest cancer burdens.

Africa makes up around 17% of the global population, but only 1% of the world's published research is by African authors. 78% of African respondents to an ecancer survey had faced barriers getting their research published, including lack of funding, inadequate research techniques, geographical bias and linguistic difficulties. 85% had faced problems accessing the latest guidelines in order to be able to treat their patients.

In order to support African authors to publish their research and increase the amount of freely accessible data on which African countries can base their cancer control plans, ecancer works with local experts to commission articles on issues where publication of these results is most urgently needed, such as HPV vaccination and low-tech early detection methods for cervical cancer, tobacco-control policies for smoking-related cancers, and pain relief at the palliative stage. The publication of real-world data is crucial for areas of the world like Africa where Western guidelines are not always applicable. ecancer works closely with African authors during the pre-submission, peer review and publication processes, offering personalised support and helping them to develop their papers to meet international publishing standards. Only peer reviewers with a deep understanding of resource-limited settings are selected. All authors also receive free language editing and open access publication with a CC BY copyright licence.

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EVALUATING THE GEOGRAPHIC DISTRIBUTION OF CERVICAL CANCERS IN BOTSWANA REFERRED TO GABORONE FOR TREATMENT

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Objective: In Botswana, cervical cancer (CC) is the most common cancer and leading cause of cancer death for females. With limited resources, Botswana's cancer control program is challenged to ensure equitable access to advanced health care. Located in Gaborone, there is only one gynecological cancer multi-disciplinary clinic and the one radiotherapy machine to provide standard of care for locally advanced CC. We aimed to identify areas with poor geographic access to appropriate CC treatment.
Methods: This cross-sectional study examined CC cases referred to two tertiary hospitals in Gaborone, Botswana between January 2015 and December 2019. Based on residence, patients were geocoded to one of 28 administrative sub-districts to estimate age-standardized rates. Global Moran's I and Anselin Local Moran's I tested the null hypothesis that CC rates occurred randomly across Botswana (ArcMap 10.6.1). Characteristics of patients living in sub-districts where significantly higher (HH) rates clustered were compared to patients living in sub-districts where lower rates (LL) clustered using multivariate logistic regression with α level 0.05 (STATA/MP 16.1).
Results: We studied 955 women referred for treatment (mean age: 50.6). CC rates geographically clustered across Botswana (p=0.01). Eight sub-districts were identified as clusters, 5 HH and 3 LL (mean rate per 100,000 women: 34.6 and 13.5, respectively). Patients living in HH sub-districts were less likely to be HIV positive (aOR: 0.52, 95% CI 0.43-0.82) and patients in LL sub-districts more often reported abnormal vaginal bleeding (aOR: 2.49, 95% CI: 1.07-5.82).
Conclusions: We found geographic clustering of CC rates in Botswana, specifically highlighting sub-districts where clustering of low CC rates may be due to limited geographical access, as well as identified individual level predictors (HIV and abnormal vaginal bleeding) among patients living in these areas. This work can inform strategies aimed at improving access to health care services to improve CC outcomes in Botswana.

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CANCER CARE IN INTER GOVERNMENTAL ORGANIZATION FOR DEVELOPMENT (IGAD) REGION

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SPOTLIGHT ON CANCER CARE IN SELECT EAST AFRICAN COUNTRIES, STREAM 1, November 10, 2021, 10:00 AM - 11:30 AM

Cancer Care in Inter Governmental Organization for Development (IGAD) Region. Hope on the Horizon!

For years the global oncology professionals are debating about cancer control challenges in low -and middle-income countries (LMIC). Witnessing the increasing trend of epidemiology in the IGAD region is of dire concern for all. Cancer related mortality in LMICs is alarmingly high, especially in those younger than 65 years of age. The economic and healthcare infrastructure of this countries is stressed beyond limits due to increasing burden of cancer. Cancer kills more than the usual infectious diseases combined from malaria, TB and HIV, making 20% of all mortality. Majority of this death is premature. The effective cancer control as acknowledged by WHO relies on early detection, accurate diagnosis, and multidisciplinary treatment.

In full consideration of the above, IGAD with its member states embarked on ambitious regional program to establish a" Regional Cancer Center of Excellence" (IRCCE). The program is spearheaded by the regional diaspora and member states interested professional groups. The center is designed to serve as a hub situated in Addis Ababa. All member states national programs will be linked to the center. Education (medical, surgical, radiation and allied oncology health) , research (population, clinical trial and bench) , data statistic center, guidelines center, and post graduate Institute are the corner stone of the center. IGAD is promising with this world class center to help mitigate the shortage of access to facilities and open a pipe line to well trained skilled staff for the region and beyond.
The full presentation will cover where this project is at now and its historical milestones.

AN INITIAL ANALYSIS OF SURVIVORSHIP CARE OBJECTIVES IN NATIONAL CANCER CONTROL PLANS IN AFRICA

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BEST OF THE BEST ABSTRACTS (4), STREAM 2, November 9, 2021, 6:30 PM - 7:30 PM

OBJECTIVE: In 2017, the World Health Organization urged member states to develop and implement national cancer control plans (NCCPs) and to anticipate and promote cancer survivor follow-up care. This study analyzes the inclusion of cancer survivorship-focused objectives in NCCPs in Africa to support regional stakeholders in advancing cancer survivorship care in Africa.

METHODS: As part of a 2018 Union for International Cancer Control global review, NCCPs were accessed via the International Cancer Control Partnership portal and directly from Ministries of Health and reviewed by a group of international, independent experts according to 111 measures. For this study, 12 of these measures were identified as relevant to survivorship care and this subset of data was extracted for NCCPs of African countries. Nine new or updated NCCPs published between 2018 and 2021 were also reviewed for these 12 objectives using associated search terms.

RESULTS: A total of 24 of 54 African countries have an active or recently expired NCCP, and 9 had a current plan in 2021. The 24 plans contained reference to between 2 and 12 survivorship-focused objectives, with a median of 5. The objectives most often included related to acknowledgement of primary care's role in cancer care (n = 21), provision of psycho-social or spiritual support (n = 20), and primary care training in cancer (n = 19), while those least often included related to long-term care protocols (n = 1), patient navigation (n = 2), and financial protection (n = 4).

CONCLUSIONS: Survivorship-focused objectives in NCCPs may influence development of guidelines, appropriation of resources, and provision of care to support cancer patients, survivors, and caregivers. This study serves as a baseline analysis of survivorship-focused objectives in NCCPs in Africa and identifies gaps to inform further research, grant portfolio analyses, and efforts to strengthen survivorship care in the region.

TEN YEARS OF U.S. NATIONAL CANCER INSTITUTE FUNDING IN AFRICA: A LONGITUDINAL ANALYSIS

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OBJECTIVE: As the U.S. National Cancer Institute (NCI) Center for Global Health commemorates its 10th anniversary in 2021, we analyzed ten years of NCI-funded research and training awards to countries in Africa to identify trends and gaps within the grant portfolio.

METHODS: NCI-funded extramural grants active between fiscal years 2011 - 2020 with primary investigators and/or collaborating institutions in Africa were identified using two internal NIH databases, Query-View-Report and Dimensions. Grants were categorized by common scientific outline (CSO) code and cancer site according to coding schemes developed by the International Cancer Research Partnership (ICRP). Longitudinal analysis was conducted in Microsoft Excel and Python.

RESULTS: 212 extramural grants with collaborators in 37 African countries were active between 2011 – 2020, with the oldest project beginning in 1992. Twelve grants were direct awards to African institutions, while the remaining 200 had primary investigators based outside of the region and collaborators in one or more African countries. The most common collaborating countries were South Africa (n=60), Uganda (n=54), Kenya (n=47), Tanzania (n= 34), and Nigeria (n=32). 135 projects were initiated in 2011 or later. Grant trends have varied, but there was an overall increase in grants in the past decade, from 7 awards initiated in 2011 to 24 awards initiated in 2020. The analysis highlights summaries and longitudinal trends in geographic, funding, cancer site, CSO code, publication output, and collaborator institution distribution of the identified grants.

CONCLUSIONS: The NCI has supported a broad portfolio of research with collaborators in African countries since 2011. A detailed analysis of this portfolio identifies regional priorities, existing collaborations, and opportunities for research, and provides a baseline for future studies on the impacts of this research on policy, capacity, and health outcomes in the region.

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MAGNITUDE AND FACTORS ASSOCIATED WITH THROMBOSIS AMONG CANCER PATIENTS RECEIVING CHEMOTHERAPY AT OCEAN ROAD CANCER INSTITUTE

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CANCER EPIDEMIOLOGY, STREAM 3, November 9, 2021, 3:00 PM - 4:30 PM

OBJECTIVE: This study aimed to determine the prevalence of venous thromboembolism (VTE) and risk category of cancer patients at Ocean Road Cancer Institute (ORCI) in Tanzania. Additionally, this study also sought to determine the utility of Khorana score and evaluate the risk factors associated with VTE development among cancer patients on chemotherapy at ORCI.

METHODS: This was a hospital based cross-sectional study conducted at ORCI from 1st February to 30th April 2020. Patients with histologically confirmed cancer scheduled for chemotherapy were enrolled and stratified into either low, intermediate or high risk based on the Khorana Score. All participants were then subjected to a doppler lower limb ultrasonography for VTE evaluation performed by one radiologist to eliminate intra-observer variability. Analysis was done using IBM SPSS software 23 version. Numeric data were summarized using measures of central tendencies such as mean and standard deviation and/or median and range.

RESULTS: A total of 78 cancer patients were enrolled. Median age was 55.5 years. 66.7% were females. Prevalence of VTE obtained was 12.8%. 57.7% of the patients were at intermediate risk of developing VTE. Among the high-risk patients, 55.6% had VTE. Sensitivity and specificity of Khorana score was found to be at 50% and 94.1 % respectively. Multivariate logistic regression showed that primary cancer site, high D-Dimer levels and a high Khorana score were significantly associated with VTE.

CONCLUSIONS:This study determined the prevalence of VTE among cancer patients in Tanzania to be at 12.8%, demonstrated the utility of Khorana score and also showed that the major risk factors that contributed to VTE in Tanzania are, type of cancer, high D-Dimer levels and a high Khorana score.

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ÉVOLUTION DU PROFIL DE PATIENTS TRAITÉS EN RADIOTHÉRAPIE AVEC LE PASSAGE DE LA RADIOTHÉRAPIE BIDIMENSIONNELLE À LA TRIDIMENSIONNELLE AU SÉNÉGAL.

Gaye P[1], Ba M, Dieng M
[1]Université Cheikh Anta Diop de Dakar

Introduction

Le type de patients traités en radiothérapie a évolué avec le passage technique de la 2D à la 3D au Sénégal en 2018 dans les hôpitaux publics.

Matériel et méthodes

Nous évaluons dans une étude rétrospective comparative le profil des patients et les indications de cobaltothérapie, et de radiothérapie conformationnelle tridimensionnelle (RC3D).

Résultats

Nous avons traité 160 patients au Cobalt en 2016. La liste d'attente de traitement était de 3 mois. Les tumeurs traitées étaient à des stades III et IV dans 80% des cas. Les principales localisations tumorales étaient ainsi représentées : col de l'utérus (40%), sein (18,1%), ORL (28,1%), métastases osseuses (8,8%), œsophage (1%) et prostate (0%). L'indication était curative dans 50% des cas. L'installation de 3 accélérateurs et de la RC3D dans les deux centres publics a permis de traiter 558 patients entre Mars et décembre 2018. La liste d'attente était toujours de 3 mois. Nous retrouvons 70% de stades III et IV. Les tumeurs les plus fréquemment traitées étaient : col de l'utérus (34,9%), sein (18,1%), ORL (17,3%), Œsophage (8,4%), Prostate (4,4%) et autres (16,6%). L'indication était curative dans 80% des cas.

Conclusion

L'installation de nouvelles techniques change le profil des patients traités et des indications. Le plateau technique reste insuffisant au Sénégal malgré l'installation de 4 accélérateurs et de technologie VMAT dans une structure privée.

PROFIL ÉPIDÉMIOLOGIQUE, DIAGNOSTIC, THÉRAPEUTIQUE ET ÉVOLUTIF DU CANCER DU SEIN TRIPLE NÉGATIF À L'INSTITUT DU CANCER DE DAKAR

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Introduction : Le cancer du sein est le premier cancer féminin dans le monde et le deuxième cancer au Sénégal avec une incidence de 16,1% en 2020. C'est une maladie hétérogène qui regroupe plusieurs entités avec des caractéristiques morphologiques, fonctionnelles et moléculaires différentes. Une classification moléculaire permet d'identifier le sous type tumoral « Basal-Like » triple négatif dépourvu de cibles thérapeutiques spécifiques, semblant plus fréquente chez les femmes d'origine africaine et au pronostic défavorable. Matériel et méthodes : Il s'agit d'une étude rétrospective réalisée à l'Institut du cancer de Dakar sur une période de quatre ans incluant tous les carcinomes mammaires confirmés de phénotype triple négatif. L'objectif était de décrire le profil des patientes, d'évaluer la prise en charge thérapeutique et de déterminer le profil évolutif de ces cancers. Résultats : Nous avons colligé 225 patientes de phénotype triple négatif avec un âge moyen au diagnostic de 47 ans. Ce qui représente 43,35% des cancers mammaires observés à l'Institut à la même période. Ils étaient la forme moléculaire la plus fréquente. La taille tumorale clinique moyenne était de 8,54 cm avec une grande majorité de tumeurs T3-T4 (89,33%). Une chimiothérapie néo adjuvante était réalisée dans 65,78% des cas avec un taux de réponse clinique objective à 68,9% dont 27,7% de réponse totale et 41,7% de réponse partielle. La chirurgie était de type radicale dans 77% des cas, conservatrice chez 14% et de propreté dans 9% des cas. Une radiothérapie adjuvante est réalisée chez 58,6% des patientes opérées. Le délai moyen du suivi était de 20,63 mois avec des extrêmes de 1 et 53 mois. La survie globale était de 69,8% à un an, de 41,6% à deux ans et de 25, 6% à trois ans. Conclusion : L'analyse descriptive de ses résultats confirme les données suivantes: la fréquence élevée des cancers du sein triple-négatifs en Afrique Subsaharienne et le pronostic péjoratif de cette entité moléculaire.

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AMERICAN SOCIETY OF CLINICAL ONCOLOGY (ASCO) RESOURCE STRATIFIED GUIDELINES FOR ADULT WOMEN WITH OVARIAN MASS AND EPITHELIAL OVARIAN CANCER

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OBJECTIVE
The purpose of this guideline is to provide expert guidance on the diagnosis and treatment of adult women 18 years of age or older with epithelial ovarian cancer (including fallopian tube and primary peritoneal cancer) to clinicians, public health leaders, patients, and policymakers in resource-constrained settings (basic, limited, and enhanced).

METHODS
This systematic review-based guideline product was developed by an international, multidisciplinary Expert Panel, which included a patient representative and ASCO guidelines staff member with health research methodology expertise. This guideline adaptation was also informed by the ADAPTE methodology and ASCO's modified Delphi Formal Expert Consensus methodology as an alternative to de novo guideline development. The guideline recommendations were crafted, in part, using the Guidelines Into Decision Support (GLIDES) methodology. This guideline has been reviewed and approved by the Expert Panel and the ASCO Clinical Practice Guideline Committee prior to dissemination.

RESULTS
Existing sets of guidelines from eight guideline developers were found and reviewed for resource-constrained settings; adapted recommendations from nine guidelines form the evidence base, informing two rounds of formal consensus, all recommendations received ≥75% agreement.

CONCLUSIONS
Evaluation of adult symptomatic women in all settings includes symptom assessment, family history, (ultrasound and CA-125 serum tumor marker levels where feasible). In limited/enhanced settings, additional imaging may be requested. Diagnosis, staging, and/or treatment involves surgery. Only trained clinicians with logistical support should perform surgical staging; treatment requires histological confirmation; surgical goal is staging disease and performing complete cytoreduction to no gross residual disease. In first-line therapy, platinum-based chemotherapy is recommended; in advanced stages, patients may receive neoadjuvant chemotherapy (NACT). After NACT, all patients should be evaluated for interval debulking surgery. Targeted therapy is not recommended in basic/limited settings. Specialized interventions are resource-dependent, e.g. laparoscopy, fertility-sparing surgery, genetic testing, and targeted therapy. Multidisciplinary cancer care and palliative care should be offered.

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CONFORMITE DES FORMULAIRES DE DEMANDE ET DES COMPTES RENDUS D'EXAMENS ANATOMOPATHOLOGIQUES DE PIECE OPERATOIRE DE CANCER DU SEIN A COTONOU DE 2015 A 2020.

Gnangnon F[1,2,3], Gbessi D[1], Seidou F[1], Odidi P[1], Dangbemey P[1], Attolou G[1], Houinato D[1,2], Dossou F[1], Denakpo J[1], Gangbo F[1], Mehinto D[1]

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i) OBJECTIFS : Le cancer du sein requiert une prise en charge pluridisciplinaire. Les chirurgiens et les pathologistes communiquent grâce au formulaire de demande d'analyse et au compte rendu d'examen anatomopathologique. Notre objectif était d'évaluer la conformité des formulaires de demande et des comptes rendus d'examen anatomopathologique de pièce opératoire de cancers du sein chez les femmes au sud du Bénin.

ii) MÉTHODES : Il s'agissait d'une étude transversale, descriptive et analytique, avec une collecte rétrospective de données sur 57 mois.Nous avons ciblé les deux centres hospitalo-universitaires de référence et quatre laboratoires d'anatomie pathologique dans la région Sud du Bénin. La conformité des formulaires et des comptes rendus d'examen anatomopathologique a été évaluée sur la base des recommandations de la Haute Autorité de Santé (HAS) de France . Le traitement des données a été fait à l'aide du logiciel SPSS. La comparaison des fréquences a été faite avec le test de Chi², avec un seuil de significativité fixé à 5%.

iii) RÉSULTATS : 31,3% des formulaires de demandes étaient conformes aux recommandations de la HAS. Les comptes rendus d'examen anatomopathologiques étaient narratifs dans 92,7% des cas et 68,8% comportaient les critères minimaux. La présence d'emboles vasculaires, le statut HER 2 et les récepteurs hormonaux étaient tous simultanément renseignés uniquement dans 29,2% des comptes rendus. La présence d'embole vasculaire était le facteur le plus souvent renseignés.

iv) CONCLUSION: : Les chirurgiens et les anatomopathologistes ne remplissent pas toujours de façon adéquates les formulaires de demandes d'examen et les comptes rendus d'examen anatomopathologique. Ce constat s'expliquerait , entre autre, par l'absence de consensus et la faible disponibilité de l'immunohistochimie. L'élaboration de référentiels nationaux, la mise à disposition de plus de moyens diagnostiques et thérapeutiques et l'utilisation de compte rendu synoptique pourrait améliorer les pratiques.

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DEFIS DU DIAGNOSTIC ET DU TRAITEMENT DES CANCERS SOLIDES DE L'ENFANT AU SUD DU BENIN

Gnangnon F[1,2,3], Bognon G[1], Abètè F[1], Gbénou S[1], Alao J[1], Mehinto D[1], D'Almeïda Hounnou M[1], Houinato D[1,2], Fiogbé A[1]

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i) OBJECTIFS : Les cancers pédiatriques représentent la deuxième cause de mortalité de l'enfant dans les pays développés après les accidents de la voie publique. En Afrique, ils sont réputés peu fréquents et de mauvais pronostic. Il existe peu de données sur ces affections en Afrique au Sud du Sahara. Notre objectif était d'étudier les aspects épidémiologique, diagnostique, thérapeutique et pronostique des cancers solides de l'enfant en milieu hospitalier dans le sud du Bénin.

ii) METHODES: Il s'agissait d'une étude transversale descriptive et analytique dans trois centres hospitaliers de référence au sud du Bénin. Les enfants pris en charge pendant une période de 5ans allant du 1er novembre 2015 au 31 octobre 2020 et chez qui le diagnostic de cancer solide avait été retenu, ont été inclus. Les données ont été analysées à l'aide du logiciel Epi-data 7.2.1.0. La méthode de Kaplan Meier a été utilisée pour évaluer la survie. Le seuil de significativité des tests statistiques a été fixé à 5%.

iii) RESULTATS : Il a été recensé 92 cas de cancers solides avec un accroissement du nombre de cas au fil des années. L'âge moyen était de 5,83 ans avec des extrêmes de 2 mois et 15 ans. La prédominance était masculine avec un sex ratio de 1,3. Les sarcomes osseux (17,39%) et les tumeurs cérébrales (17,39%) représentaient les types de cancers les plus fréquents, puis suivait le rétinoblastome (14,13%). Plus d'un enfant sur quatre consultait après 1an d'évolution.Le taux de confirmation histologique était de 25,75%. La prise en charge thérapeutique était principalement chirurgicale. Par ailleurs, un quart des enfants avait bénéficié de la chimiothérapie.Aucun des enfants n'avait eu accès à la radiothérapie. La survie globale à 3ans était de 41,15%.

iv) CONCLUSION : Les cancers solides de l'enfant sont, dans notre contexte, caractérisés par un retard à la consultation, un faible accès aux soins et une mortalité élevée.

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ENSURING QUALITY CHEMOTHERAPY IN AFRICA: BENIN MINISTRY OF HEALTH PERSPECTIVE

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ENSURING QUALITY CHEMOTHERAPY IN AFRICA, STREAM 1, November 5, 2021, 10:00 AM - 11:30 AM

With more than 1million new cases in 2020, cancer is a major public health problem in Africa. For some cancers, such as breast cancer, although incidence rates are among the lowest worldwide, the continent has the highest mortality rates, reflecting a particularly poor survival. In fact, cancer mortality rates in African countries are reaching unacceptably high proportions. Delayed diagnosis and poor access to treatment are the most frequently cited causes.

Despite its rising in recent years, the number of publications documenting experiences with systemic therapies such as chemotherapy for cancer management in Africa are scare.

However, there is one certainty: for most of African countries, meager health budgets, dwindling donor financial support and, more recently, the health crisis linked to the Coronavirus pandemic are hindrances to accessing life-saving cancer medication.

With over 6,000 new cases and nearly 5,000 deaths of cancer in 2020, Benin, a West African country, is not an exception.

Our aim is to discuss the Benin Ministry of Health perspective to ensure quality chemotherapy.

This requires the availability of quality medicines administered in adequate facilities, by specialised personnel and at an affordable cost.

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FACTEURS ASSOCIES A LA MORTALITE POST OPERATOIRE DES CANCERS DIGESTIFS DANS QUATRE HOPITAUX DE REFERENCE DU SUD DE LA REPUBLIQUE DU BENIN

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i)OBJECTIFS: En 2020 on comptait 19,3 millions de cas de cancers et les cancers digestifs occupaient la proportion la plus importante. La chirurgie reste la seule chance de guérison des cancers digestifs. Le but est d'étudier les facteurs pronostiques à court terme des cancers digestifs opérés dans les hôpitaux de référence au Sud de la République du Bénin.

ii) MÉTHODE: Il s'agissait d'une étude transversale descriptive et analytique prospective et rétrospective sur la période allant de janvier 2015 à décembre 2020. Elle a exploré les différents paramètres socio démographiques, cliniques et biologiques qui pourraient expliquer la mortalité post opératoire des patients opérés d'un cancer digestif dans les hôpitaux de référence du sud du Bénin. Ont été inclus tous les patients opérés d'un cancer digestif primitif dans cette période. Ont été exclus les patients dont les dossiers n'ont pas été retrouvés.

iii) RESULTATS : Au total 110 patients ont été retenus pour notre étude. L'âge moyen était de 53,56 ± 13,74 ans avec des extrêmes de 22 ans et 82 ans. La sex ratio était de 1,5. L'hypertension artérielle était l'antécédent personnel le plus retrouvé (n = 18 ; 16,4%). Les complications post opératoires étaient présentes chez 29,1% des patients. On retrouvait majoritairement des complications de Clavien-Dindo type I et II (n = 24 ; 75%). La mortalité post opératoire brute était de 13,6% (n=15). Les facteurs fortement corrélés à la mortalité étaient : le taux de prothrombine bas (p=0,046), la découverte en per opératoire de métastases (p=0,032) et la présence de complications en post opératoire (p=0,006).

 CONCLUSION : La mortalité post opératoire des cancers digestifs au sud du Bénin était élevée.

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PLACE DE LA CHIRURGIE DANS LA PRISE EN CHARGE DES CANCERS DU SEIN CHEZ LA FEMME À COTONOU

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i)OBJECTIFS : Les cancers du sein constituent un problème majeur de santé publique. Leur prise en charge est particulièrement difficile dans les pays à ressource limitée. La chirurgie est parfois la seule option thérapeutique disponible. Notre objectif était d'étudier la place de la chirurgie dans cette prise en charge dans deux centres hospitaliers de niveau III au sud du Bénin.

ii) MÉTHODES : Il s'agissait d'une étude multicentrique descriptive et analytique qui a porté sur des patientes opérées d'un cancer du sein sur la période allant de Janvier 2013 à Octobre 2019 dans deux hôpitaux universitaires de Cotonou.

III) RÉSULTATS : Des 214 patientes prises en charge dans les deux structures pendant la période d'étude,141 ont été opérées soit un taux d'opérabilité de 81,30%. Elles étaient âgées en moyenne de 47,17 ans, majoritairement ménagères et vendeuses (51,05%), avec un niveau d'instruction faible (53,18%). Les tumeurs étaient diagnostiquées majoritairement aux stades avancés (stades III et IV) de l'UICC dans 68,07% des cas. Sur le plan chirurgical, la mastectomie totale était le traitement le plus réalisé (92,90%). Elle était à visée curative dans 84,40% des cas. La technique de Patey modifiée (81,56 %) était la plus réalisée. La morbidité globale était de 8,51 % dominée par les hématomes post opératoires. Les autres moyens thérapeutiques utilisés étaient la chimiothérapie (95,74%) et la radiothérapie (37,83%). La survie à 5 ans des patientes opérées était supérieure de 15,13% à celle des patientes non opérées.

CONCLUSION : La chirurgie est un des piliers de la prise en charge des cancers du sein au Sud du Bénin.

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CLINICAL CHARACTERISTICS OF INCIDENT LYMPHOMA IN MALAWI BEFORE AND AFTER IMPLEMENTATION OF UNIVERSAL ART

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Objective:
In 2016, Malawi expanded eligibility for antiretroviral therapy (ART) to anyone with confirmed HIV infection. Here, we assess the impact on lymphoma presentation.

Methods:
We enrolled patients with newly diagnosed lymphoproliferative disorders 2013-2020. We categorized patients pre-universal ART (pre-UART) (2013-June 2016) or post-universal ART (post-UART) (July 2016-2020) and evaluated clinical characteristics.

Results:
There were 156 cases pre-UART and 256 post-UART. The most common diagnoses were diffuse large B-cell lymphoma (DLBCL) (45%), low-grade lymphoma (11%), Burkitt lymphoma (10%), Hodgkin lymphoma (9%), and multicentric Castleman disease (7%). HIV prevalence was 50%, mean age 43, and 62% male. 66% of pre-UART HIV+ knew their HIV status, for median 5 years (IQR 2-8), and 71% were on ART for median 4 years (IQR 2-7). 80% of post-UART HIV+ knew their HIV status (p=0.02), for median 4 years (IQR 2-9) and 84% were on ART (p=0.05) for median 4 years (IQR 2-8). HIV was suppressed <1000 copies/mL in 56% (n=33/59) pre-UART and 71% (n=73/103) post-UART (p=0.05). Among DLBCL, 61% (n=23/38) of pre-UART HIV+ knew their HIV status, for median 5 years (IQR 2-9), and 61% were on ART for median 4 years (IQR 2-6). 82% (n=51/62) of post-UART DLBCL HIV+ knew their HIV status (p=0.02), for median 5 years (IQR 2-9) and 89% were on ART (p=0.003) for median 5 years (IQR 2-9). Post-UART DLBCL patients had median HIV viral load of 0 log copies/mL (IQR 0-10) compared to pre-UART (6.2; IQR 0-10) (p=0.09). CD4 count, age adjusted-IPI and Ki67 proliferation index were similar for DLBCL patients in the two groups.

Conclusions:
There were no significant differences in lymphoma subtypes diagnosed or in traditional DLBCL prognostic factors after implementation of universal ART in Malawi. However, HIV was better controlled in the post-UART period and differences in immunological status may have implications for therapy and prognosis.

ENVIRONMENTAL DETERMINANTS OF EPIGENOMIC ALTERATIONS IN CANCER

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CANCER GENOMICS: AN EDUCATIONAL SESSION AND METHODS WORKSHOP (Part 2), STREAM 2, November 5, 2021, 12:00 PM - 3:30 PM

In addition to genomic mutations, broad epigenomic alterations contribute to the development of every type of cancer. The epigenome consists of modifications to DNA and chromatin that do not alter the underlying DNA sequence yet are heritable across cell divisions and regulate gene expression. Epigenetic mechanisms include DNA methylation, posttranslational histone tail modifications, and non-coding RNA. Tumors exhibit epigenetic signatures that vary drastically from healthy tissue, and these signatures include the silencing of tumor-suppressor genes. Myriad environmental factors including metals, synthetic chemicals, stress, and more can alter the epigenome. This may be a mechanism by which environmental exposures contribute to the development of cancer. In this educational session, epigenomics and its role in carcinogenesis will be briefly introduced. Then, evidence for the impact of environmental exposures on the epigenome will be presented as it relates to cancer risk.

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THE QUALITY OF DYING AND DEATH IN SUB-SAHARAN AFRICA

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OBJECTIVE

Research on the quality of dying and death in sub-Saharan Africa is needed to inform palliative care service improvements and advocacy. This study investigated the quality of dying and death of patients with advanced cancer in Uganda and Kenya.

METHODS

Bereaved caregivers of deceased patients with advanced cancer who died in a hospice in Kenya and Uganda were recruited 2–12 months after patient death. Participants completed the Quality of Dying and Death (QODD) questionnaire, a multidimensional, interview-based proxy measure of the quality of dying and death. Ratings range from 0-100, with higher scores reflecting better outcomes.

RESULTS

The quality of dying (last 7 days of life) of patients (n=329; Kenya=127, Uganda= 202) was rated as at least moderate by 42.6% (n=140), with 17.6% (n=58) rating it as good to almost perfect. A similar proportion (41.9%, n=138) rated the quality of the moment of death as at least moderate, with 21.3% (n=70) rating it as good to almost perfect. However, 55.0% (n=181) and 46.2% (n=140) rated the quality of dying and of death, respectively, as terrible to poor. The quality of Spiritual Activities (M=81.28, SD=25.72), Death Preparation (M=61.22, SD=18.58), and Death Acceptance (M=51.19, SD=25.29) was rated most highly and Symptoms and Functioning (M=39.89, SD=23.12) least highly.

CONCLUSIONS

A substantial proportion of cancer patients who die in hospice care in Kenya and Uganda experience at least moderate quality of dying and of death, although it is rated as poor to terrible in more than 40% of cases. Identifying factors that contribute to strengths in the spiritual and psychological domains of the quality of dying and death and to limitations in symptom control in cancer patients in sub-Saharan Africa is needed to inform advocacy and resource allocation, clinical care, and palliative care education in the region.

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PUBLISHING IN GLOBAL CANCER CONTROL

Gourd K[1]
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PUBLISHING IN GLOBAL ONCOLOGY, STREAM 2, November 8, 2021, 11:00 AM - 12:00 PM

This presentation will describe The Lancet Oncology's editorial perspective on publishing high-quality research on clinical oncology and global cancer control. It will outline the types of papers that we seek to publish, what the journal is looking for, commonly encountered barriers to publication, and highlight other content we publish to challenge the status quo and tackle issues in global oncology. The presentation will outline our global advocacy programme that maps out inequalities and inequities in health systems, and offers a platform to discuss and resolve barriers to the provision of widespread high-quality cancer control for all people worldwide. These aims are all part of the journal's mission to to deliver the best science for better lives.

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DEVELOPING PALLIATIVE CARE COURSES FOR ONCOLOGY FELLOWS IN SENEGAL

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I-   Introduction
In Senegal, there is no palliative care training program either in oncology or in the medical curriculum. In fact, cancer care and cancer training are respectively realized by the team of Joliot Curie Institute and the academic teachers in oncology. From 1998 to 2018, 7 students from Senegal and 40 from 10 other African countries specializing in oncology graduated. Generally, courses are delivered as lectures and case-based learning in oncology. Although palliative care is mentioned, it is mostly assimilated to end-of-life care.

Our project aimed at developing designing palliative care courses for oncology fellows.

II-   Method
We reviewed the literature focussing on palliative care, cancer, and integration of palliative care. The aim was to identify models used to improve palliative care knowledge and competencies for fellows in oncology and for medical students.

III-   Results
We found that increasing knowledge and acquiring skills require training in 4 domains:
•   General aspects of palliative care: Philosophy, Concept, Models of delivery, Ethics;
•   Communication;
•   Pain and symptom management;
•   Decision making/treatment appropriateness.

Based on those findings, we developed a short curriculum including 4 sessions which were validated by the academic staff.

The participants filled the questionnaire before and after receiving those courses.

The impact of that awareness in the daily care of the patients was immediate and tremendously beneficial. The palliative care concept was effective for all participants after the training versus 15% before.

Adequate communication skills to announce cancer diagnosis are acquired in 85% of oncology residents.

IV-   Conclusion
Developing palliative care courses for fellows has greatly improved palliative care awareness. The impact on patient care was immediate and tremendously beneficial. Later, a palliative care certifying program is expected.

GESTION DES PERDUES DE VUE DANS UN CENTRE NATIONAL DE PRISE EN CHARGE DES MALADIES TROPHOBLASTIQUES GESTIONNELLES : EXPÉRIENCE DU SENEGAL

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Objectifs : Evaluer l'impact de stratégies d'amélioration de la communication sur la gestion des perdues de vue dans un Centre National de Référence dans la prise en charge des maladies trophoblastiques gestationnelles.

Patientes et méthode : Etude expérimentale après/après au CHU de Dakar entre le 1er janvier 2011 et le 31 Décembre 2018. L'efficacité de nos stratégies était évaluée à l'aide du test exact de Mc Nemar (variables catégorielles appariées). Le seuil de significativité retenu était de 5%.

Résultats : Entre janvier 2011 et décembre 2018, le Centre a enregistré 977 patientes. Notre étude portait ainsi sur les 142 patientes perdues de vue (soit 14,9%). Le taux de perdue de vue était de 16,2% pour les patientes provenant des régions éloignées et 13,2% pour les régions proches (p = 0,443). En outre, le modèle de régression logistique ayant comme variable dépendante l'état « perdue de vue » et comme variable explicative la distance n'était pas prédictif de la probabilité de non observance du suivi/traitement : OR=1,000 - IC 95% : 0,999-1,001, p= 0,607.

Plus du tiers des patientes perdues de vue (37,17%) avaient contracté une grossesse et décidé d'arrêter le suivi, toutes avant rémission. A côté de la grossesse, les soucis financiers étaient également évoqués ainsi que la décision de changer de centre de suivi. La communication personnalisée et un secrétariat ad hoc mis place pour l'étude avaient permis de réduire le taux de perdues de vue de 14,9 à 6,9% (p < 0,001).

Conclusion : Nos résultats confirment que la mise en place d'un secrétariat pour le suivi post-molaire permet la réduction du taux de perdues de vues et ainsi une optimisation du suivi post môlaire.

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LES 10 COMMANDEMENTS DE LA PRISE EN CHARGE D'UNE MASSE MAMMAIRE CHEZ LA FEMME A LA LUMIERE DES LECONS APPRISES

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Objectifs : Rapporter les difficultés et les résultats de la prise en charge de patientes atteintes de cancer du sein et initialement prises en charge par chirurgie sans cytologie ni histologie préalable.
Patientes et méthodes : A partir de notre base de données, nous avions repris tous les cas de cancers suivis dans notre structure et avons retenu celles qui ont bénéficié d'une chirurgie première sans confirmation histologique préalable. Nous avions analysé les modalités diagnostiques, thérapeutiques et évolutives.
Résultats : Une proportion de de 7,1% répondaient aux critères de recherche. Elles avaient bénéficié d'une tumorectomie mammaire préalable. La récidive était survenue entre 3 et 12 mois parfois sur une grossesse évolutive. Elles avaient toutes bénéficié d'une chimiothérapie et d'une mastectomie associée à un curage axillaire avec un pronostic effroyable.
Conclusion : La survenue d'un nodule mammaire chez une femme jeune doit faire proposer une échographie avec ou sans mammographie. L'aspect solide de la masse doit faire pratiquer une cytoponction ou mieux une biopsie. C'est au prix de ce trépied clinique-imagerie-histologie que la prise en charge peut être optimisée. La prise en charge d'un cancer du sein doit être correctement planifiée et basée sur une preuve anatomo-pathologique. Toute entorse à cette règle est préjudiciable à la patiente. Nous proposons dans la discussion une conduite sous forme de commandements.

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OPTISEN: OPTIMISER l'INFORMATION EN SENOLOGIE - UN SYSTÈME DE GESTION DE BASE DE DONNÉES INFORMATISÉ POUR LES PATIENTS DE MALADIES DU SEIN DANS UN PAYS À FAIBLE REVENU

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Objectifs : Rendre compte de l'expérience de l'utilisation d'une base de données informatisée pour la prise en charge des maladies du sein dans un pays en développement.

Matériels et méthodes : « OPTISEN » est une base de données développée sur Filemaker Pro Advanced pour servir de dossier patient et de registre des maladies du sein Le développement de la plateforme, son utilisation et ses avantages sur un système de classement manuel sont décrits.

Résultats : Depuis 10 ans, nous utilisons cette base de données, qui compte plus de 2000 patients et incluant des données de plus de 10 ans.

Un aperçu de l'activité est facilement généré. Les rapports générés sont utilisés pour les soins de routine des patients, les statistiques et la recherche clinique. Les données saisies sont immédiatement utiles en plus de mettre en œuvre simultanément la base de données pour la recherche clinique.

De nombreuses fonctionnalités personnalisées sont intégrées. À des fins de recherche, le système a la capacité d'effectuer des analyses détaillées sur des sous-ensembles définis par l'utilisateur comme le cancer du sein, maladies bénignes du sein, etc.

Conclusion : « OPTISEN » s'est avéré être un moyen utile de documentation qui est devenu une partie intégrante et essentielle de l'activité quotidienne et également un outil de recherche précieux.

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CHALLENGES OF GYNAECOLOGICAL ONCOLOGY PRACTICE IN A RESOURCE-CONSTRAINED ENVIRONMENT

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GYNAECOLOGICAL CANCERS, STREAM 1, November 9, 2021, 12:30 PM - 2:00 PM

Introduction

Gynaecological oncology services and outcomes have remained suboptimal in most resource-constrained countries due to chronic underfunding.

Challenges

Lack of access to health care by women with gynaecological cancers remains a big challenge in most resourced-constrained envirinments. There is a severe shortage of gynaecological oncologists and a lot of women are managed by generalists leading to suboptimal outcomes.
Very few hospitals in these countries have well established tumour boards to discuss and optimise patient care. Tumour boards have been shown to improve oncological outcomes. Using telemedicine to team up with well established international centres might be a short-term solution but lack of reliable internet in these settings remains a big problem.
Shortage of radiological services especially advanced imaging potentially leads to suboptimal staging for gynaecological oncology patients. Due to the known inadequacies of clinical staging, a significant number of patients end up having surgery when they have advanced disease resulting in poorer outcomes.
Lack of adequate laboratory support for basic investigations and severe shortage of blood products leads to major surgical delays for women eligible for surgery.
Lack of theatre time due to a shortage of anaesthetists, anaesthetic machines, theatre nurses, anaesthetic drugs, intensive care unit beds and payment of theatre user fees by patients remains a big constraint. All these factors lead to significant delays in surgery and potentially worsening cancer outcomes.
There is a huge shortage of radiotherapy machines and personal leading to long delays in women requiring radiotherapy. Coupled with this is the lack of chemotherapy and other basic drugs needed in the treatment of women with cancer.
All these problems result in unsustainable out-of-pocket expenses for cancer patients.

Conclusion

In low-resourced countries, Governments should fully fund cancer treatment in order to improve gynaecological cancer outcomes.

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PRISE EN CHARGE DES PNEUMOPATHIES INFECTIEUSES CHEZ LE NEUTROPÉNIQUE

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Introduction : Les pneumopathies représentent environ 30 % des complications infectieuses chez les patients en onco-hématologie avec une morbi-mortalité importante. L'objectif de notre étude était de déduire l'incidence des pneumopathies chez le neutropénique et définir leurs différents aspects.
Patients et Méthodes : Etude prospective sur une période de 10 mois, incluant les patients hospitalisés dans l'unité protég LAM et l'unité de greffe ayant présenté un épisode   de pneumopathie infectieuse.
Résultats : Sur un total de 235 admissions, 50 épisodes de pneumopathies infectieuses ont été identifiés chez 49 patients, soit une incidence de 21.28%. L'âge médian était de 39 ans avec un sex-ratio de 1.07 .La fièvre et la toux représentaient 82% des circonstances de diagnostic. La TDM thoracique a été réalisée chez tous les patients recrutés. Le lavage broncho-alvéolaire a été réalisé au cours de 9 épisodes et a permis d'isoler l'Aspergillus Spp chez 2 patients et Le Fusarium Spp chez 1 patient. Le dosage sérique d'antigénèmie galactomannane a été réalisé dans 94% des cas revenu positif dans 46% des épisodes de pneumopathie. L'aspergillose pulmonaire invasive probable a été le diagnostic le plus fréquent   retenu chez 48% des patients. Le diagnostic de tuberculose pulmonaire a été posé chez un seul patient devant la positivité du Genexpert BK réalisé sur prélèvement bronchique.Une antibiothérapie à large spectre a été administrée à nos patients sans délai d'attente. Un traitement spécifique a été instauré devant la documentation microbiologique de l'atteinte pulmonaire. L'évolution a été favorable dans 52% des cas, défavorable nécessitant le transfert en réanimation chez 8% et 40% des patients   ont été décédés.
Conclusion : La prise en charge des pneumopathies infectieuses du neutropénique est difficile nécessitant une collaboration pluridisciplinaire afin de concentrer les connaissances pour optimiser le traitement de nos patients.

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PROFIL CYTOGÉNÉTIQUE DES LAM DE L'ADULTE : EXPÉRIENCE DU SERVICE D'HÉMATOLOGIE CLINIQUE DE CASABLANCA

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Introduction : Les anomalies cytogénetiques constituent un facteur pronostique indépendant des autres facteurs de risque et permettent une stratification en groupes pronostiquesdes LAM.
Objectif: décrire le profil cytogénétique de LAM de l'adulte.
Patients et méthodes : étude rétrospective sur 4ans incluant les patients >18 ans diagnostiqués LAM de NOVO. Les données ont été collectées à partir des dossiers médicaux des patients et de la base de données cytogénétique. Les groupes pronostiques ont été déterminés selon la classification ELN 2017.
Résultats : Sur 309 patients diagnostiqués, le caryotype a été réalisé et réussi chez 261 patients soit 85.5%.Des anomalies chromosomiques ont été retrouvées chez 161 patients. 21.07 % des patients ont été classés groupe favorable, 58.6% intermédiaire et 20.3% groupe défavorable .Le caryotype normal était le plus fréquemment retrouvé chez 38% des patients suivi du caryotype complexe chez 12 .6%.l'anomalie la plus récurrente était la t(15,17). Les LAM CBF représentaient 12% des cas.L'étude de biologie moléculaire a été réalisée chez 47 patients soit 15.2% et a permis le changement du groupe pronostic chez 11 patients dont 8 sont passés du groupe intermédiaire au favorable et 3 du groupe intermédiaire au défavorable.
Conclusion : Les mutations décrites au sein des LAM ne cessent d'augmenter ces dernières années. La biologie moléculaire doit faire partie intégrante dans le diagnostic des LAM dans notre pratique, afin d'améliorer la prise en charge thérapeutique des différents groupes pronostiques.

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THE CONTRIBUTION OF COMMON GENETIC VARIANTS TO BREAST CANCER RISK IN SOUTH AFRICAN BLACK POPULATIONS

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OBJECTIVE: Breast cancer (BC) is the second most common cancer in South African black (SAB) women. While some BC cases are familial, most occur sporadically, where many common genetic variants collectively contribute to increased BC risk. Genome-wide association studies (GWAS) for BC have been carried out in European, Asian and African American populations and identified more than 170 independent risk loci. However, little is known about the contribution of common variants to BC risk in resident sub-Saharan African populations. This study aims to investigate the role of common genetic variants and its contribution to BC in SAB women using a GWAS approach.

METHODS: 2,717 SAB with histologically confirmed BC and 1,170 ethnically matched female controls were recruited by the Johannesburg Cancer Study and the AWI-Gen study, respectively. DNA samples were genotyped using the H3Africa Illumina SNP array which contains 2.3 million single nucleotide polymorphism (SNP) markers enriched for variants common in African populations. After imputation, quality control and population substructure correction, 13 million SNPs were tested for association with BC in 2,557 cases and 1,074 female controls using linear-mix model regression analysis with the Genome-wide Efficient Mixed Model Association (GEMMA) software.

RESULTS: Preliminary analysis detected strong evidence of association with BC risk at genome-wide significance ($P<5x10-8$) at loci on chromosomes 1, 2, 4 and 6. SNPs at some of these loci are absent or extremely rare in non-African populations, which suggests that they may be African specific risk loci for BC. Investigation of known BC risk genetic loci identified in European populations and their contribution in SAB women is in progress.

CONCLUSIONS: Several genetic associations with BC were detected at genome-wide significance in the SAB population. This is the first GWAS of BC patients in Africa and will contribute to our understanding of the genetics of African BC.

OUTCOMES OF MULTIDISCIPLINARY WORKSHOP TO IMPROVE MANAGEMENT OF PROSTATE CANCER IN CÔTE D'IVOIRE

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Objective:
The objective of this study is to evaluate the impact of a three-day training designed to improve the management of prostate cancer in Côte d'Ivoire. At the University Hospital Center (CHU) Treichville, one of only three public cancer treatment hospitals in Côte d'Ivoire, a needs assessment identified training on multidisciplinary management of prostate cancer as an area for improvement. To address this gap, in November 2019, the American Society of Clinical Oncology (ASCO) partnered with CHU Treichville and BIO Ventures for Global Health (BVGH) to hold a three-day training in Abidjan.

Methods: ASCO collected data from participants (N=104) in two stages: an on-site evaluation on the final day and a follow-up survey 12 months after the training. The follow-up survey assessed potential practice changes among participants. Both surveys were translated into French.

Results:
One year after the training, 34% of participants responded to the follow-up survey (N=32). Ninety-seven percent of respondents reported having made changes to their practice. More than 90 percent reported improvement in their ability to: manage patients with prostate cancer; provide multidisciplinary care; and provide palliative care to patients, including pain and symptom management and communication skills. Thirty-four percent of respondents reported that their participation in tumor boards increased.

Conclusions:
The majority of participants who responded to the one-year follow-up survey reported improvement in their ability to manage prostate cancer, particularly in the areas of multidisciplinary and palliative care. Despite the low response rate, respondents reported an impact on their practice. This suggests that the multidisciplinary training model may expand training for healthcare providers in other aspects of cancer and beyond. For future trainings, a shorter length between training and follow-up may increase response rates as all respondents who reported practice changes indicated having done so within six months of the course.

A STUDY OF PAPANICOLAOU SMEAR PRACTICES AMONG FEMALE NURSES IN A TERTIARY HOSPITAL IN GOMBE, NORTHEAST, NIGERIA

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ABSTRACT

OBJECTIVE: Both incidence and burden of cervical cancer have been drastically reduced in developed world, due to regular practice of cervical cancer screening with pap smear. Unfortunately, the disease is still the most common gynecological cancer in Africa and the second leading cause of cancer mortality in Nigeria after Breast cancer. The study aimed to assess knowledge, attitude and practices of papanicolaou smear among female nurses in a tertiary hospital in Gombe.

METHODS: A cross-sectional study was conducted in which information was obtained from randomly selected 91 female nurses in Federal Teaching Hospital who fulfilled the inclusion criteria and the data were analyzed at univariate and bivariate levels using SPSS version 23 with P-value of less than 0.05.

RESULTS: Mean age of the respondents is 39±7.3 years with age group 25 – 34 years constitute 45.9% 0f the participants. Greater proportions (64.4%) of the respondents were married. About 54.9% of the female nurses knew that Pap smear is a screening test for cervical cancer. Though the respondents had good attitude (100%) toward Pap smear as a cervical cancer screening test, only 38.5% have had Pap smear done. Been married was found to have had statistically significant association with knowledge of the Pap smear as a screening test for cervical cancer.

CONCLUSION: The study showed that the female nurses who should be advocate of cervical cancer screening test to the society have poor practices toward the test despite their fair knowledge and good attitude of the screening test.

Keywords: cervical, cancer, knowledge, attitude, practice, smear

EFFECT OF CHURCH BASED INTERVENTION TO PROMOTE INFORMED DECISION MAKING FOR PROSTATE CANCER UPTAKE OF SCREENING AMONG MEN ATTENDING SAINT MARY'S CATHOLIC CHURCH ENUGU, NIGERIA

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Introduction: Prostate cancer (PC) is the most common type of cancer in men and constitute a major public health issue. In developing countries, available evidence indicates that factors responsible for high PC-related mortality rate include poor knowledge and low uptake of screening practices.This study examined the effect of church based intervention to promote informed decision making for prostate cancer uptake of screening among men attending Saint Mary's Catholic Church Enugu, Nigeria. The objectives of the study were to determine the knowledge of prostate cancer among the participants, determine the uptake of screening and assess the barriers towards uptake of screening. Methods: A mixed method research comprising of focus group discussion and a quasi-experimental pretest-posttest research design was used. The participants comprised of 50 adult men aged 40 – 70 years who were willing to participate in the study without any previous history of PC. A researcher developed questionnaire was the instrument used for data collection pre and post intervention. Statistical analysis for association was performed using ANOVA. Results: Results revealed that the mean age of the participants was 54+12.9 years. Majority 36(72%) had not heard of prostate cancer at pre intervention versus 50(100%) at post intervention phase (p < 0.05). Few 15(30%) of the participants were aware of the screening test for prostate cancer at pre-intervention versus 50(100%) post intervention. Few 5(10%) of participants had ever carried out prostate specific antigen (PSA) test in the pre intervention stage in the last one year versus 20(40%) at the post intervention phase. The major barriers to prostate cancer uptake of screening by participants were being afraid to hear that I have prostate cancer 40(80%) versus 5(10%) and that the PSA test is expensive 46(92%) and 10(20%) at pre intervention and at post intervention respectively. Conclusion: It was recommended that initiation of cancer teachings in churches and public places should be intensified to create awareness of PC and informed decision for free uptake of screening for men who are prone to the disease.
Key words: Church based intervention, promote informed decision making, prostate cancer, uptake of screening, Saint Mary's Catholic Church Enugu, Nigeria.

COVID-19 RELATED ANXIETY IN MEN WITH LOCALISED PROSTATE CANCER AT TERTIARY HOSPITALS IN CAPE TOWN, SOUTH AFRICA

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OBJECTIVE

The health profile of older adults places them at risk of infirmity and death from COVID-19 which may induce anxiety or exacerbate pre-existing anxiety. We examined COVID-19 related anxiety in men undergoing treatment for prostate cancer (CaP)

METHODS

This study was conducted between July and September 2020. Sixty participants from a larger prospective, longitudinal study assessing depression, anxiety and health related quality of life in men with localised prostate cancer (DAHCaP) were included. COVID-19 related anxiety was measured at a single time point using, the Corona Virus Anxiety Scale (CAS). In addition, the following, the State-Trait Anxiety Inventory (STAI-S), the Connor-Davidson Resilience (CD-RISC) scale and Multidimensional Scale of Perceived Social Support (MSPSS) that form part of the DAHCaP study were used in the analysis. We extracted pre-pandemic data for the STAI-S.

RESULTS

Twenty one percent had diabetes, 62.3% had hypertension and 24.6% had cardiac diseases, all known risk factors for severe COVID-19. Only 3% scored ≥ 9 on the CAS, indicating COVID 19 anxiety dysfunction. Half knew of family or friends that had contracted COVID-19 especially those scoring higher on the CAS (p = 0.042). There was a significant decrease in STAI-S scores pre-pandemic to the pandemic phase (34.7 to 29.8, p= 0.003). No correlation was observed between CAS and STAI-S (rho=0.08), CD-RISC (rho=-0.06) or MSPSS (rho=-0.15). There was a weak positive correlation between the CAS and monthly income (rho=0.33; p=0.010).

CONCLUSIONS

COVID-19 did not induce significant anxiety in men being treated for CaP nor did it place an additional psychological burden, nor was there any correlation with state anxiety, resilience or social support.

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CLINICAL CHARACTERISTICS IN PROSTATE CANCER IN SUB-SAHARAN AFRICA: THE MADCAP PROSPECTIVE COHORT

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Prostate cancer disproportionally affects black male. While Data on epidemiology, screening, diagnosis and treatment of prostate cancer are abundant in western countries, a little is known about that disease in Sub Saharan Africa (SSA). Moreover, little information exists about the genetic epidemiology of prostate cancer in this region.

The Men of African Descent Carcinoma of Prostate (MADCaP) consortium, a collaboration between African, American and European researchers has undertaken a research aiming at better describing prostate cancer in men from SSA. The finding of the MADCaP consortium will inform prostate cancer both in SSA and globally especially in the African diaspora.

The present lecture aims at describing the evolving landscape of epidemiological and clinical presentation of prostate cancer in SSA and the promising perspectives of multi institutional GWAS studies on prostate cancer in this region.

CLINICAL CHARACTERISTICS OF PROSTATE CANCER PATIENTS IN WEST AND SOUTH AFRICA IN THE MEN OF AFRICAN DESCENT AND CARCINOMA OF THE PROSTATE (MADCAP) CONSORTIUM STUDY

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Introduction and Objective: Men of African descent have the highest burden of aggressive prostate cancer (PCa). In Sub-Saharan Africa (SSA), PCa accounts for 19% of all cancer related death. However, the clinical features of PCa within SSA are understudied. Our objective was to characterize the clinical features of men with PCa in SSA, and to compare demographic and clinical features of PCa between West (WA) and South Africa (SA).

Materials and Methods: Between 2016 and 2020, we recruited 2,588 histologically-confirmed PCa patients into a multi-center, hospital-based study in Senegal, Ghana, Nigeria and South Africa via the MADCAP Consortium. Participants completed a detailed epidemiologic questionnaire which collected information on demographics, lifestyle, PCa family history, and lower urinary symptoms (LUTS) assessed through the International Prostatism Symptom Score (IPSS); medical history and PCa clinical features were extracted through review of medical charts. We used Student t-test, Wilcoxon sign-rank test or chi-square tests to compare patients' characteristics by region.
Results: Among 2588 men with PCa, 1325 (51.2%) were recruited in WA and 1263 (49.8%) in SA. The majority (78.9%) of patients had high D'Amico risk PCa. PCa patients in WA were older at diagnosis (68.3±8.0 years) compared to SA patients (66.5±8.0, $p<0.001$). Median PSA at diagnosis was higher in WA cases (93.9, IQR: 26.5-450.9) compared to SA cases (28.5, IQR: 12.8-100.9, $p<0.001$). PCa cases in WA also had a higher prevalence of moderate/severe LUTS (63.7%) compared to PCa cases in SA (49.4%). Clinically invasive disease (stage T3+) was more prevalent in WA compared to SA (64.5% vs. 20.2%, $p<0.001$). However, the distribution of aggressive Gleason Group 4-5 PCa was similar between WA (39.9%) and SA (38.1%). The majority of patients were treated with hormone-therapy in both WA (42.2%) and SA (61.8%). However, in SA, a large proportion of patients are treated with radiation therapy (27.6%), while this treatment was rarely used in WA.

Conclusions: Men in Africa present with very high-risk PCa. Patients in WA had characteristics of more advanced disease at presentation than their SA counterparts, indicated by a higher PSA, prevalence of adverse clinical features, and a greater proportion of prostatic symptoms. This data further emphasizes the need for the development of PCa screening guidelines within SSA.

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CHRONIC VIRAL HEPATITIS, HIV INFECTION AND NON-HODGKIN LYMPHOMAS IN WEST AFRICA, A CASE-CONTROL STUDY

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OBJECTIVE. Non-Hodgkin Lymphomas (NHL) are important and underestimated causes of cancer in West Africa where chronic viral hepatitis and HIV are endemic. While the association with HIV infection has already been characterized, limited information is available on the association between chronic viral hepatitis and NHL in sub-Saharan Africa. Our objective was therefore to document the association between chronic viral hepatitis, HIV infection and NHL in West Africa.

METHODS. A case-control study was conducted in referral hospitals of Abidjan (Cote d'Ivoire) and Dakar (Senegal). Cases of NHL were matched with controls on age, gender and participating site. The diagnosis of NHL relied on the combination of a first local pathological examination completed with a centrally-based diagnosis completed with immunohistochemistry. HIV, HBV and HCV serology tests were systematically performed. A conditional logistic regression model estimated the associations by the Odds Ratio (OR) with their 95% confidence interval (CI).

RESULTS. A total of 117 NHL cases (Abidjan n=97, Dakar n=20) and their 234 matched controls were enrolled. Cases were predominantly men (68.4%) and had a median age of 50 years (IQR 37 – 57). While Diffuse Large B-cell lymphoma were the most reported morphological type (n=35) among mature B-cell NHL, the proportion mature T-cell NHL (30%) was high. The prevalence figures of HBV, HCV and HIV infection were 12.8%, 7.7% and 14.5%, respectively among cases of NHL. In multivariate analysis, HBV, HCV and HIV were independently associated with NHL with OR of 2.23 (CI 1.05-4.75), 4.82 (CI 1.52-15.29) and 3.32 (CI 1.54-7.16), respectively.

CONCLUSIONS. Chronic viral hepatitis B and C were significantly associated with NHL in West Africa. Timely preventive measures against HBV infection and access to curative anti-HCV treatment might prevent a significant number of NHL.

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SOUTH AFRICAN BREAST CANCER AND HIV OUTCOMES STUDY (SABCHO) -SUMMARY FINDINGS

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HIV-ASSOCIATED CANCERS Co-convened by AORTIC and NCI, STREAM 1, November 9, 2021, 3:00 PM - 4:30 PM

The South African Breast Cancer and HIV Outcomes Study (SABCHO) is a NCI-funded longitudinal cohort study of ≥3,500 South African women with breast cancer prospectively recruited and enrolled between 2015 and 2019 and diagnosed, treated and followed for survival outcomes at two academic hospital cancer centers in Johannesburg and three in urban and rural regions of Kwa-Zulu Natal. This collaboration between investigators from the Universities of Witwatersrand and KwaZulu-Natal (South Africa) and Columbia University (USA) is investigating the impact of HIV and other chronic comorbidities, sociodemographic and clinical factors associated with stage at breast cancer diagnosis, treatment adherence, response and tolerance and 5-year overall survival. To date the study has yielded 35 peer-reviewed articles, with several more in submission and has received 10 South African and International research grants

Summary findings:-
The median age at BC diagnosis was 55 years; most patients were black (78%), multimorbidity (MM) was highly prevalent among the cohort; (obesity 53%, hypertension 41% and HIV 22%) and more common in older women and those of higher socioeconomic status. MM also impacted first cancer treatments received in women with early stage disease.

HIV status was associated with younger age at diagnosis,
Black race, later stage at diagnosis and poorer pathological response to neoadjuvant chemotherapy. They also had a 49% increased risk of death from any cause, after accounting for differences in age, ethnicity, breast cancer stage, subtype, and treatments received (60% versus 71%, p<0.001; aHR: 1.49, 95% CI 1.22-1.83). HIV+ women with <50 viral load copies/ml and those with ≥50 viral load copies/ml had worse survival than HIV-uninfected patients. HR 1.35 (1.09-1.66) and 1.54 (1.20-2.0) respectively.

Our cohort findings were consistent with those observed in smaller cohorts from USA-based cancer registries. The growing population of WLWH are at especially high risk for poor breast cancer outcomes.

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STADE IVA DES CANCERS DU COL DE L'UTÉRUS : RÉSULTATS CLINIQUES, THÉRAPEUTIQUES ET PRONOSTIQUES

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Objectifs: Nous rapportons les résultats de la plus grande cohorte à ce jour de cancers du col de l'utérus de stade IVA, traités par radiochimiothérapie suivie de curiethérapie dans une institution internationale recevant des patientes d'un peu partout (Antilles, Afrique, France métropolitaine, Emirats arabes Unies...)

Méthodes : Les patientes atteintes de cancer du col de stade IVA, traitées par radio-chimiothérapie concomitante suivie de curiethérapie entre 1989 à 2020, ont été analysées. Les tests de Wilcoxon et de Fisher ont été utilisés pour les comparaisons entre les variables. Le taux de contrôle local, la survie sans progression et la survie globale ont été calculés selon la méthode de Kaplan-Meier et les estimations de survie à risques proportionnels de Cox. Pour les analyses de variables continues, la médiane a été utilisée pour séparer les patients en deux groupes. Les valeurs P ont été estimées à l'aide de tests bilatéraux. Un seuil de $< 0,05$ a été défini pour la signification.

Résultats : cent-seize patientes ont été identifiées. Vingt-sept (23.3%) avaient à la fois une atteinte ganglionnaire pelvienne et lombo-aortique. Toutes les patientes ont été traitées par radiothérapie externe. Cent neuf (93.96%) ont eu une curiethérapie dont trente-trois (28.4%) par bas débit de dose et soixante-seize (65.5%) patientes par débit pulsé. Seize patientes (14.68%) ont eu une fistule au cours ou après la curiethérapie. Le suivi médian était de 32.86 ± 37.54 mois. Quarante-neuf (42.2%) récidives étaient retrouvées dont trente-six à distance (31.0%). La survie globale médiane ainsi que la PFS médiane étaient respectivement de 48.5 mois et 16.9 mois. En analyse multi variée, l'utilisation du TEP dans la stadification ganglionnaire était associée à une meilleure survie globale (HR : 0.37, 95%CI [0.2-0.67], p=0.001). L'utilisation de la chimiothérapie concomitante est en faveur de la survie globale (HR : 0.39, 95%CI [0.2-0.74], p=0.0077) et du PFS (HR : 0.43, 95%CI [0.24-0.77], p=0.009). L'étalement de la radiothérapie externe au-delà de 36 jours entraine une mauvaise PFS (HR : 1.8, 95%CI [1.1-2.9], p=0.026). Un volume HR-CTV bas est en faveur d'un meilleur contrôle local (HR : 0.14, 95%CI [0.035-0.58], p=0.018). La curiethérapie PDR montrait une meilleure survie globale (HR : 0.45, 95%CI [0.25-0.83], p=0.01) comparée au BDD.

Conclusion : Le pronostic des cancers du col de stade IVA est pauvre. Les progrès de l'imagerie ainsi que l'expertise des centres notamment dans la curiethérapie contribuent à améliorer la survie globale.

ASSESSMENT OF WOMEN'S EXPERIENCES OF THERMAL ABLATION TREATMENT WITHIN A CERVICAL CANCER 'SCREEN AND TREAT' SERVICE IN MALAWI

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OBJECTIVE

Malawi has the second highest global incidence of cervical cancer. Cervical cancer screening using visual inspection with acetic acid (VIA) is carried out in many rural primary care settings. Thermal ablation has recently been approved by the WHO as a safe and effective alternative to cryotherapy for treatment of VIA-positive lesions. This study aimed to assess the experience of women receiving thermal ablation treatment and evaluate any predictors of pain and treatment sensation.

METHODS

VIA-positive women were treated with one of three instruments: the WISAP Standard instrument or either of the newly available Liger or WISAP C3 thermal ablation devices, at Nkhoma Hospital and associated health centres. Following treatment, trained patient assistants administered a patient experience survey. Using a complete case analysis approach, we ran descriptive statistics to summarize experiences of pain, and used Fischer's exact test to evaluate associations between demographic characteristics and pain experience.

RESULTS

Data were available from 217 women (124 treated with WISAP Standard, 49 with WISAP C3, 44 with Liger). Varying pain levels were reported: 5.5% of women experienced no pain, 79.7% mild pain, 11.5% moderate pain, and 3.2% severe pain. No statistically significant associations were found between pain experience and HIV status (p=0.700), women's age (p=0.716), or number of children (p=0.639). Relative to the WISAP Standard instrument, women treated with either WISAP C3 or Liger had 2.2 times increased odds (95% CI: 1.02, 4.71) of experiencing elevated pain (moderate or severe pain) during thermal ablation (p=0.044).

CONCLUSIONS

Health messages for women attending cervical screening should include information on the potential for experiencing pain if treatment is required. Further research is needed to understand variation in reported pain following treatment by different instruments, and how healthcare professionals can manage and mitigate pain experienced by women undergoing thermal ablation treatment.
N=295

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INCIDENCE OF LOSS TO FOLLOW UP AND ASSOCIATING FACTORS AMONG COHORT OF KS INDIVIDUAL TREATED AT OCEAN ROAD CANCER INSTITUTE IN TANZANIA BETWEEN 2015-2018

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Objective: Kaposi's Sarcoma is the most common sarcoma and fourth most prevalent cancer seen in Tanzania associated with high mortality influenced by irregular clinic attendance and hence poor adherence. Loss to follow-up (LTFU) is typically defined retrospectively but this may lead to biased inferences. We assessed incidence of and factors associated with LTFU among Karposi's Sarcoma patients attended for clinical care at ocean road cancer Institute.

Methods: Methods: We included adults (≥15 years) enrolled in 2015 to 2018, regardless of ART status, with follow-up through September 2018. LTFU was defined as >364 days late for a scheduled appointment. Participants could experience multiple LTFU episodes.
We performed analyses based on the first (prospective), Time to LTFU was estimated using cumulative incidence functions. We assessed factors associated with LTFU using cause-specific proportional hazards, marginal means/rates.

Results: Among 228 participants (49% female, 51% were male, 92.4% aged 15-24 years, 62% WHO stage 3/4, and 28.2 were HIV positive with 70%   had CD4 count <200 cells/mm3), there were 41 LTFU episodes. 12 months LTFU probabilities were 0.45 (95% confidence Intervals 0.43, 0.47). Factors associated with LTFU were broadly consistent across different models: being male, younger age, never married, living far from the clinic, lower BMI, advanced disease stage, Low income, and Low level of education. Poor adherent to ARV and chemotherapy were the significant independent factors associated with deaths (p < 0.001). Patient's follow-up was generally poor with more than two-thirds of karposis sarcoma patients who had previous history of attending to traditional healer were lost to follow up.

Conclusions: LTFU episodes among KS individuals were common and prompt tracing efforts are urgently needed. We identified socio-demographic and clinical characteristics associated with LTFU that can be used to target tracing efforts and to help inform the design of appropriate interventions.

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HIV AND OTHER RISK FACTORS FOR OESOPHAGEAL SQUAMOUS CELL CARCINOMA IN MALAWI

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OESOPHAGEAL CANCER Co-convened by AORTIC and NCI, STREAM 2, November 7, 2021, 1:45 PM - 3:00 PM

Objective: esophageal cancer (EC) is the second commonest cancer in Malawi. EC is classified as esophageal adenocarcinoma (EAC) and esophageal squamous cell carcinoma (ESCC). 95% of all disease in Malawi is ESCC. Despite such a high burden, very little is known about the epidemiology of ESCC in Malawi. We conducted a study to describe the risk factors for ESCC in Malawi.
Methods: we conducted a case-control study from 1st August 2017 to 4th April 2020 at a large teaching hospital and a regional hospital in Lilongwe Malawi. Adults 18 years and above with confirmed ESCC or clinically suspected ESCC were enrolled as cases. Endoscopy was conducted on all cases and biopsies were obtained for histological confirmation. Controls (selected from patients or their guardians in orthopedic, dental and ophthalmology wards) were frequency matched by age range, region of origin and gender. A mobile-based structured questionnaire delivered by a trained interviewer was the main method of data collection. Conditional logistic regression models were used to assess the effect of different risk factors on ESCC. Data analysis was done in Stata 15.
Results: 300 cases and 300 controls were enrolled into the study. Median age of cases was 56 years and median age of controls was 56 years. 186 (62%) cases were male, with a male:female ratio of 1.6:1. 33 (11%) cases were HIV+ while 12 (4%) controls were HIV+. HIV positivity had an adjusted odds ratio of 4.0 (95% CI 1.8-9.0 p=0.001) for ESCC. 89 (30%) cases were ever smokers while 65 (22%) controls were ever smokers. Smoking had an adjusted odds ratio of 2.4 (95% CI 1.4-4.2 p=0.003) for ESCC.
Conclusion: Vigorous public health messaging to address the modifiable risk factors identified in this study can help to reduce the burden of ESCC in Malawi.

ANALYSIS OF CANCER DIAGNOSES FROM 2015-2019 WITHIN MACHAKOS COUNTY, KENYA, SUPPORT ESTABLISHMENT OF CANCER CENTRE IN 2019 LIKELY CHANGING REFERRAL PATTERNS

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BEST OF THE BEST ABSTRACTS (2), STREAM 3, November 8, 2021, 11:00 AM - 12:00 PM

OBJECTIVE
In Kenya cancer is an increasing public health challenge, with an estimated 48,000 new cancer cases and over 33,000 deaths recorded each year. Machakos county, Kenya, recently opened a cancer center given the increasing burden of cancer care with an aim of bringing cancer services such as surgical oncology, chemotherapy, radiotherapy, and pathological services closer to the residents of Machakos county. The county is also one of four counties selected for the universal health coverage pilot programme making it uniquely poised to inform cancer control programs at the local, national, and international levels. This study aimed to build a cancer database and comprehensively to enable future population-based cancer studies by reviewing cancer diagnosis records for selected major public hospitals in Machakos county from 2015-2019.

METHODS
Medical records data were retrieved from Machakos Level 5 Hospital and Kangundo, Matuu, Kathiani and Mwala Level 4 Hospitals.

RESULTS
A total of 522 cancer cases were recorded across the study period with more than a third (N=172, 33%) diagnosed August-December of 2019 when the Machakos Cancer Centre opened. Among the cancers diagnosed the majority were in women (59.2%) with cervix uteri (n=106, 34.3%) followed by breast (n=62, 20.1%) as the most common cancers. For males, esophagus (n=52, 24.4%) followed by prostate (n=43, 20.2%) were the most common cancer types.

CONCLUSION
It is clear that access to cancer care treatment will change referral patterns for residents in Machakos county and with the establishment of this database we expect to enable future population-based surveillance of the cancer burden to inform cancer control programs.

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CAPACITY BUILDING OF COMMUNITY HEALTH VOLUNTEERS TO RESPOND TO THE CANCER BURDEN IN MERU COUNTY, KENYA.

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IMPLEMENTATION SCIENCE: NUTS AND BOLTS FOR AFRICAN PRACTICE Co-convened by AORTIC and NCI (Part 2), STREAM 3, November 6, 2021, 1:00 PM - 5:00 PM

OBJECTIVES
In Kenya, cancer is a major contributor to high mortality approximately 28,092 deaths yearly1. Efforts and interventions to reduce the cancer burden are a priority. Amref using a consortium multifaceted approach, has been implementing an end-to-end NCD pilot program tackling cancer dubbed "Blueprint for innovative access to healthcare". 20% of the cancer patients seeking medical attention at Kenyatta National Hospital   hail from Meru County2. The project aims to improve cancer outcomes, including expanding cancer knowledge and improving the community's health-seeking behaviors. Outcomes expected include reducing cancer morbidity and mortality through early screening for cancer by the Community Health Volunteers (CHVs) and front-line health care workers.

METHODS
1,000 CHVs were trained through M-learning on the Amref leap platform. Leap uses a self-learning approach which has been successful in many health areas but proved difficult for cancer topics. This led to a review of the curriculum and a change in tact, leading to a Trainer of Trainers (TOT) approach, where the TOTs were able to supervise training and carry out support supervision of the CHVs. Performance in training hence became competitive.

RESULTS
The CHVs recorded a pass rate of 85%. CHVs disseminated key messages on cancer prevention & management to their communities through household visits. As a result, over 70,000 households were visited, reaching a population of 130,000. During mass screenings, CHVs participated and have attributed to the over 1,000 cancer patients currently on treatment at the Meru cancer center.

CONCLUSIONS
Capacity building CHVs on cancer using a blended approach and structured supervision has proven effective in increasing community knowledge on cancer and early screening diagnosis and treatment of cancer patients.

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ESTIMATING AND RESPONDING TO THE PALLIATIVE CARE NEEDS OF WOMEN WITH CERVICAL CANCER

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OBJECTIVE
Given the high prevalence of cervical cancer among the poor and indications that the associated suffering is particularly serious, we quantified and characterized this suffering and then developed an essential package of palliative care for a universal, effective response.

METHODS
We reviewed the literature and then conducted a modified Delphi process with cervical cancer experts to identify the major types, severity, prevalence, and duration of suffering due to cervical cancer in 2017. By applying the suffering prevalence and duration estimates to the number of decedents (those who died from cervical cancer), non-decedents (those who had cervical cancer but did not die), and family caregivers in 2017, we were able to estimate their respective palliative care needs. Based on World Health Organization recommendations, we then developed an essential package of palliative care for cervical cancer.

RESULTS
There is a high prevalence among decedents of moderate or severe pain (84%), vaginal discharge (66%), or vaginal bleeding (61%). Among both decedents and non-decedents, there is a high prevalence of clinically significant anxiety (63% and 50% respectively), depressed mood (52% and 38%), and sexual dysfunction (87% and 83%), and over 40% are abandoned by their intimate partners (46% and 41%). Moderate or severe financial distress is prevalent among decedents, non-decedents, and family caregivers (84%, 74%, and 66% respectively). Most patients experience a combination of physical, psychological, social, or spiritual suffering. Our essential package of palliative care for cervical cancer includes the interventions, medicines, basic equipment, social supports and human resources needed to prevent or relieve most suffering associated with cervical cancer and is designed to be feasible even in low resource settings.

CONCLUSIONS
Suffering is highly prevalent and often severe and multi-faceted among women with advanced cervical cancer. An essential package of palliative care can prevent and relieve most of this often-neglected suffering.

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THE CHANGING LANDSCAPE IN THE MANAGEMENT OF MENINGIOMA

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NEURO-ONCOLOGY, STREAM 2, November 7, 2021, 11:00 AM - 12:00 PM

Summary
The majority of meningiomas, the most common primary brain tumor, are considered to be benign, and characteristic magnetic resonance imaging features allow a preliminary diagnosis. Although approximately 80% of these tumors are slow growing, some subtypes are associated with a less favorable outcome and a higher recurrence rate. Previous histopathological grading systems did not consistently predict their natural history, with The fifth edition of the WHO Classification of Tumors of the Central Nervous System (WHO CNS5), histomorphological features and genetic/molecular profiles have now become more evident for a comprehensive diagnosis and in understanding of recurrence risk to better guide the choice of optimal treatment. We hereby discuss the latest updates in the management of intracranial meningioma

RESEARCH AND EARLY CANCER DIAGNOSIS

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COVID-19 AND CANCER IN AFRICA Co-convened by AORTIC and NCI, STREAM 1, November 10, 2021, 3:00 PM - 5:00 PM

The burden of both infection and non-infection related cancers is increasing in Africa. Clinical outcomes for many of these cancers are poor with late case detection as one of the main contributing factors. There is evidence that in many cases, late diagnosis is not purely due to late patient presentation, but the many barriers within health and social systems that make it difficult for patients to access care. The Coronavirus disease (COVID-19) has not spared Africa. Many countries experienced three waves of increased cases and at each time had to institute measures that disrupted care and diagnosis for cancer cases. Many health institutions downsized outpatient and non-emergency services in order to deal with the rising burden of COVID-19 cases. The largest referral hospital in Zambia for example, closed all its outpatient clinics, in order to concentrate on medical emergencies and COVID-19 admissions. In Cameron, the cervical cancer screening programme was suspected as it was considered inappropriate to expose women and healthcare providers to the risk of COVID-19. These are two examples among many in several Africa countries, instituted to combat the epidemic. However, an accurate assessment of the impact of COVID-19 and its related measures on cancer has not been done in many African countries. This knowledge gap offers a great opportunity to understand barriers of access to cancer care particularly among rural communities on the continent, who are most affected. Both prospective and retrospective analyses should be conducted to provide this information. The link between cancer and COVID-19 and/or its vaccination programme also needs to be investigated. There is need to clearly outline the best time for COVID-19 vaccinations in cancer patients receiving either curative or palliative care.

ASSOCIATION BETWEEN RISK FACTORS AND THE SITE OF UPPER AERODIGESTIVE TRACT CANCER IN MOROCCO

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Objective

 In Morocco, 3 246 new case of upper aerodigestive tract cancer (UADTC) were diagnosed in 2020. The main risk factors are tobacco and alcohol. Other risk factors have been identified or suspected. This study aimed to investigate potential risk factors associated with the UADTC site.

Methods

Cross-sectional study was conducted from december 2018 to february 2020 at the National Institute of Oncology in Rabat. Data were collected using a face to face structured and pre-tested questionnaire among patients with UADTC. Medical records were abstracted to complete clinical information. Chi Square test and p value at 95% confidence level were used to predict the association between potential risk factors and UADTC site.

Results

201 patients agreed to take part in the study. The mean age was 54.08 years, 48.3 % were illiterate, 74,1% were poor and 52.7% diagnosed at stage IV. 50.3% were current or past smokers. 26,9 % were current or former alcohol drinkers. 26.4% were both tobacco and alcohol users. 18.9%were current or former cannabis users. 62.2% practiced a daily oral hygiene which included 45,6% just once a day. 75.1% % had never been to a dentist before.

Pearson Chi-Square test showed a significant relationship between smoking and cancers of the oral cavity (p=0.039), nasopharynx (p<0.001) and larynx (p<0.001). Alcohol was associated with cancers of oral cavity (p=0.049), nasopharynx (<0.001), oropharynx (p=0.047) and larynx (p<0.001). A statistical relationship was also demonstrated for both tobacco and alcohol users and cancers of oral cavity (p=0.041), nasopharynx (<0.001), oropharynx (p=0.042) and larynx (p<0.001). Oral hygiene (p=0.049) and prosthetic irritation (p<0.001) were associated with oral cavity cancer only.

Conclusion

In this study, cigarette smoking ,alcohol drinking ,oral hygiene and prosthetic irritation were associated with UADT cancer. The identified at-risk individuals can then be for clinical examination and for focused preventive treatment measures.

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THERAPEUTIC UTILITY OF CAPECITABINE PLUS OXALIPLATIN IN PATIENTS WITH METASTATIC COLORECTAL CANCER AT TYGERBERG HOSPITAL

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OBJECTIVE: To retrospectively explore the efficacy and safety of capecitabine plus oxaliplatin in patients with colorectal cancer at Tygerberg hospital

METHODS: A review of medical records of adult patients with histological diagnosis of colorectal cancer at Tygerberg hospital between June 2012 and June 2017 was conducted. Patients received oxaliplatin at a dose of 130mg/m2 as an infusion over 4 hours on day 1 and capecitabine at daily dose of 1000mg/m2 twice daily on days 1-14; repeated every 3 weeks. Objective response rates were reported and the rates of progression-free survival (PFS) at 12 and 24 months were estimated using the Kaplan-Meier methods and compared by the log rank test using Stata version 14. A p-value of less than 0.05 was regarded as significant.

RESULTS: 60 participants were treated with capecitabine plus oxaliplatin (XELOX) regimen over the study period. The median age was 53 years, and 45% were female (n=27), with 58.33% having colon as primary site, and 68.33% of patients had synchronous liver metastases at presentation. Patients received an average of 6 cycles of chemotherapy. In 60% of participants, the intent of treatment was palliative. In the radical-intent group, equal numbers of patients received XELOX as either neoadjuvant or adjuvant, and liver resection was performed in 20 patients (31.8%). The overall response rate (ORR) was 69.6% with 13 patients attaining complete remission after initial treatment with XELOX regimen. Approximately a third of patients developed disease progression (30.4%) and the 1-year PFS was 44.5% 95% CI (0.31-0.57) while the 2-year PFS was 25.1% 95% CI (0.14-0.38). Regarding safety, thrombocytopenia was the most frequent adverse event (18.5%) and overall, 15.1% patients experienced grade 3 and 4 toxicity.

CONCLUSIONS: Our findings confirm a good overall response rate with XELOX regimen and tolerable side effect profile regardless of the intent of treatment.

FACTORS ASSOCIATED WITH CERVICAL CANCER SCREENING AMONG WOMEN LIVING WITH HIV IN THE KILIMANJARO REGION, NORTHERN TANZANIA: A CROSS-SECTIONAL STUDY

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Objectives: Despite cervical cancer being a highly preventable disease, it is the fourth most common cancer among women in both incidence and mortality. Women living with HIV (WLHIV) are at higher risk of developing the disease because of their immune-compromised state. We aimed to determine factors associated with cervical cancer screening among WLHIV in the Kilimanjaro region, northern Tanzania.

Methodology: We carried out a cross-sectional study in the Kilimanjaro region among 297 WLHIV attending care and treatment centers (CTC) in Hai district and Mawenzi regional hospitals in northern Tanzania between August 21 and September 3, 2020. A questionnaire was used for data collection using face to face interviews. Data were analyzed using SPSS version 20.0. Frequencies and percentages summarized categorical variables and numerical variables summarized using median and interquartile range (IQR). Logistic regression determined factors associated with cervical cancer screening.

Results: Out of the 297 WLHIV, about half (50.2%) of them had ever screened for cervical cancer. WLHIV with positive attitudes towards cervical cancer screening (AOR=3.48, 95% CI 1.86, 6.51) and those who received information on cervical cancer from Health Care Providers (HCP) (AOR=17.31, 95% CI 6.00, 50.22) had higher odds of being screened for cervical cancer. Lower odds of screening (AOR=0.50, 95% CI 0.27, 0.96) were among women diagnosed with HIV within the past three years.

Conclusions: WLHIV with a positive attitude towards screening and receiving cervical cancer screening information from HCP were associated with high screening practice. Women newly diagnosed with HIV are less likely to be screened for cervical cancer. Counseling programs among WLHIV at CTC by HCP is essential for awareness and promoting a positive attitude towards screening. Special attention should be given to women newly diagnosed with HIV.

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EVALUATION OF BREAST CANCER PRECEPTORSHIP PROGRAMME IN UPSKILLING HEALTH CARE PROVIDERS: A CASE STUDY OF INTERNATIONAL CANCER INSTITUTE EDUCATION AND TRAINING PROGRAMME

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OBJECTIVE

Breast cancer is the second most commonly diagnosed invasive malignancy, and cause of cancer-related deaths among women. Annually, 42,116 new cases and 27,092 deaths are reported in Kenya. Despite accelerating access to high-quality, safe and affordable cancer care in select public referral hospitals, there is a dearth of training geared towards upskilling the health care providers to avert these trends. We sought to evaluate the impact of the breast cancer preceptorship program in upskilling health care providers in Sub-Saharan Africa.

METHODS

The Office of Education and Training at the International Cancer Institute(ICI) tailored a breast cancer preceptorship curriculum. Virtual lectures and discussion forums were conducted for six weeks. Assignments and reading materials were accessed through an e-learning portal. Online questionnaires were used to examine the respondents at the end of the course. The respondents evaluated the lectures using a 5 point Likert scale. Continued mentorship was offered through bi-weekly, multidisciplinary virtual tumor board discussions. Descriptive statistics were generated using STATA (version 17).

RESULTS

Out of 29 participants enrolled, 28 were Kenyans with 18(62%)males. Twenty- two (76%) of the participants who attempted the end-of-course examination had a mean score of 52%. Nineteen (65%)of the respondents did not evaluate the program. The mean age of respondents who evaluated the course was 34.4 95% C I (28-40). Ninety percent of participants were satisfied with the training. Eighty percent of the participants were involved in clinical work serving an average of 40 cancer patients weekly.

CONCLUSION

The breast cancer preceptorship program was well-tailored and accepted. Continuous mentorship and follow-up in upskilling the health care providers is pivotal in improving the continuum of cancer care.

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TRAVERSING THE BORDERS IN CANCER CARE MENTORSHIP DURING COVID-19 LOCKDOWN THROUGH VIRTUAL MULTIDISCIPLINARY TUMOR BOARD DISCUSSUONS: A CASE STUDY OF INTERNATIONAL CANCER INSTITUTE

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[1]International Cancer Institute

OBJECTIVE
The number of cancer cases in Sub-Saharan Africa is increasing with few health care workers undergoing the lengthy formal training process to effectively manage patients. International Cancer Institute (ICI) launched a Continuous Professional Development (CPD) accredited education and training program aiming at capacity building for the multidisciplinary team of healthcare providers in cancer and other non-communicable diseases (NCD) care in Sub- Saharan Africa through a formal training program, and continued mentorship and support through virtual tumor board discussions (VTBs). We sought to describe the health care professionals attending 84 biweekly virtual multidisciplinary tumor board discussions during COVID-19 lockdown.
METHODS
Participants are invited via email to join the one-hour virtual meeting where they register their name, cadre, facility of practice, city, and country. This data is stored in a secure password-protected database and is used to generate CPD points. Frequency tables and proportions for country, cadre, and VTB attendance duration were calculated using STATA 17. The distribution of participants by country was done using QGIS 3.4
RESULTS
A total of 7,566 participants attended the VTBs with a mean of 90 CI 95% [71-108] participants per session. The minimum number of participants was 24 and the maximum was 390. On average, a unique participant has attended 9 CI 95% [8-9] unique VTB sessions with a range of 1 to 71. The mean attendance time is 45 CI 95% [44-46] minutes. Participants joined from all over the world with 91% being from Kenya. The multidisciplinary team of health care workers included pharmaceutical technologists (37%), clinical officers (16%) medical officers (16%), allied health care workers (11%), consultants (10%), nurses (6%), and pharmacists (4%)
CONCLUSION
VTBs have been pivotal in providing on-job case-based and highly practical mentorship support for the multidisciplinary team involved in cancer care.

BREAST CANCER EPIDEMIOLOGY, TREATMENT, OUTCOMES, AND CORRELATION WITH NCCN HARMONIZED GUIDELINES FOR SUB-SAHARAN AFRICA IN CÔTE D'LVOIRE

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OBJECTIVE: To describe the presentation, treatment, and outcomes of breast cancer in Côte d'Ivoire and assess concordance with NCCN Harmonized Guidelines for Sub-Saharan Africa.

METHODS:
A sequential sample of thirty women with breast cancer treated at University Teaching Hospital Treichville in Abidjan, Côte d'Ivoire were recruited in March-September 2018 within six months of diagnosis. Information was obtained from medical records at enrollment and again in February 2021. Descriptive statistics include percentages or means with a standard deviation and range. Concordance with the NCCN Harmonized Guidelines, defined as concordance in all aspects of treatment, and reasons for deviations were described based on our clinical experience.

RESULTS: Median age was 46. Breast cancer was hormone-receptor (HR) positive, HER2/neu-negative in 14 (46.7%), triple-negative in 10 (33.3%), HR+HER2+ and HR-HER2+ in 3 each (10.0%). Almost all were diagnosed at least 12 months after symptom onset. Four (13.3%) had Stage II cancer, 14 (46.7 %) Stage III, and 12 (40%) de novo Stage IV. Almost all received chemotherapy, mastectomy, radiation, and endocrine therapy as indicated, and 70.6% with metastases received palliative care. Seven (53.8%) of women with progressive disease eventually were unable to afford treatment. Five (35.7%) women with Stage III and five (45.4%) with Stage IV cancer died. While most treatment was evidence-based or in line with best practices, it was concordant with NCCN guidelines in three (10%) patients. Deviations were due to the use of neoadjuvant FEC instead of AC or EC in 12 (54.4%), longer duration of FEC or AC due to inability of patients to pay for taxanes or observation of a good response in 4 (13.3%), use of paclitaxel every 4 instead of every 3 weeks due to high cost in 7 (23.3%), inability to afford further chemotherapy in metastatic disease in 7 (23.3%), use of cisplatin-based doublets in metastatic breast cancer in 4 (13.3%), carboplatin shortage resulting in use of other chemotherapy in metastatic triple-negative breast cancer in 3 (10.0%), use of more cost-effective regimen (FEC-D versus FEC), use of cisplatin/doxorubicin observed to be effective by local oncologists in one case each, and palliative mastectomy in three (10%) women with metastatic disease following response to chemotherapy.

CONCLUSION
Work should continue to improve early diagnosis and affordability and availability of treatment. Development of local clinical guidelines relevant to daily practice will help improve breast cancer care, as will establishment of a regional forum to share experience and develop joint guidelines.

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CIRCULATING NATURAL KILLER CELLS AND THEIR ASSOCIATION WITH BREAST CANCER SUBTYPE, STAGE, AND TREATMENT IN WOMEN WITH BREAST CANCER IN CÔTE D'IVOIRE: A CASE-CONTROL STUDY

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BEST OF THE BEST ABSTRACTS (1), STREAM 2, November 7, 2021, 10:00 AM - 11:00 AM

OBJECTIVE: Natural killer (NK) cells play a critical role in cancer immunosurveillance and hold promise as both therapies and prognostic markers in advanced disease. We explore factors that may influence NK cell concentration in peripheral blood of women with breast cancer in Côte d'Ivoire compared to healthy controls and implications for future research in our context.

METHODS: In this cross-sectional case-control study, blood samples were taken from a sequential sample of thirty women diagnosed with breast cancer within six months of diagnosis and fifteen healthy women at University Teaching Hospital (CHU) Treichville in Abidjan, Côte d'Ivoire, from March to September 2018. NK cells were isolated, stained, analyzed, and counted using the flow cytometer at the Department of Immunology at CHU of Cocody. Student's T-test was used to compare differences in means. The Mann-Whitney U test was used to compare distribution of NK cell concentration between two independent groups and the non-parametric 1-way ANOVA (Kruskal-Wallis test) for more than two groups given the small sample size. All p-values were two-sided.

RESULTS: Mean age among women with breast cancer was 49 years old (range 35-63) and 45 years old (range 26-65) in controls (p=0.41). Mean concentration of NK in cases was 81.1 cells/ml (standard deviation 100.5, range 5-441) compared to 42.9 (std. dev. 26.2, range 20-103) in controls (p=0.054). NK cell concentration was not associated with age. Among women with breast cancer, 4 (13.3%) had Stage 2 disease, 14 (46.7 %) at Stage 3, and 12 (40%) at Stage 4. Of the 30 women, 14 (46.7%) had breast cancer that was hormone receptor-positive (HR+) HER2-negative, 10 (33. 3%) had triple-negative cancer, 3 (10.0%) had HR+HER2+ disease, and 3 (10.0%) HR-HER2+ cancer. Within six months of diagnosis, 27 (90.0 %) received chemotherapy, 10 (33.3%) surgery, 5 (16.7%) radiotherapy, a third (33.3%) endocrine therapy, 5 (16.7%) received trastuzumab or bevacizumab, and 8 (26.7%) received palliative care. NK cell concentration was not associated with cancer stage, subtype, or type of treatment patients received.

CONCLUSIONS: Most women were diagnosed with late-stage disease. Though we did not find an association between NK cell concentration, cancer characteristics, or treatment, our results are limited by the small sample size and timing of blood draw. Our next steps include a larger study to explore circulating NK cells prior to any treatment and NK cell infiltration within breast cancer tumors and correlating this with response to treatment and prognosis.

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CANCER STATISTICS IN THE REPUBLIC OF MAURITIUS: INCIDENCE AND MORTALITY DATA IN 2019

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Objective:
This study illustrates the 2019 cancer statistics in the Republic of Mauritius (population of 1.3 million inhabitants), including cancer incidence and mortality.

Methods:
Cancer incidence data was obtained from the population based National Cancer Registry (MNCR) database at the Central Health Laboratory, Victoria Hospital. Sources for registration of new cancer cases were diverse and included both public and private cases. Tumour were coded (ICD Oncology 3rd edition and ICD 10th edition) and analysed using CANREG 5 software. The "IARCcrgTOOL" software was run to check for any inconsistencies on the data. Mortality data was obtained from the Civil Status Office. Crude and age-standardized rates (ASRs) for incidence and mortality were calculated according to gender and sites of cancer.
Results:

Overall, 2667 new cases were diagnosed with a sex ratio (Male/Female) of 0.71. Among males, prostate (n=176, ASR=19.6/105), colorectal (n=154, ASR=17.5/105) and lung (n= 123, ASR=13.5/105) cancers were the most common while among females, they were breast (n=548, ASR=56.3/105), colorectal (n=138, ASR=13.6/105) and endometrial (n=135, ASR=12.8/105) cancers. We recorded 1412 cancer deaths with a sex ratio (Male/Female) of 0.97. The highest mortality rates among males were lung (n=125, ASR=14.6/105), prostate (n=100, ASR=12.3/105) and colorectal (n=95, ASR=11.3/105) while among females were breast (n=212, ASR=21.8/105), colorectal (n=70, ASR=6.6/105) and lung (n=53, ASR=5/105). The mortality to incidence ratio was 0.63 for males and 0.46 for females.

Conclusions:
The most common cancers were those associated with 'westernisation' of lifestyle. The MNCR is among the few cancer registries in Sub Saharan Africa where cancer report has been issued during this COVID-19 pandemic period. Information from this report will be essential for the second Cancer Action Plan 2021-2025 to improve cancer registration, surveillance and research in the Republic of Mauritius.

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ÉCHOGRAPHIE ET MASSES OVARIENNES : ASPECTS ÉPIDÉMIO-CLINIQUES ET HISTOLOGIQUES

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OBJECTIF : Les masses ou tumeurs ovariennes correspondent à un processus prolifératif bénin, malin ou à malignité réduite, développé aux dépend de l'ovaire. L'objectif de cette étude était d'évaluer les aspects épidémiologiques, cliniques, échographiques et histologiques des masses ovariennes de la femme.

MATERIEL ET METHODES : Il s'agissait d'une étude prospective de type descriptif couvrant une période de 6 mois, allant du 1er décembre 2017 au 31 mai 2018.

RESULTATS : La fréquence des tumeurs ovarienne était de 12 %. Nous avons noté un âge moyen des patientes de 36,17+/- 12,30 ans et des extrêmes de 16 et 70 ans, 40,3 % étaient nullipares, 67,7% de nos patientes étaient mariées.

Les algies pelviennes, les troubles du cycle menstruel et la sensation de pesanteur pelvienne, ont été les principaux motifs de consultation rencontrée au cours de notre étude avec respectivement 79%, 64,5% et 22,6%.

Le contenu kystique des masses ovariennes à l'échographie était l'aspect le plus dominant 47/78 cas soit 60,8%.

Le type histologique prédominant était le Cystadénome séreux dans 20,7%.

CONCLUSION: L'échographie reste et demeure l'examen clé devant toute douleur abdomino-pelvienne mais pour le diagnostic des tumeurs ovariennes elle doit être associé à l'histologie tout en se servant des données épidémiologiques et cliniques

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TUMEUR DU SEIN: CORRELATION RADIO-HISTOLOGIQUE DES LESIONS MAMMAIRE ACR4 ET 5

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OBJECTIF: Le cancer du sein constitue de nos jours un réel problème dans le domaine de la santé publique. Il s'agit d'une affection cancéreuse grave menaçant la vie de la plusieurs des femmes, l'objectif de notre étude était d'établir la corrélation radio-histologique de lésion mammaire ACR 4 et 5 METHODES: Il s'agissait d'une étude prospective de type descriptive et analytique portant sur les patientes ayant présenté des lésions mammaires ACR4 et 5 du 1 janvier 2018 au 31 juin 2018. RESULTATS: Le couple écho-mammographie a été réalisé chez 73 patients (82%) dont 8,5% des cas présentais des lésions ACR4 et 5, la biopsie avait été effectuée dans 52,6% des cas, la malignité était confirmée histologiquement chez 70,7% de nos patients avec 20 cas de carcinome canalaire infiltrant, 2 cas de carcinome lobulaire infiltrant et les autres carcinomes étaient peu représentés, la valeur prédictive positive (VPP) de malignité respective étaient de 51,1% pour ACR 4 et 85% pour ACR 5. CONCLUSION: Les résultats de l'association écho-mammographie plus biopsie sont beaucoup plus performants que ceux obtenus pour chaque moyen diagnostic utilisé seul.

BCNET AND ISBER PROVIDE BIOBANKING TOOLS AND RESOURCES FOR LMIC SCIENTISTS

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OBJECTIVES: Biobanking includes the continuum from the patient's consent, collection of biospecimens, transport, processing, storage, sharing and assaying the material for clinical and research data. All of these processes are maximized by following standards, quality practices and regulations to maximize the quality of the results for the patient and research.

METHODS: Many educational and practical tools are now available to help guide scientists and clinicians in most aspects of biospecimen management and biobanking in resource-restricted settings. The International Agency for Research on Cancer in collaboration with the US National Cancer Institute created the Biobanking and Cohort Building Network (BCNet). The Low- and Middle-Income Countries (LMICs) BCNet initiative arose from the realization that despite improvements in developed countries, population cohorts and biobanking facilities are either underdeveloped or non-existent in LMICs.

RESULTS: IARC has built an educational platform to share educational resources amongst the BCNet member organizations, inaugurated in January 2020. LMIC organizations can request to join the BCNet through a simple online application. The platform holds original talks and content from BCNet partner and member organizations, including the International Society for Biological and Environmental Repositories (ISBER) biobanking tools. Cumulatively there are over 1000 unique visits to the platform over its first year of operation, showcasing its usefulness and reach. Best practice documents, publications, webinars, recorded talks, publications, etc. are catalogued to support LMIC scientists and clinicians in their sample management and biobanking needs. The partner organizations also act as expert resources for the BCNet member organizations.

CONCLUSION: Biobanking in high and low resource settings must adhere to quality practices to assure that the results of the biospecimens that are collected, result in reproducible results. The BCNet, in collaboration with its partners, provide an expert resource for biobanking that is a resource to LMIC scientists.

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PATHOLOGY BIOBANKING FOR RESEARCH: INTERNATIONAL NETWORKS, BCNET AND EDUCATIONAL OPPORTUNITIES

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PATHOLOGY/BIOBANKING | Co-convened by AORTIC and NCI, STREAM 2, November 9, 2021, 3:00 PM - 4:30 PM

Pathology is the study of the cause, origin and nature of disease, while biobanking is a collective term which describes the process by which biological samples (bodily fluid or tissue) and associated data are collected, annotated, transferred, stored and redistributed for future research in order to improve our understanding of health and disease.

Thus, Pathology and Biobanking are strongly linked in supporting the discovery of new treatments for the great healthcare challenges. Medicine research is based on the analysis of samples with clinical data – and, because associations in many diseases are often weak, we need these samples in large quantities. The implication is clear: if more, well-characterised, high-quality samples are available through biobanks, the faster research will advance and impact upon the faster delivery of precision healthcare today.

In this workshop entitled 'Pathology and Biobanking for research', attendees will hear the latest developments in the field of biobanking and how these link with pathology practices. This includes: i) a look at the latest biobanking practices from a pathologist's point of view; ii) the introduction of technological innovations (e.g. telemedicine) and how these could impact biobanking; iii) a presentation of exiting biobanking networks (e.g. BCNet) and opportunities thereof and iv) the availability of relevant training and education materials.

RESEARCH INFRASTRUCTURES SUSTAINABILITY THROUGH TIMES OF CRISIS: THE EXAMPLE OF BIOBANKS THROUGHOUT THE COVID-19 PANDEMIC

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OBJECTIVES: Biobanks represent significant research infrastructures underpinning the collection of specimens and associated data for clinical research. To tackle the many different needed responses to COVID-19, research infrastructures, and in particular biobanks, have found themselves on the front line. This abstract presents the experiences of biobanks during the pandemic and how those might reflect on their sustainability and downstream patient research.

METHODS: This poster summarizes the relevant results from three sources: the survey conducted by the ISBER Standards Committee COVID-19 Task Force; the responses by BCNet members; and review of relevant literature, in order to highlight the sustainability aspects for Low- and Middle-Income Countries (LMICs).

RESULTS: Two key aspects have emerged from this overview: (1) the initial impacts of the biobanks in low- and middle-income countries (LMICs) were similar to those in high-income countries (HICs) and (2) the longer-term resilience of the biobanks in LMICs did not appear as robust as those in HICs. Additionally, those biobanks that were already following the context-specific quality practices and biobanking standards were better prepared to face the demands by the pandemic.

CONCLUSION: The consensus opinion noted is that biobank operations were not prepared for this type and level of disruption on an operational or financial level, therefore affecting their sustainability prospects. Biobank collections were halted in some countries or regions, whereas operations were moved to merely maintenance mode. Human resources were affected, either by being unavailable due to the virus or being used in a different capacity within their organizations. Some biobanks were able to engage their operations in support of COVID-19 research, by collection, processing, and storage of patient samples and data for current research and for future use.

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DESCRIPTION OF PALLIATIVE CARE SERVICES DELIVERED IN A TERTIARY ACADEMIC HOSPITAL DURING THE 2020-2021 COVID PANDEMIC.

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The WHO strongly recommend that palliative care (PC) should be accessible in all institutions that provide care for persons with COVID-19. The aim of this presentation is to describe how, why and where PC was integrated during the COVID pandemic in a Tertiary Academic Hospital in South Africa. This presentation does not only focus on the care of COVID patients but will also explore how PC services were provided to cancer patients during the pandemic.

This is a descriptive study looking retrospectively at the PC provided by the PC team in Groote Schuur Hospital provided from March 2020 – February 2021. Retrospective analysis of demographic and treatment data from referrals to the PC team will be presented. A description of the guidelines developed and used, resources used and barriers experienced will be presented. Three main categories of patients will be presented; Firstly, the known PC patients whose care has been compromised in the time of COVID-19. Social isolation, complex advanced decision making and downscaling of community PC resources led to intensified PC for these patients in the hospital setting. Secondly, known patients in the COVID-19 wards requiring PC for their existing conditions that has been complicated by the infection. The third group are the end of life care provided to patients dying from COVID-19-related complications because they were not candidates for ventilation. Pre-bereavement and bereavement care with families as essential components of care will be described. Interdisciplinary team experiences and how the team was extended to teams beyond the dedicated PC team will be described.

In conclusion, the role of PC 'feet on the ground' during this pandemic will demonstrate the fundamental role of PC service delivery in normalising PC during this time period and will advocate for the continued PC service deliver in hospital settings.

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ENSURING QUALITY CHEMOTHERAPY IN AFRICA: WELCOME AND INTRODUCTION

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ENSURING QUALITY CHEMOTHERAPY IN AFRICA, STREAM 1, November 5, 2021, 10:00 AM - 11:30 AM

While substandard and falsified medical products are found worldwide, they are more prevalent in countries with under-resourced national medicine regulatory authorities. Substandard and falsified medical products may lack efficacy, contain contaminants (e.g., bacteria, toxins, other impurities), and their use may promote drug resistance. As described in the Oxford Statement (DOI:https://doi.org/10.1016/S2214-109X(19)30426-7), a systematic review and meta-analysis estimated that 12·4% of antibiotics and 19·1% of antimalarials in low-income and middle-income countries (LMICs) were substandard or falsified, and the SEVEN study in sub-Saharan Africa found that 16·3% of 1530 randomly sampled cardiovascular medications (anticoagulants, antihypertensives, and statins) failed Active Pharmaceutical Ingredient content analysis. The extent to which drugs used to treat cancer in Africa are substandard or falsified is not known, but there are well-documented examples. The aims of this workshop are to discuss the challenges of identifying substandard and falsified cancer chemotherapeutic agents in Africa, the regulatory processes involved in approving and procuring cancer chemotherapeutic drugs for use in various African countries, the impact of cancer drug quality on patient outcomes from the standpoint of African oncologists, and potential methods to better ensure cancer drug potency, purity, and sterility throughout Africa.

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QUALITY OF CANCER CARE WITHIN A UNIVERSAL HEALTH COVERAGE SYSTEM

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QUALITY IN CANCER CARE: THE NEXT FRONTIER TO IMPROVE OUTCOMES IN AFRICA | An AORTIC-ASCO Seminar, STREAM 2, November 9, 2021, 12:30 PM - 2:00 PM

Universal health care systems provide a unique setting in which to advance the quality of cancer care. Jurisdictional level standard setting and investment in quality infrastructure and processes can facilitate the delivery of high-quality care across the entire system by incentivizing best practices, decreasing variation in processes of care and co-ordination of quality improvement efforts leading to better outcomes at both macro and micro levels. Central health system planning with strong focus on patient-centred, high-value care coupled with front line engagement and flexibility in implementation allows for collaborative learning, economies of scale and facilitates a partnership between health system decision makers and front-line providers towards a common goal. This presentation will discuss the opportunities and challenges of a whole system approach to cancer care delivery using examples from the province of Ontario, Canada where the provincial government agency responsible for cancer care delivery has used such an approach to advance the quality of cancer care including essential elements, lessons learned and impact.

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FELLOWSHIP IN SURGICAL ONCOLOGY: THE ANGOLAN FELLOWS OPINION

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i) OBJECTIVE: Evaluation of the Fellowship carried out by Angolan fellows participating in surgical oncology training at reference hospitals in Portugal.

ii) METHODS: The Fellowship in surgical oncology (FSO) included basic oncology, surgical oncology, participation in multidisciplinary treatment decision board and participation in complex oncological surgeries. The training committee of the FSO conducted an Internet survey (according to Kirkpatrick's learning evaluation model) of the first graduating class. The purpose of the survey was to assess the graduates' practice experiences and perceptions regarding the fellowship training program. Fellows were asked about positive and negative aspects of the FSO

iii) RESULTS: The survey was answered by 83.3% of the fellows. According to the respondents' opinion "Knowledge in oncology", before FSO training, was deficient. Therefore, to maximize the fellow's training, appropriate theoretical background in oncology must be guaranteed before coming to the FSO. All participants reported they enjoyed the training. The FSO objectives were met at 96%. The final assessment reveals that, in overall, fellows were well prepared upon completion of the program to enter the multidisciplinary practice of surgical cancer treatment. The work developed by fellows with organized oncology units will allow that fellows work better and become proficient in managing surgical oncology units. During FSO, the fellows were distributed to different hospitals. Organizational constraints in some of these hospitals limited an effective participation of the fellows during oncological surgeries. This aspect must be solved as the practical training should offered similar opportunities in each training center. The fellows reported they would repeat the FSO again, as they found it extremely useful.

iv) CONCLUSIONS: The results of the training were favorable. However, it is necessary that the acquisition of knowledge in oncology occurs prior to FSO. It is also fundamental to guarantee equity in practical training.

THE ROLE OF DOCTORS WITH A PhD DEGREE IN CANCER CARE, TEACHING AND RESEARCH IN ANGOLA.

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i) OBJECTIVE: This study aimed at understanding the impact PhD training might have on Angolan oncologists careers, as well as on the organization of oncology services and research in Angola.
ii) METHODS: We followed the curriculum of three PhD doctors whose thesis themes involved different aspects of research in oncology.
1- LVL-Specialist in General Surgery, whose thesis focused on: Breast Cancer in Angola: clinical and pathological characterization and necessary resources for the definition and implementation of an action program.
2- FM-Specialist in General Surgery, that studied the: Organization of oncology units in Angola: epidemiological profile of oncological diseases, necessary resources for early diagnosis and adequate treatment.
3- JLS - Specialist in Urology, that searched: biopathology of bladder cancer associated with Schistosome haematobium, possible carcinogenic effect mediated by estrogen adducts. Study carried out in an endemic area of urinary schistosomiasis in Angola.
All have completed their doctoral program abroad. We evaluated their current place of work and professional position; academic activity; mentoring experience; number of residents under their responsibility; membership to AORTIC; scientific output; and the date of the last publication.
iii) RESULTS:
1- LVL is the head of the oncology unit of the Sagrada Esperança Clinic (Luanda); PhD jury member; a mentor, supervising one resident; AORTIC member; that published seven papers (the last one in 2020).
2- FM is the head of the Angolan Institute Against Cancer (IACC, Luanda); a university professor; a mentor, supervising three residents; AORTIC member, and published seven papers (the last one in 2020).
3- JLS is a member of the Urology Unit at Américo Boavida Hospital (Luanda); a university professor; a mentor, supervising three residents, published 12 papers published (the last one in 2021).
Only one (JLS) belongs to a research centre (in this case abroad).
iv) CONCLUSIONS: The doctors who received doctoral training have become relevant members of the scientific and clinical community dedicated to oncology in their home country, actively contributing to the organization, research, and good practices in oncology. Thus, it is important to create national doctoral programs with the support of leading universities, to increase the country's capacity.

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CERVICAL CANCER: WHY PSYCHO-ONCOLOGY SHOULD BE CHAMPIONED IN AFRICA

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PSYCHO-ONCOLOGY, STREAM 1, November 7, 2021, 11:00 AM - 12:00 PM

Cancer by nature is associated with distress across the whole spectrum of continuum of care from suspicion to diagnosis through treatment. The onset, nature and severity of distress experienced by cancer patients varies significantly between patients and even along the course of care for individual patient. Unmanaged distress could negatively impact outcome of cancer care. This session will review peculiar manifestations of distress in cervical cancer patients in low resource settings and report on my experience in applying psycho-oncology principles in managing some of these presentations.

Despite the availability of evidence-based resource appropriate cervical cancer prevention strategies that can be applied in low resource settings, the incidence and case fatality of cervical cancer continues to be on the increase in low resource settings. Most of the patients presents in late stages with characteristic vaginal discharge which poses significant psycho-social problem.

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PROFESSIONAL VIEWS ON HUMAN PAPILLOMAVIRUS AND CERVICAL CANCER IN UGANDA

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OBJECTIVE

This study examines Ugandan health professionals' knowledge and perspectives on human papillomavirus (HPV) and cervical cancer (CxCa), to identify perceived barriers and facilitators to CxCa prevention and control, including among women living with HIV (WLHIV).

METHODS

This qualitative study uses key informant interviews to obtain primary data from professionals working in the HIV field in Uganda. Informants were identified through purposive and snowball sampling through consultation with colleagues at The AIDS Support Organisation and Makerere University. Virtual, hour-long interviews were conducted and audio recorded after consent was obtained. Interviews consisted of open-ended questions exploring perspectives of CxCa and HPV in Uganda, knowledge about HPV and CxCa among WLHIV in Uganda, and practices. Transcripts were analyzed and coded via MaxQDA software for common themes and compared with data from previous interviews with cervical cancer experts in Uganda.

RESULTS

To date, we have conducted 12 interviews with CxCa professionals and 8 interviews with HIV experts. Common themes regarding facilitators to HPV and CxCa control include ability to treat CxCa with early detection, use of village health teams, and school vaccination programs. However, females who don't attend school, which often includes WLHIV, or are absent the day vaccinations are administered may not complete the series, and vaccination records can be improved. Other barriers identified include misconceptions among women, limited access and distance to CxCa screening and treatment, and transient/limited funding for CxCa screening and treatment supplies. Potential solutions include decentralizing care and training more professionals to provide care in rural areas.

CONCLUSION

Preliminary results suggest that CxCa burden in Uganda, including among WLHIV, results from factors at the individual, interpersonal, community, and systemic levels. With continued data collection, we will identify areas to focus future research efforts, guide intervention, and inform larger efforts such as Uganda's Ministry of Health.

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BREAST CANCER TREATMENT ACCESS DISPARITY IN BOTSWANA

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OBJECTIVE: Multimodality treatment for breast cancer (BC) is available free-of-charge to Botswana citizens, but services are only available in specialized centers. Assuming relatively consistent BC incidence across Botswana, we sought to examine rates of treatment initiation and cancer stage.

METHODS: As part of the Thabatse Cancer Cohort, we included all consenting patients with BC entering oncology care at the four principal cancer centers in Botswana from 2014 to 2020. Cancer stage and the clinic/health district (HD) where the patient first presented were obtained at time of enrollment. We estimated population catchments for the 27 HDs using community-specific counts from the 2011 Botswana national census. Poisson modeling was used to estimate annual treatment initiation incidence by HD and the effect of initial presentation to a clinic along the populated A1 highway corridor in Botswana.

RESULTS: A total of 601 BC cases were enrolled with available location of initial presentation, including 462 within and 139 outside the populated corridor. Overall annual BC treatment initiation incidence was 9.7/100,000 but ranged from 1.6/100,000 in Okavango Health District to 19.2/100,000 in Southeast Health District. Treatment initiation incidence was significantly higher for HDs in the populated A1 corridor, rate ratio 1.27 (95% CI, 1.02 to 1.58, p=0.035). A similar pattern was seen in relation to cancer stage, with 269 (58%) of those along the populated corridor having advanced stage (IIIB, IV, or unstaged) and 90 (65%) of those outside the populated corridor having advanced stage, but this was not statistically significant (p= 0.20, Fisher exact).

CONCLUSIONS: This analysis of patients entering oncology care for BC indicates significant disparity in access and potentially unreported cases in certain HDs. While overall treatment initiation rates are lower than expected from international norms, access to care is significantly worse for women seeking treatment at clinics outside developed transportation networks.

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BREAST CANCER IN ANGOLA - NEW IMMUNOHISTOCHEMICAL DATA

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Background & Objectives: Breast cancer is common in Angola. This work presents the histological and biological characteristics of 456 cases diagnosed from January 2011 to Mars 2022 in IACC and CSE, that are sited in Luanda and treat patients from all the country.

Material and Methods: Paraffin embedded blocks from 500 cases were used: 226 with Tru-Cut biopsies and 274 with surgical specimens. 40 cases were withdrawn because the preanalytical artifacts, all of them from surgical specimens. 4 cases od male breast cancer were excluded. The remaining 456 cases were studied by conventional histology and immunohistochemistry using antibodies against ER, PR, HER2, Ki67 in all cases; and p63; CK5/6, E-Cadherin, PGFR and SISH for Her2 if necessary. Immunohistochemical study was done in UNILABS, Porto. Statistical analysis was done using software RStudio v1.2.1335.

Results: Age (years): average 46,4; min 24; mx 84; under 50 y: 297 cases (65%); after 50y: 159 (35%). Histological types of carcinomas (%): invasive NST(74,6); lobular(7,7), mucinous(6,4), others(11,3%). Grade: 1 – 23.6%; 2 – 33,8%; 3 – 42,6%. Stage: I – 0,6%; IIa – 6,7%; IIb – 11,5%; IIIa – 25,2%; IIIb – 26,8%; IIIc . 9,1%; IV – 12,1%; others - 8,0%. Molecular-like types (all cases): luminal A – 23,9%; luminal B – 27,4%; HER positive – 14,5%; luminal B/HER2 positive – 7,9%; triple negative – 26,3%. Molecular-like types (after 50 years): luminal A – 30,2%; luminal B – 27,0%; HER2 positive – 12,6%; luminal B/HER2 positive – 5,7%; triple negative – 24,5%. Preanalytical artifacts were seen in surgical specimens.

Conclusions: Breast cancer in Angola is diagnosed in advanced stages. Luminal B and triple negative are the most common. This high prevalence aggressive types is related with low age at diagnosis. If only the group of patients more than 50 years is considered, predominant types are luminal. Efforts in health education for early diagnosis and improvement in pre-analytical procedure must be done.

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EXPLORING THE RELATIONSHIP OF CIRCULATING FATTY ACIDS AND IMMUNE-ONCOLOGICAL MARKERS WITH PROSTATE CANCER IN A DIVERSE COHORT OF MEN

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African American (AA) men are at higher risk for lethal prostate cancer (PCa) than European American (EA) men. Differences in exposure to dietary fatty acids and their metabolism may contribute to this disparity. While it remains controversial to what extent circulating fatty acids influence PCa risk and progression, their association with PCa in AA men remains unexplored. Our study aimed to characterize this relationship in the diverse NCI-Maryland Prostate Cancer Case-Control Study with an over-representation of AA men. We focused on both fatty acids and additional immune-oncological mediators that potentially contribute to the differences seen in PCa risk and survival between AA and EA men. A CLIA-certified, mass spectrometry-based assay was applied to measure 24 fatty acids in serum from 846 cases and 846 controls. Linear regression analyses were performed on six fatty acid groups including total, saturated, trans, cis-monounsaturated, omega-6 and omega-3 fatty acids, to initially compare levels in AA and EA men. Exploratory mediation analyses were also applied to determine which of the measured 82 immune-oncological proteins were mediating the relationship between fatty acids and race/ethnicity and PCa. Our first findings indicate significant differences in fatty acid concentrations between AA and EA men with PCa - with the exception of omega-3 fatty acids. Using percent of total fatty acids as an alternate readout also showed highly significant differences between AA and EA cases in every category except trans fatty acids. Myristic acid, a saturated fatty acid, was robustly lower in AA cases (p<0.0001). Cases with low concentrations of myristic acid had significantly higher relative concentrations of neutrophil-associated chemokines, CXCL1 (p<0.0001) and CXCL5 (p<0.0001). Our findings point to a previously unexplored role of fatty acids and immune-inflammation mediators in AA men with PCa.

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TISSUE MICRO ARRAY VALIDATION IN BIOMARKERS STUDY IN CERVICAL CARCINOMA – A METHODOLOGICAL APPROACH

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High incidence rates of cervical cancer (CC) are reported in Sub-Saharan Africa (SSA). The vast majority of CCs are associated with persistent high-risk human papillomavirus (hrHPV) infection. p16 is overexpressed in HPV infected cells thus it is used as a surrogate marker for HPV. In SSA a high incidence of CC is occurring in an HIV pandemic milieu. Thus, a recent therapeutical biomarker as PDL-1 expression could also be of interest to study in an SSA setting. Biomarkers studies using whole slide (WS) preparations yields a high cost per case, thus cost-effective methods as tissue microarray (TMA) are of importance to facilitate SSA based clinical research.

Objective: To evaluate the effectiveness of TMA in p16 and PDL-1 expression in CC compared to WS.

Methods: We selected and anonymized 20 cases of CC diagnosed at Orebro university hospital. p16 and PDL1 expression was immunohistochemically investigated. All WS were scanned, ten representative virtual TMA cores per sample were selected with 0.6 mm in diameter and scored. 10 random combinations of 3 cylinders per case were assessed for each marker. Each cylinder and WS was considered was considered negative or positive for p16 and PDL1. Agreement of scoring between TMA samples and whole sections were evaluated by kappa statistics.

Results: p16 WS was considered as positive in 19 cases with a kappa value of 1.00 (1.00-1.00, 95% confidence interval) concerning TMA evaluation. PDL-1 was scored as negative in 15 cases and positive in 5 on WS, with a TMA concordance with k=0.66 (0.54-0.79). Thus, TMA agreement was excellently and substantial for the evaluated biomarkers.

Conclusions: TMA is a valuable method in the research setting and is a cost-effective tool for cancer research especially in the SSA setting. However, each biomarker needs to be assessed concerning TMA and WS concordance.

CUTANEOUS ADVERSE EFFECTS OF IMATINIB MESYLATE IN PHOTOTYPE VI PATIENTS TREATED FOR CHRONIC MYELOID LEUKEMIA: EXPERIENCE FROM DAKAR, SENEGAL ABOUT 60 PATIENTS.

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Imatinib mesylate is a tyrosine kinase inhibitor (TKI) that targets BCR-ABL, c-kit, and PDGF receptors. It is a first line treatment in chronic myeloid leukemia in Senegal, while second line treatments are expensive in our practice. Adverse skin effects are generally well tolerated and the most common are edema, maculopapular rash or diverse eruptions (lichenoid eruptions, Steven-Johnson syndrome, hyperpigmentation and hypopigmentation). Our aim was to identify the cutaneous side effects in phototype VI Senegalese patients who received Imatinib mesylate for the treatment of chronic myeloid leukemia.

We perform a descriptive study in population with dark complexion. The study was conduct in the Hematology unit of National Center of transfusion, in Dakar, Senegal. We include the patients who receive imatinib mesylate (IM) for chronic myeloid leukemia from January 2008 to December 2017. We excluded those treated for another affection by IM. Socio-demographic, clinical, biological and therapeutic data were recorded by a structured questionnaire. We analysed data by software CS Pro 7.0 and to Stata 12.0 by EPi-info version. The Pearson Chi square test and the Fischer bilateral exact test were used to compare frequencies. If $p < 0.05$, the difference was considered statistically significant. We collected data from 60 patients treated with imatinib mesylate during approximatively 39 months. Among them 55% (n=33) developed cutaneous side effects. The sex ratio was 0.94 (16 males/ 17 females) and the median age of entire cohort was 46,7 years. Fifty-two patients received a daily dosage of 400 mg, and 8 received a 600mg daily dosage. The median time to onset of cutaneous disease was 3,73 months.

The following adverse cutaneous effects were found: generalized hypopigmentation (n=21), localized hypopigmentation (n=2), periorbital edema (n=4), Stevens-Johnson syndrome (n=3), eczematous dermatitis (n=3), cutaneous dermatophytosis (n=2) , hyperpigmentation (n=2), alopecia(n=2), fixed pigmented eruption (n=1), onychodystrophy(n=1), folliculitis(n=1), stomatitis(n=1) and lichenoid reaction(n=1). Extra-dermatological toxicity was observed in 23 patients (38.33%). Skin side effects were mostly associated with gastrointestinal (n=16) and hematologic (n=14) side effects. We found no difference between age , sex and the apparition of cutaneous side effects but it was an association between the dose of the imatinib mesylate (p=0,027) and the stage of the disease ((p=0,047).

Conclusions: cutaneous side effects of Imatinib mesylate are common among patients among the patients followed for chronic myeloid leukemia. Hypopigmentation was the most frequent; we found an association between cutaneous side effects and the dose of Imatinib mesylate.

KNOWLEDGE AND USE OF PAIN ASSESSMENT TOOLS AMONG NURSES IN FEDERAL TEACHING HOSPITALS IN ABUJA, FEDERAL CAPITAL TERRITORY OF NIGERIA

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Abstract

Objective: Pain is a physiological phenomenon which causes unpleasant feelings to its subjects, and is difficult to communicate in certain circumstances. Pain assessment is an essential key to effective pain management. As major players in pain management, nurses require appropriate knowledge and skill of pain assessment. Expanding scope of pain assessment in a cancer patient for nurses is an area of concern because most cancer patients usually experience pain while some die with unrelieved pain. Therefore, knowledge of pain assessment using appropriate tools is a prelude for choosing appropriate pain relief measures for cancer clients. The study aimed to determine knowledge and use of pain assessment tools among nurses in federal teaching hospitals in Abuja, federal capital territory of Nigeria.

Methods: A quantitative descriptive cross-sectional design was adopted for the study. Purposive sampling technique was used to select the hospitals while stratified proportionate sampling was used to draw 319 nurses from a total population of 1051 nurses in selected hospitals. Data were collected using a researcher-developed questionnaire containing 34 structured items. The instrument yielded a reliability coefficient of 0.78. Data generated was statistically analyzed using descriptive and inferential statistics.

Results: Majority (98.0%) of the respondents had fair knowledge of pain assessment tools. The overall use of pain assessment tools among the respondents was poor (18.4%), Pain assessment tools used by the respondents varied while the most common tools used by respondents were visual analog scale (47.3%) and verbal descriptor scale (22.0%). Nursing work load, lack of skill in utilization of pain assessment tools, non-availability of pain assessment tools in the wards and inadequate training/expertise in the use of pain assessment tools were the barriers to use of pain assessment tools identified in the study setting. There was no significant difference ($p > 0.05$) in the knowledge and use of pain assessment tools.

Conclusion: knowledge of pain was fair and respondents showed poor use of pain assessment. Adequate pain management for cancer patient aids relief of suffering and improved quality of life. Therefore, comprehensive, mandatory and continuous training should be organized to ensure nurses have relevant and up to date information on pain assessment measures

A DOSIMETRIC COMPARISON OF FOUR THREE DIMENSIONAL CONFORMAL RADIOTHERAPY TECHNIQUES FOR PROSTATE CANCER , A PLANNING STUDY AT PARIRENYATWA HOSPITAL

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OBJECTIVE : To compare the dosimetric coverage of the Planning Target Volume and dose delivered to the Organs at risk in 3, 4,5, and 6 field techniques of 3DCRT in patients with localized prostate cancer. The purpose of the research is to determine the most effective technique for sparing the rectum, bladder and femoral head while keeping adequate dose coverage of the PTV.

METHOD : 24 patients with prostate cancer already treated using 4 field technique underwent 3, , 5 and 6 field planning. Plans were generated on eclipse Treatment planning system using AAA algorithm and at machine energy 6MV or 10MV. The PTV was defined as prostate gland with 10mm margins around Clinical Target Volume . CTV is prostate gland except for the posterior margin (prostate gland anterior part where the rectum wall where 5mm margin is applied). For each patient OAR were outlined, rectum, bladder, right femoral head. The following plans were made with beam angle orientations 3 field (0, 120, 240) 6 field (45, 90, 135 ,225 ,270, 315) 5 field (0, 90, 110, 250, 270,) and compared with the already existing 4 field (0,90,180,270).

All dosimetric parameters were appraised qualitatively and quantitatively using standard dose volume coverage, homogeneity and conformity. PTV coverage was evaluated with D min, D mean and D max dose to PTV. Dose homogeneity was assessed using Homogeneity Index and conformation of the PTV coverage was estimated using the Conformity Index. Normal tissue avoidance of OAR (bladder, femur, rectum) was evaluated with V50, V70 for rectum, V50, V70 for bladder, V50 for femur.

RESULTS : ANOVA statistical methods were used to verify the significance of different between the treatment plans and all 4 plans differed slightly in measured parameters and none of them have statistically significant differences.

CONCLUSION : In comparison to 4 field technique, the 5 and 6 field technique has resulted in improved dose conformity and heterogeneity, however the difference was not very statistically significant.

REGULATORY VCAN POLYMORPHISM IS ASSOCIATED WITH SHOULDER PAIN AND DISABILITY IN BREAST CANCER SURVIVORS

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Objective: Shoulder morbidity following breast cancer treatment is multifactorial. Despite several treatment- and patient-related factors implicated, unexplained inter-individual variability exists in the development of such morbidity. Given the paucity of relevant genetic studies, we investigate the role of polymorphisms on the risk of shoulder pain/disability in breast cancer survivors.

Patients and methods: A cross-sectional study of 254 South African breast cancer survivors evaluated associations between shoulder pain/disability and ten single nucleotide polymorphisms (SNPs) within four proteoglycan genes: ACAN (rs1126823 G>A, rs1516797 G>T, rs2882676 A>C); BGN (rs1042103 G>A, rs743641 A>T, rs743642 G>T); DCN rs516115 C>T; and VCAN (rs11726 A>G, rs2287926 G>A, rs309559). Participants were grouped into no–low and moderate–high shoulder pain/disability based on total pain/disability scores: <30 and ≥30, respectively using the shoulder pain and disability index (SPADI).

Results: The GG genotype of VCAN rs11726 was independently associated with an increased risk of being in the moderate to high shoulder pain (P=0.005, OR=2.326, 95% CI=1.259 - 4.348) or disability (P=0.011, OR=2.439, 95% CI=1.235 - 4.762) categories, after adjusting for participants' age. In addition, the T-T-G inferred allele combination of BGN (rs74364 - rs743642) - VCAN rs11726 was associated with an increased risk of being in the moderate to high shoulder disability category (0=0.002, OR=2.347, 95% CI=1.215 - 4.534).

Conclusion: Our study is first to report that VCAN rs11726, independently, or interacting with BGN polymorphisms, is associated with shoulder pain or disability in breast cancer survivors. Whereas our findings suggest an involvement of proteoglycans in the etiology of shoulder pain/disability, further studies are recommended.

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SUCCESS RATE FOR LINKING PATIENTS IDENTIFIED DURING BREAST CANCER SCREENING TO CANCER TREATMENT IN RESOURCE LIMITED SETTING DURING COVID19 LOCKDOWN; A ONE-YEAR CASE STUDY FOR INTERNATIONAL CANCER INSTITUTE, ELDORET KENYA.

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Objectives
Breast cancer accounts for 26% of all new cancers for women in Kenya. It is the second leading cause of cancer related deaths for women. Early detection and linking clients to care can avert these trends. We seek to establish the proportion of women screened and linked to care in resource limited setting in Kenya in a period of one year during the COVID19 lockdown.

Methods
International Cancer Institute, in collaboration with partnering counties organized for screening activities for breast and other cancers. Data was abstracted from the ICI electronic medical records system (e-ICI) for clients screened using clinical breast examination. These clients were followed up until they got enrolled to care and treatment initiated. Proportions were calculated using STATA Version 17.

Results
A total of 2089 clients mean age 36.6 95%[35.9- 37.3] years were screened for breast cancer and records documented in the e-ICI platform for the period between 1st May 2020 to 22nd April 2021 from the e-ICI. 1759(84%) were female clients screened for breast cancer. Of the people screened 27(1.3) had abnormal findings [17(64%) had a breast lump, 6(21%) had breast tenderness, 3(11%) had nipple discharge, and 1(4%) had other findings]. 25(93%) abnormal cases had biopsy taken. The histopathology examination revealed that 5(20%) were benign, 16 (64%) were malignant. 15(94%) were linked to and initiated on oncology treatment. However, 1(6%) patient died before being enrolled to care.

Conclusion
ICI has managed to initiate treatment for 94% of the patients diagnosed with breast cancer during the Breast cancer screening over a period of one year.

CHALLENGES FACED BY CANCER PATIENTS DURING COVID 19 PANDEMIC IN ZIMBABWE. A CASE OF CANCER ASSOCIATION OF ZIMBABWE, HARARE CANCER CLINIC CLIENTS/PATIENTS PERSPECTIVES

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The study intended to assess the challenges faced by cancer patients during the COVID 19 pandemic in Harare, Zimbabwe. It also intended to establish how the outlined challenges affected the patients' physical, mental and social wellbeing from a patient's perspective.

The study utilized a case study type of qualitative research method. It targeted cancer patients seeking health services during COVID 19 period. An Interview guide with open-ended questions was developed and pilot tested. Data were collected from purposively selected participants using recorded telephone interviews. Recorded data were transcribed verbatim, coded, and analyzed using thematic-content analysis methods.

Five respondents participated in the study by providing rich qualitative data on their experiences during the COVID 19 period. The respondents consisted of both males and females and had varied demographic and socio-economic characteristics. Participant's highest level of education ranged from primary to master's degree level. The study included patients from both private and public hospitals. All the respondents had no medical insurance. Patients with breast, skin, and colon cancers were included in the study. The majority of the respondents (3/5) were diagnosed with cancer at an advanced stage. The age range and mean age of participants were from 34 to 69 and 49.2 years, respectively. Cancer patients faced challenges emanating from COVID 19 itself, resultant lockdown measures, and health institutions' operational adjustments. Challenges included mental health problems, livelihood, medical-related, and transport problems.

The study revealed that COVID 19 made it difficult for cancer patients to access treatment and cope with cancer diagnosis thereby infringing on their physical, mental, and social wellbeing. Both formal and informal cancer support systems were weakened by COVID 19, leaving the cancer patients without any meaningful support/safety net. This calls for immediate patient-centered and COVID 19 period-specific efforts to ameliorate the plight of cancer patients.

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WOMEN'S KNOWLEDGE, ATTITUDES AND PRACTICES (KAP) RELATING TO BREAST AND CERVICAL CANCERS IN RURAL ZIMBABWE: A CROSS-SECTIONAL STUDY IN MUDZI DISTRICT, MASHONALAND EAST PROVINCE

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Introduction
Cancer knowledge levels, attitudes, and practices of people in different sections of society should be assessed in order to guide current cancer interventions. This study aimed to assess breast and cervical cancer knowledge, attitudes, and practices of women of reproductive age, in Mudzi District, Republic of Zimbabwe.

Methods
A cross-sectional community-based survey was conducted. A total of 409 survey household questionnaires were administered to women of reproductive age (15-49 years) in 2014.

Results
A total of 409 respondents were interviewed. . Nearly 85% of respondents had heard of cancer. 34.2% did not know of any cervical cancer risk factors and 51% were not familiar with the signs and symptoms of cervical cancer. 55% had not discussed cancer issues with partners in the past 12 months, and only 27.4% had discussed cancer issues with partners at all. Most of the respondents (96.2%) had never undergone cervical cancer screening. The majority of the respondents (70.8%) had never discussed breast cancer issues with community members. About 70% had never discussed cervical cancer issues with community members.

Conclusions
This study revealed a lack of awareness and comprehensive knowledge about breast and cervical cancer. It also revealed low self-risk perception, low uptake of cancer early detection services, and low capacity of the local health institution in offering cancer services. It is recommended that the scaling-up of cancer information, dissemination, and early detection services must be prioritized, including training of local health institutions.

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THE CHARACTERISTIC OF CHILDREN ATTENDING PEDIATRIC ONCOLOGY UNITS IN 7 SUB-SAHARAN AFRICAN COUNTRIES.

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Objectives background:
Pediatric Oncology is an overlooked discipline in sub-Saharan Africa, data are collected by few regional population based registries. In January 2016 the French African Pediatric Oncology Group (GFAOP) working in 20 countries set up an international hospital based cancer registry collecting data on line. All 18 units were invited to participate. Here we report on the characteristics of children attending 7 of these units from 2017 to 2019 to document needs of dedicated pediatric oncology units.
Method:
Units that registered children over the 3 years, with at least 45 new cases per year were selected. Units included Abidjan, Bamako, Dakar, Kinshasa Ouagadougou, Tananarive, and Yaoundé. Diagnosis was confirmed on clinical and radiological, histological or hematological examination.
Results:
Over the 3 years 3044 children were registered and 2313 had a confirmed diagnosis. Sex ratio was 1.7 male to 1 female. Age ranged from < one month to 20 years, with a mean age of 6.6, the most frequent age group was: 1-4, 23% for boys and 5-9, 17% for girls. The annual number of cancers ranged from 48 in Tananarive to 227 in Ouagadougou   Five units had an annuel registration of over 100 children. The most common malignancies were: Burkitt lymphoma (BL) 497, Nephroblastoma 390, retinoblastomas (RB) 363 and LAL 312. Ouagadougou had the largest proportion for both LB and RB with 37% and 27% respectively. LAL represented 63% of all leukemias. Sixteen brain neoplasms were registered. None of the units had more than 3 pediatric oncologists.
Conclusion:
The high incidence of BL is characteristic of tropical Africa. The paltry 16 brain tumors mostly reflects the incapacity of countries to diagnose brain tumors, due to lack of essential equipment. Our data highlights the need for development of pediatric oncology services including diagnostic resources such as imaging in the countries participating in this study.

CANCER DU COL UTERIN : LA CHIMIOTHERAPIE NEOADJUVANTE DITE « D'ATTENTE », UNE SOLUTION POUR L'AFRIQUE ?

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BEST OF THE BEST ABSTRACTS (1), STREAM 2, November 7, 2021, 10:00 AM - 11:00 AM

OBJECTIFS : Le cancer du col utérin est le 4ème cancer de la femme dans le monde, et le 2ème en Afrique, aussi bien en termes d'incidence que de mortalité. Son diagnostic bien qu'aisé, est souvent réalisé dans nos contrées à un stade localement avancé, rendant la radiochimiothérapie concomitante (RCC) indispensable. Toutefois, l'accès à la radiothérapie dans les pays en voie de développement (PVD) reste encore très limité, imposant dans la plupart des cas, la mise en route d'une chimiothérapie néoadjuvante dite d'attente , dont le but principal serait de ralentir la progression locale de la maladie et d'éviter une probable dissémination micrométastatique. L'objectif de notre étude était d'évaluer l'impact de notre pratique clinique quotidienne sur la réponse tumorale, la toxicité, la compliance et les taux de survie.

METHODES : Nous avons mené une étude rétrospective descriptive incluant des patientes prises en charge pour un carcinome épidermoïde du col utérin en 2019 au Service de Radiothérapie du Centre Hospitalier National Dalal Jamm.

RESULTATS : Les 49 patientes, âgées en moyenne de 56 ans, avaient une maladie localement avancée (IIB à IVA) dans 80%. Une chimiothérapie d'attente a été réalisée dans 53% , avec le doublet Carboplatine et Paclitaxel dans 81%. La réponse thérapeutique était objective chez 68% des patientes. Le délai moyen entre le diagnostic et le début de la radiothérapie était de 03 mois. Une RCC a été réalisée chez 45 patientes et une radiothérapie exclusive chez 04 patientes. Seule une toxicité de grade ≤ 2 a été retrouvée et elle était essentiellement digestive (45%), cutanée (18%) et urinaire (10%). Le taux de SSP à 2 ans dans le groupe chimiothérapie d'attente était de 87% versus 81% dans le groupe RCC seule avec un p value de 0.55.

CONCLUSION : La chimiothérapie d'attente dans le cancer du col utérin en permettant d'obtenir une réponse tumorale objective sans engendrer une toxicité majeure ni altérer la compliance à la RCC, pourrait gagner une place dans l'arsenal thérapeutique dans les PVD, ou l'accès dans les délais à la radiothérapie constitue un véritable problème. Pour cela, il faudrait réaliser de grandes études randomisées qui permettraient d'identifier le protocole de chimiothérapie optimal.

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TRANSCRIPTOMIC ANALYSIS OF TNBC IN WEST VS EAST AFRICAN PATIENTS REVEALS DISTINCT IMMUNE RESPONSES

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Objective: Breast cancer (BC) remains a leading cause of mortality among women globally. Molecularly aggressive Triple Negative Breast Cancer (TNBC) is disproportionately diagnosed among women with West African ancestry. Our aim is to identify ancestry-specific drivers of gene expression in TNBC tumors among our African-enriched ICSBCS cohort.

Methods: RNA sequencing was obtained and analyzed from archival FFPE TNBC tumor tissue from Ghanaian (n = 6), Ethiopian (n = 11), and African-American (AA) women (n = 9). Single nucleotide variants from the alignments were used to estimate genetic ancestry, using 1000 Genomes as our reference. Gene expression was quantified and used to identify differentially expressed genes (DEGs) associated with self-reported race/ethnicity (SRR) and genetic ancestry.

Results: Quantified genetic ancestry across the cohort revealed a range of African ancestry between SRR groups, where Ghanaians had the greatest proportion of African ancestry, followed by AA and Ethiopian. Interestingly, Ethiopian women in our cohort reported similar levels of African and European admixture. We utilized QGA and SRR to define differential gene signatures. 613 genes were associated with African ancestry, with High AFR (Ghanaian and AA) and Low AFR (Ethiopian) groupings. This AFR-associated gene list showed enrichment in terms related to immune cell trafficking, and CIBERSORTx deconvolution revealed tumor-associated leukocyte abundance was significantly higher among High AFR samples (p = 0.0076). From our SRR analysis, 751 DEGs were unique to this approach, and clustered samples by geographical location versus ancestry (AA clustering distinctly from Ghanaians and Ethiopians). We found enrichment in pathways that may be associated with co-morbidity or environmental status, specifically predicted activation of pathways related to diabetes, obesity and cardiac function among AAs.

Conclusions: In conclusion, use of both QGA and SRR revealed distinct gene signatures that highlight the importance of investigating both shared ancestry and SRR in the context of cancer genomics.

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HOT BEVERAGES AND PORRIDGE AND OESOPHAGEAL CANCER RISK IN MALAWI AND TANZANIA: A CASE-CONTROL STUDY

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OESOPHAGEAL CANCER Co-convened by AORTIC and NCI, STREAM 2, November 7, 2021, 1:45 PM - 3:00 PM

Introduction
Consumption of very hot beverages/food is a probable carcinogen and might contribute to the African corridor of esophageal squamous cell carcinoma (ESCC). We investigated ESCC risk in relation to several measures of possible thermal injury individually and as a composite score.
Methods
We conducted ESCC case–control studies in Blantyre, Malawi (2017-20) and the Kilimanjaro region, Tanzania (2015-19). Using logistic regression models adjusted for country, age, sex, alcohol and tobacco, odds ratios (ORs) and 95% confidence intervals (CIs) were estimated for self-reported metrics of tea, coffee and porridge consumption.
Results
The study included 849 cases and 906 controls. Three metrics were positively associated with ESCC risk: temperature of drink/food (OR 1.92 (95% CI: 1.50, 2.46) for 'very hot' vs 'hot'), waiting time before drinking/eating (1.76 (1.37, 2.26) for < 2 vs 2-5 minutes) and drinking/eating speed (2.23 (1.78, 2.79) for 'normal' vs 'slow' consumers). Self-reported mouth burning was not associated with risk. The composite score indicated that ESCC risk increased, OR of 3.60 (1.99, 6.51) for a score of 7+ vs 2.
Conclusions
Consumption of hot foods/beverages is a potentially modifiable ESCC risk factor in Malawi and Tanzania. These findings suggest a new composite exposure metric for use in future studies.

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SURVIVAL OUTCOMES AND PROGNOSTIC FACTORS AFFECTING SURVIVAL IN PATIENTS WITH METASTATIC BREAST CANCER

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OBJECTIVE

Breast cancer (BC) is the most common cancer in Kenya with approximately 6,000 new cases per year. The majority of BCs in Kenya present at an advanced stage. A significant population of women diagnosed with early breast cancer eventually develop metastatic disease. Metastatic Breast Cancer (MBC) therefore comprises a significant population of women living with breast cancer. With the advancement of treatment options survival of MBC patients has improved over time. Several clinical and pathologic factors have been considered to impact the long term outcomes of women with MBC. Most of the factors, however, have been studied in the western population. From our tertiary university hospital and cancer centre in Nairobi, Kenya, we report available survival data on women with MBC along with their clinical and pathological characteristics associated with survival outcomes.

METHODS

We retrospectively reviewed the medical records of women diagnosed with MBC between 2009 and 2017 at Aga Khan University Hospital. Nairobi

Survival data was collected on progression-free survival, survival time between diagnosis of first metastasis and death and overall survival. Data on the patient's age, stage at diagnosis, menopausal status, tumor grade, receptor status, site of metastasis and treatment was also collected.

The Kaplan-Meier Estimator was used to estimate survival. Prognostic factors for survival were analysed using univariate analysis. Standard descriptive statistics were used to describe patient characteristics.

RESULTS

131 patients diagnosed with MBC with complete records were included. The median age at first diagnosis of breast cancer was 47.00 years (range 21-79 years). The median survival was 22 months. The 3-year and 5-year survival were 31.3% and 10.7% respectively. Factors significantly affecting survival were Luminal A molecular subtype (HR 0.652 95% CI 0.473-0.899) and metastasis to the liver or brain (HR 0.615 95% CI 0.413-0.915 and HR 0.566 95% CI 0.330-0.973 respectively). Time to metastasis, age at diagnosis, menopausal status, tumour grade and type of chemotherapy given did not show any statistically significant effect on survival of patients after the diagnosis of MBC.

CONCLUSIONS

Our study found survival rates for patients diagnosed with metastatic breast cancer to be lower compared to studies from Western countries but higher than in studies from Sub Saharan Africa. Luminal A molecular subtype and metastasis to the liver or brain were found to be significant prognostic factors.

EVALUATION OF VACCINE AND NON-VACCINE-TYPE HUMAN PAPILLOMA VIRUS AMONG YOUNG ADULT WOMEN LIVING WITH AND WITHOUT HUMAN IMMUNODEFICIENCY VIRUS IN BOTSWANA FOR FUTURE HUMAN PAPILLOMA VIRUS VACCINE IMPACT MONITORING

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Objective: The purpose of this study was to determine HPV prevalence among the unvaccinated cohort of young women in Botswana, including those living with and without HIV, as a baseline to inform Botswana's future vaccine impact evaluation.

Methods: We conducted a cross-sectional assessment of women aged 18-22 years recruited from the University of Botswana and HIV clinics in Gaborone in October 2019–January 2021. Demographic and behavioral characteristics were self-reported during structured interviews; HIV clinical characteristics were abstracted from medical charts. Self-collected vaginal swabs were tested for 28 HPV types using Seegene Anyplex II HPV28. We compared 4vHPV (6,11,16,18) and non-4vHPV-type prevalence among women living with HIV (WLWH) and without HIV by demographic characteristics (age, sex, gender, marital status, education level), sexual and other health behavior (age of sexual debut, number of sex partners in past 12 months, number of sex partners in lifetime, age of current sex partner, age of first sex partner, sexual identity, condom use, and tobacco use) using chi-square test for statistical significance.

Results: A total of 806 women [306 (38.0%) with HIV, 500 (62%) without] were enrolled. WLWH were significantly older (median 21 vs 19 years, p<.001), more likely to be sexually experienced (86.9% vs 74.4%, p<.001), report ≥5 lifetime sex partners (22.2% vs 11.2%, p<.001), and report current sex partner aged ≥30 years (19.2% vs 3.2%, p<.001). HPV prevalences were significantly higher among WLWH compared to those without HIV for 4vHPV (34.5% vs 21.0%, p<.001) and non-4vHPV (79.9% vs 60.4%, p<.001) types. HPV prevalence remained higher among women with HIV in analyses restricted to sexually experienced women.

Conclusions: Over one-third of WLWH and nearly a quarter of those without had vaccine-type HPV detected. This study provides important baseline data to evaluate impact of the HPV vaccination program in Botswana.

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RÔLE DU KI67 DANS LA PRÉDICTION DE LA SURVIE DANS LE CANCER DU SEIN RH+

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Introduction: L'objectif de notre étude était d'évaluer la valeur seuil de Ki67 qui prédisait la survie dans le cancer du sein RH+/HER-. Nous avons aussi étudié son impact sur la survie en fonction de l'atteinte des ganglions lymphatiques axillaires.

Méthodes: Nous avons colligé rétrospectivement 321 cas de cancer du sein de stade précoce, confirmé histologiquement, traités entre 2011-2015, ayant des tumeurs RE et/ou RP positives (expression> 10%) et HER2 non surexprimé. Nous avons évalué plusieurs seuils de Ki67 en termes de survie globale (SG à 5 ans): 14%, 20%, 30% et 50%. Nous avons également considéré différents sous-groupes: pN0 (38%), 1-3pN+ (35%) et ≥4pN+ (27%). Nous avons utilisé la méthode de Kaplan Meier et les modèles de régression de Cox pour évaluer la survie.

Résultats: Le Ki67 médian était de 28%. Sur la population globale, nous avons observé une différence significative en termes de SG uniquement avec un seuil du Ki67 de 30% (67 vs 64 mois, p=0,04, HR=0,79 IC à 95% [0,6-0,87]). En absence d'atteinte ganglionnaire, seul le cut-off ki67=20% était associé à une différence en SG (72 vs 65 mois, p=0,03, HR=0,83[0,63-0,92]). Chez les patientes ayant une atteinte ganglionnaire pN+, les valeurs seuil testés du Ki67 n'avait pas d'impact sur la SG sauf chez les patientes ≥4pN +, où les patients avec Ki67> 50% avaient une SG significativement altérée par rapport aux patients ≤50% (63 vs 30 mois, p = 0,01, HR = 0,31 IC à 95% [0,22-0,65]).

Conclusion: Le niveau de Ki67 dans le cancer du sein Luminal a prédit la survie avec la valeur seuil de 30%. Il n'y avait pas d'impact de plusieurs valeurs seuil dans le groupe pN0 et 1-3pN+. Par contre un Ki67 > 50% était associé à une survie globale médiocres dans les tumeurs ≥4pN +.

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YOUNGER AGE AT CERVICAL PRECANCER AND CANCER DIAGNOSIS IN WOMEN WITH GENITAL SCHISTOSOMIASIS: A TEXT MINING APPROACH

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OBJECTIVE: Female genital schistosomiasis (FGS) may facilitate infection with oncogenic HPV and HIV, and consequently occurrence of cervical cancer. Cost-effective methods of studying this relationship are needed. We sought to assess the performance of text-mining in exploring the association between FGS and cervical precancerous lesions/cancer.

METHODS: 31,516 cervical histopathology reports from 2011 to 2017 from Inkosi Albert Luthuli Hospital, KwaZulu-Natal were extracted from the National Health Laboratory Services Corporate Data Warehouse in South Africa. Records with a Systemized Nomenclature of Medicine Clinical Terms diagnosis were used to train and test two supervised machine learning classifiers - Support Vector Machine (SVM) and Random Forest (RF). The performance was assessed using F-measures. The classifier with the best performance was used to assign diagnosis to records where it was missing. Word/phrase matching was used to extract schistosomiasis status from records classified as cervical precancer and cancer. Proportions and the Independent t-test were used to describe the relationships between FGS and cervical precancerous lesions and cancer.

RESULTS: SVM accurately classified 94.2% of test records into cervical precancer, cancer and other pathologies while RF accurately classified 93.5%. Schistosomiasis related words (positive/negative) were found in only 5.58% of cervical precancer/cancer records. Assuming that records without schistosomiasis related words were schistosomiasis negative, the prevalence of schistosomiasis was 2.59% and 0.96% in cervical precancer and cancer respectively. Women with schistosomiasis developed cervical precancer and cancer 2 years (p<0.001) and 5 years (p=0.021) earlier than patients without schistosomiasis, respectively.

CONCLUSION: Text-mining of histopathology reports is an efficient way to explore the relationship between FGS and cervical cancer. Women with FGS were diagnosed with cervical precancer and cancer at a younger age than women without FGS. Further studies are needed to understand the role of schistosomiasis in the occurrence of cervical cancer at young ages.

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FACTORS ASSOCIATED WITH UPTAKE OF CARE AND OUTCOME IN LEADING CANCER ENTITIES - A MULTINATIONAL, POPULATION-BASED COHORT STUDY IN SUB-SAHARAN AFRICA

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OBJECTIVE: Cancer is responsible for over half a million deaths in Sub-Saharan Africa (SSA) annually, with the number expected to reach 757.000 deaths in 2030. Currently, breast (BC), cervical (CC), prostate (PCa), colorectal cancer (CRC) and non-Hodgkin lymphoma (NHL) contribute to over half of cancer deaths in the region. As population-based data on access to cancer care and outcome remain scarce, we designed a study in cooperation with the African Cancer Registry Network to assess current status in a multinational context.

METHODS: Our observational study covered eleven population-based cancer registries in ten countries: Benin, Ethiopia, Ivory Coast, Kenya, Mali, Mozambique, Uganda, and Zimbabwe. Per registry, random samples of 25–125 patients diagnosed from 2009 to 2016 were selected for all five entities. Registry data were actively updated. Diagnostics and cancer-directed therapy (CDT) were evaluated for degree of adherence to National Comprehensive Cancer Network Harmonized Guidelines and factors contributing to access to care and outcome were analyzed.

RESULTS: Of 3461 patients included, 58.3% were actively traced. Of these actively traced patients, HIV infection was found in 11.8% and an Eastern Cooperative Oncology Group performance score (ECOG PS) of two or higher in 8.8% patients. Early or advanced stage was found in 58.4%, and metastatic stage in 17.3%. For a large proportion of traced patients, diagnostic information was missing (HIV: 72.8%; ECOG PS: 56.1%; stage: 24.3%). Any CDT was identified in 65.9% of traced patients. Overall three-year survival was 46.6% (95% confidence interval: 44.0%-49.2%), ranging from 37.2% for NHL, 41.1% for CC, 44.3% for PCa, 49.5% for CRC to 57.7% for BC patients. Factors associated with access to care, NCCN guideline-adherence and survival will be presented.

CONCLUSION: Though many patients in our population-based cohort presented with potentially curable disease, overall access to diagnostics and treatment were poor, resulting in impaired overall survival. Our study will present associations between socio-demographic and pathologic factors and access to care and contribute to a more complete picture of the current status of cancer care in Sub-Saharan Africa.

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NON-HODGKIN LYMPHOMA PATIENTS IN SUB-SAHARAN AFRICA: TREATMENT AND OUTCOME OF A MULTINATIONAL, POPULATION-BASED, ADULT COHORT

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OBJECTIVE: Non-Hodgkin lymphoma (NHL) is the sixth most common malignancy in Sub-Saharan Africa (SSA). To our knowledge, no population-based data on treatment and outcome have been published so far. Therefore, we aimed to assess therapy modalities and outcome of a population-based cohort of adult NHL patients.

METHODS: In our longitudinal observational study, we included registry data from eleven population-based cancer registries in ten countries. These data were amended by review of clinical records and follow-up calls. Therapy data were assessed for quality in terms of adherence to harmonized National Comprehensive Cancer Network (NCCN) guidelines. Survival analysis was done with multivariable Cox regression.

RESULTS: Of 516 patients included in the study, therapy-guiding sub-classification of NHL was available (42.1%). Lymphoma-directed therapy was identified for 206 (39.9%), specifically, chemo(immuno-)therapy for 186 (36.0%), and radiotherapy for 34 (6.6%). Mostly the CHOP regimen (cyclophosphamide, doxorubicin, vincristine, and prednisone) and derivatives were used, with a median of 6 cycles. Of 171 patients diagnosed with the 4 most common subtypes, treatment adherent to the NCCN guideline was identified in 21 (12.3%), deviations thereof for another 50 (29.2%). Overall 1-year survival of all 516 patients was 61% (95% confidence interval (95%CI) 55.1%-66.9%). Advanced ECOG performance status of 2 and higher, less than 5 cycles of any chemo(immuno-)therapy and no therapy were associated with unfavorable survival. For 106 patients diagnosed with diffuse large B-cell lymphoma (DLBCL), 1-year overall survival was 66.5% (95% CI 55.1%-77.9%). In DLBCL patients, deviations from guideline-recommended CHOP (with or without CD20-antibodies) and missing therapy were associated with unfavorable survival. HIV infection, age, and gender had no significant association with survival.

CONCLUSIONS: Enhanced access to diagnostic services especially with regard to pathology and provision of recommended chemo(immuno-)therapy could greatly improve guideline-adherence of therapy and hence survival of NHL patients in SSA.

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BLOOD LEVELS OF TNFRSF9 AND PTN PREDICT LETHAL PROSTATE CANCER AMONG AFRICAN AMERICAN MEN

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OBJECTIVE: Differentiating men who have lethal forms of prostate cancer from those with a more slow-growing disease remains a major challenge in clinical oncology. Risk stratification strategies are particularly needed for men of African descent who disproportionately bear the prostate cancer burden. METHODS: Using a high throughput proximal extension assay, we simultaneously measured 82 immune-oncological proteins in the blood of 819 prostate cancer patients at diagnosis of whom 394 were African American (AA) and 425 were European American (EA). These patients were followed up for a median of 8.6 years since their diagnosis during which 57 died of prostate cancer while 202 died of all causes. To identify an immune-oncology protein signature predictive of lethal prostate cancer, we applied a cross-validated, regularized Cox regression model. Included in this model were the 82 immune-oncology proteins and 6 covariates of clinical significance (age, education, BMI, smoking history, aspirin use, and diabetes).
RESULTS: We did not identify a robust predictive signature of lethal prostate cancer for EA patients. However, for AA patients a signature primarily driven by tumor necrosis factor receptor superfamily member 9 (TNFRSF9) and pleiotrophin (PTN) (both positively associated with the risk of lethal disease) and regular aspirin use (negatively associated with risk) were the top predictors ($P < 0.05$) based on two selection criteria: the feature frequency and the weight of the features' contribution to the prediction. These features combined predicted prostate cancer-specific mortality with an accuracy of 83.7% (SE=3.8%). The two proteins alone, TNFRSF9 and PTN, predicted prostate cancer-specific mortality with an accuracy of 78.2% (SE=4.2%). AA prostate cancer patients with high levels (> median) of both TNFRSF9 and PTN in their blood at diagnosis had the worst prostate cancer-specific survival. By 10 years, 33% of cases with high levels of both TNFRSF9 and PTN died of prostate cancer compared to only 5% of cases with low levels of both or either of these proteins.
CONCLUSIONS: Our study describes novel blood markers of lethal prostate cancer that can be used for risk stratification of AA patients at the time of diagnosis. AA patients with high levels of both TNFRSF9 and PTN in their sera had the highest risk of dying from prostate cancer. These markers may also be applicable to African prostate cancer patients since the blood-based immunome of Ghanaian and AA men are similar, as shown by our data.

EVOLUTION DE LA DEPRIVATION ANDROGENIQUE DANS LE CANCER DE LA PROSTATE A KINSHASA

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Contexte et objectif : Le cancer de la prostate (CaP) est un cancer hormono-dépendant. Dans nos milieux, la plupart de malades atteints arrivent souvent au stade localement avancé ou au stade métastatique. Ceci justifie le choix de la déprivation androgénique comme mode du traitement. L'objectif de cette étude était de décrire les caractéristiques socio-démographiques de patients atteints de CaP. Identifier la période durant laquelle la maladie reste sensible à la déprivation androgénique. Evaluer le pronostic des patients en termes de la survie.

Méthodes : C'est une étude observationnelle rétrospective concernant l'évolution des patients pris en charge pour le CaP. Elle a porté sur 51 cas et s'est déroulée à la clinique de Pointe à Pitre (CPAP) à Matete sur une période de 4 ans (de mars 2014 à juin 2018).

Résultats : l'âge moyen de patients était de 69,4±9,7 ans (37-92 ans) ; 39,2% des patients porteurs de CaP avaient un âge compris entre 70-79 ans ; 45,1% avaient consulté pour la dysurie et 25,5% étaient hypertendus. Tous avaient réalisé la biopsie prostatique, 47,1% étaient diagnostiqués au stade métastatique, avec le taux de PSA ≥100 ng/ml, le score de Gleason 8-10 et au stade clinique TNM3- 4. Environ 51 % étaient soumis à l'acétate de ciprotérone, 23,5% étaient castratrés chirurgicalement et 3,9% avaient subi une prostatectomie radicale. Une proportion de 41,1% avaient résisté à la castration dans un délai médian de 1,4 (1-3) ans de la réponse au traitement. La survie médiane était de 30 mois, avec une survie moyenne de 26,6 mois. La mortalité globale était de 19,6%.

Conclusion : Le cancer de la prostate a concerné surtout les patients de la tranche de 70 à 79 ans. Son diagnostic a été généralement tardif avec un taux de résistance à la castration élevé et une survie médiane de 30 mois.

Mots-clés : Déprivation, Cancer de la prostate (PC), Clinique de Pointe à Pitre (CPAP).

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A FOCUS ON CANCER HEALTH DISPARITIES ACROSS AND WITHIN AFRICA, AND SOME GLOBAL PERSPECTIVES

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Although the burden of disease in Africa is dominated by infectious diseases, the burden of cancer is growing. Currently approximately 1 million people are diagnosed with cancer each year in Africa and we know this is likely to be an underestimate as comprehensive cancer mortality and morbidity data is not readily available for Africa. The outcome for many in Africa affected by cancer is poor. Yet over the past few decades there have been significant advances in our understanding of the causes of cancer, as well as methods to prevent, diagnose and treat the disease. For example we know that exposure to infectious agents such as Hepatitis B and Human Papillomavirus increase the risk of developing certain cancers. This knowledge has led to development of diagnostic tests and has also translated into effective prevention efforts such as vaccines and screening tests. However, these scientific advances have not reached many in Africa. For example, 77% of countries in Europe have introduced the HPV vaccine into their vaccination programs, compared to 31% of countries in Africa. Cervical cancer remains the leading cause of cancer deaths amongst women in Africa. Similarly the significant advances in cancer treatment have failed to reach many in Africa. This talk will highlight differences in access to and benefit from scientific advances cancer that make the risk of acquiring cancer, the journey to cancer diagnosis and the experience of cancer care very different for people within and across Africa.

BREAST CANCER SURVIVOR EXPERIENCE OF REHABILITATION SERVICES IN SOUTH AFRICA: TOWARDS A CANCER SURVIVORSHIP PLAN

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IMPLEMENTATION SCIENCE: NUTS AND BOLTS FOR AFRICAN PRACTICE Co-convened by AORTIC and NCI (Part 2), STREAM 3, November 6, 2021, 1:00 PM - 5:00 PM

Abstract

Purpose Integrated rehabilitation health care pathways are implemented to meet both the physical and clinical needs of breast cancer survivors as they transition from treatment to survivorship. The aim of this study was to assess the current South African upper limb rehabilitation service, provision, and perspectives of these from the health professionals and breast cancer survivors with upper limb disorder.

Methods A sequential mixed-methods design informed this study. Service provision was evaluated via an online survey questionnaire completed by health practitioners working in public and private breast cancer units. Focus groups were conducted with both public health practitioners providing the services and breast cancer survivors accessing the services.

Results This study has revealed a dearth of rehabilitation services for breast cancer survivors in the public health sector of South Africa. Data reveal an overstretched, understaffed, and poorly trained public health sector, unable to deliver adequate upper limb services to breast cancer survivors. Focus group data suggests that this is due to financial austerity rather than poor recognition of the need. Poor patient education is driving poor upper limb outcomes and barriers to exercise behavior.

Conclusion The current South African upper limb rehabilitation services does not cater to the needs of breast cancer survivors leading to poor health outcomes.

COLORECTAL CANCER INCIDENCE AND MORTALITY TRENDS BY SEX AND POPULATION GROUP IN SOUTH AFRICA: 2002-2014.

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OBJECTIVE
To provide Colorectal Cancer (CRC) incidence and mortality trends by population group and sex in SA from 2002 to 2014.
METHODS
A cross-sectional study was conducted. Incidence data were extracted from the South African National Cancer Registry and mortality data obtained from Statistics South Africa (STATS-SA) for 2002 to 2014. Age-standardised incidence rates (ASIR) and age-standardised mortality rates (ASMR) were calculated using the STATS-SA mid-year population as the denominator and the Segi world standard population data for standardisation. A Joinpoint regression analysis was computed for the CRC ASIR and ASMR by population group and sex.
RESULTS
A total of 33,232 incident CRC cases and 26,836 CRC deaths were reported during the study period. Of the CRC cases reported, 54% were males and 46% were females, and among deaths reported, 47% were males and 53% were females. Overall, there was a 2.5% annual average percentage change (AAPC) increase in ASIR from 2002 to 2014 (95% CI: 0.6- 4.5, p-value <0.001). For ASMR overall, there was 1.3% increase from 2002 to 2014 (95% CI: 0.1- 2.6, p-value <0.01). The ASIR and ASMR among population groups were stable, except for the Black population group. The ASIR increased consistently at 4.3% for black males (95% CI: 1.9- 6.7, p-value <0.01) and 3.4% for black females (95% CI: 1.5- 5.3, p-value <0.01) from 2002 to 2014, respectively. Similarly, ASMR for black males and females increased by 4.2% (95% CI: 2.0- 6.5, p-value <0.01) and 3.4% (, 95%CI: 2.0- 4.8, p-value <0.01) from 2002 to 2014, respectively.
CONCLUSIONS
The rapid increase in CRC trends among the Black population group is concerning and requires further investigation and increased efforts for cancer prevention, early screening and diagnosis, as well as better access to cancer treatment.

TREATMENT OUTCOMES OF OESOPHAGEAL CANCER IN TANZANIA

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OESOPHAGEAL CANCER Co-convened by AORTIC and NCI, STREAM 2, November 7, 2021, 1:45 PM - 3:00 PM

BACKGROUND: Esophageal cancer (EC) is a leading cause of cancer morbidity and mortality in Tanzania. This study aims to investigate the overall survival and quality of life (QoL) of EC patients undergoing treatment with chemotherapy, radiotherapy, and chemoradiation. METHODS: This study presents results from a single-center analysis from an international, multicenter, prospective, observational cohort study of adult patients diagnosed with EC in Eastern Africa (The TOEC-Eastern Africa Study). This study was conducted at Ocean Road Cancer Institute. Enrollment began in May 2019 and continues to date. Consecutive patients with EC who received treatment with chemotherapy, radiotherapy, and chemoradiation were included in the analysis. QoL was assessed using the Modified Rosenblatt Index at study enrollment, one- and three months following treatment and then every three months through death or loss to follow up. The log-rank test was used to compare six-month overall survival (OS) by treatment. T-test was used to compare mean change in QoL metrics from baseline at one-, three- and six months. RESULTS: 201 patients were enrolled (radiation n=140, chemoradiation n=51, chemotherapy n=10). Median age was 59 years; 70% were male. 91% had squamous cell carcinoma. Median baseline dysphagia score was three. Six-month OS by treatment was: chemotherapy 76%, radiation 85%, and chemoradiation 94% (log-rank $p=0.160$). In the chemoradiation and radiation arms, mean dysphagia scores improved significantly as compared to baseline (chemoradiation: one-month -0.65 (standard deviation (SD) 0.91) $p=<0.001$, three-months -0.95 (SD 0.85) $p=<0.001$, six-months -1.19 (SD 0.79) $p=<0.001$; radiation: one-month -0.47 (SD 1.06) $p=<0.001$, three-months -0.56 (SD 1.16) $p=<0.001$, six-months -0.43 (SD 1.24) $p=0.0145$). In chemotherapy arm, dysphagia scores did not differ significantly from baseline at any of the three time points. CONCLUSIONS: Preliminary results suggest comparable six-month OS across treatment arms. Radiation-based treatments are associated with improvements in dysphagia scores.

ACCEPTABILITY AND FEASIBILITY OF SELF-SAMPLING AND FOLLOW-UP ATTENDANCE AFTER TEXT MESSAGE DELIVERY OF HPV RESULTS: A CROSS-SECTIONAL STUDY NESTED IN A COHORT IN RURAL TANZANIA

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ABSTRACT

Objective

To determine if self-collection of vaginal samples for human papillomavirus (HPV) testing are acceptable and feasible in rural Tanzania and to assess the extent of attendance to a follow-up appointment among women who tested HPV-positive after delivery of HPV results via text messages.

Material and methods

A combined cross-sectional and cohort study was conducted among women aged 25-60 years from rural Kilimanjaro, Tanzania. Women were offered HPV self-sampling or traditional visual inspection of the cervix with acetic acid. If HPV self-sampling was preferred, participants received instructions in self-collection with an Evalyn Brush. A questionnaire was used to assess participants' acceptability and feasibility of the self-sampling procedure and delivery of HPV results via text messages. A mobile text message platform was used to send private text messages with the screening results to the participants.

Results

A total of 1108 women were enrolled and self-collected an HPV sample; 11.8% tested positive for high-risk HPV. The majority (98.9%) agreed that they had no trouble in understanding the instructions on how to perform the self-collection and that they would recommend it to a friend (94.5%) or as a standard screening method in Tanzania (95.5%). A minority of women experienced bleeding (2.4%) or pain (6%) while collecting the sample, whilst some were worried they would get hurt (12.7%) or felt embarrassed (3.5%). The majority (98.4%) of women would like to receive the screening test results via text messages. Eighty two percent of those who tested positive for high-risk HPV attended the follow-up appointment after receiving a text message reminder and an additional 16% attended after receiving both a text message and a phone call reminder whereas 2% did not attend follow-up at all. Attendance was not influenced by age, marital status, education level, parity, or HIV status.

Conclusions

HPV self-sampling and text-messages feedback delivery are generally well-perceived and accepted among rural Tanzanian women, and the majority of HPV-positive women attended a follow-up appointment after receiving their HPV results and follow-up appointment via text messages. This screening method may have potential to be transferrable to other low-income countries with a high incidence of cervical cancer and thus improve cervical cancer screening attendances.

Keywords: Cervical cancer screening, self-sampling, HPV, acceptability, feasibility SMS, Kilimanjaro, rural, Tanzania

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CANCER SPECTRUM IN HIV-INFECTED PATIENTS: A ZONAL HOSPITAL EXPERIENCE IN TANZANIA

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Background
Although the burden of human immunodeficiency virus (HIV) infection in Tanzania is high, limited data are available on cancers in HIV-infected patients. We aimed to determine the spectrum and prevalence of
cancers in HIV-infected patients attending care at a zonal hospital in Tanzania.

Materials and methods
Clinical records of HIV-infected patients from 2009 to 2019 were identified and retrospectively reviewed.

Results
A total of 3398 HIV-infected patients were recruited with median age of 37 years. Cancer was diagnosed in 9% of the patients after enrollment into HIV clinical care, with an increasing prevalence from 7.2% between
years 2009 and 2013 to 8.6% between years 2017 and 2019 (p-value <0.0001). Majority (89.2%) were on antiretroviral therapy (ART) during the time of cancer diagnosis. The proportions of acquired immunodeficiency
syndrome (AIDS)-defining cancers and non-AIDS defining cancers were 28% and 72% respectively. Kaposi's
sarcoma was the most common (13.2%) AIDS-defining cancer while esophageal cancer was the most common
(11.1%) non-AIDS defining cancer. The median duration of time from HIV infection to cancer diagnosis was 715
days (IQR: 98–2570). The median CD4+T-cell count was 318(IQR 159–690) cells/µl at the time of cancer diagnosis
and 40.7% of the patients had advanced immunosuppression with CD4 count less than 200 cells/µl at the
time of cancer diagnosis.

Conclusion
Non-AIDS defining cancers were much more common than AIDS-defining cancers suggesting increased longevity due to ART access. The prevalence of cancer among HIV-infected patients was 9% with an increasing trend over time; highlighting the importance of promoting cancer screening in this vulnerable population
and implementation of vaccinations programs for liver and cervical cancers as well as tobacco control policies for smoking-related cancers.

Keywords: Cancer spectrum, Aids-defining, Non-aids defining, HIV, Tanzania

IMPROVING ACCESS TO CANCER CARE THROUGH PURCHASE OF SOCIAL INSURANCE FOR NEEDY PATIENTS. A SUSTAINABLE CASE OF THE MERU BLUEPRINT FOR INNOVATIVE HEALTHCARE ACCESS PROGRAM, KENYA

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OBJECTIVE
The cancer continuum of care can be expensive for patients in low- and medium-income countries since it involves multimodality and a multidisciplinary approach which the poor and vulnerable cannot meet the out-of-pocket cost. The hospital waiver system is usually long and unsustainable. In Kenya, the National Hospital Insurance Fund (NHIF) offers an oncology package that self-contributing patients can access for a premium of USD 60 per annum. Affordability is a major challenge for patients from low social-economic backgrounds hence missing out on the much-needed care. The program aims to improve access to cancer care through the purchase of social insurance for needy patients.

METHODS
The program works with Clinicians and the Hospital Medical Social Worker in identifying the poor and the vulnerable cancer patients for need assessment. Purchase of NHIF coverage for an average of USD 60 per year is done from the initial encounter assisting patients in accessing the care needed promptly. Eligible members of the patient's family can also access primary care and variable levels of sub-specialty care including cancer screening and treatments.

RESULTS
A total of 42 Cancer patients have benefited through the program and among them, the females account for 83.3% (n=35) and males 16.7% (n=7). Patients with Cancer of the Breast (64.3%) formed the largest beneficiaries followed by lymphoma (7.2%) and Kaposi's Sarcoma 7.1% respectively. The amount spent is USD 3,000 with 73.8% (n=31) purchased coverage of USD 60, 21.4% (n=9) USD 120 and 4.8% (n=2) USD 30 respectively.

CONCLUSIONS
The program has maintained social protection of cancer patients by ensuring the poor and other vulnerable patients have access to needed cancer services, and that paying for care does not result in financial catastrophe and this is more sustainable than the hospital waiver system or out-of-pocket payments.

E-ICI FOR CANCER CARE INFORMATION

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BEST OF THE BEST ABSTRACTS (2), STREAM 3, November 8, 2021, 11:00 AM - 12:00 PM

Objectives
e-ICI is an electronic health record system which is a digital version of a patient's paper chart. This system is real-time, information is available instantly, and patient centered, and securely to authorized users. The digital system helps care providers by minimizing time spent on manual documentation and allow access to evidence-based tools that providers can use to make decisions hence maximizing time for patient care.
With the rising cancer cases, there was need to digitize cancer centers within the counties providing care, patient information has all been captured manually on the patient chart. Due to this method of information collection, patient's vital information was missing in the charts. This information could not be shared among various care providers and among facilities providing care within the country, especially referral facilities.
Methodology
This paper aims is to showcase how to develop a system that is patient centered, and a system built to go beyond standard clinical data collected in a provider's office and can be inclusive of a broader view of a patient's care such as demographics, medical history, diagnoses, treatment plans, allergies, radiology images, laboratory and test results and other plans.
Results
In ICI and the affiliating counties, 80% of patient's charts are now digitalized. A retrospective data entry from the manual charts was done during the implementation process. Currently information is available whenever and wherever it is needed. The system has been linked to remote cancer clinics hence during patient referral the patient notes is already available for diagnostic procedure and treatment at the cancer center.
 Conclusions
Since with e-ICI information is available whenever and wherever it is needed, there is need to interconnect more facilities providing cancer care. Providers will be able to access all patient information from any location (facility) hence there will be optimal cancer care and reduced manual patient chat movement hence improving care.

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MAPPING THE AVAILABILITY OF PATHOLOGISTS TO THE CANCER REGISTRIES IN AFRICAN COUNTRIES

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OBJECTIVE: In 2020, Africa recorded 1,109,209 new cancer cases and 711,429 deaths with a 5-year incidence of 161.6 per 1000 population. However, this may be an underestimation of cancer burden due the limited number of pathologists. Our study aims to evaluate the association of cancer disease registries and presence of local pathologists in Africa.

METHODS: A mapping study was conducted through literature search. Studies published from 2000 to December 2020 were searched in PubMed/Medline, Google scholar and African Medicus Index. We retrieved and reviewed articles that were in English and with quantitative data. The primary outcome was the number of pathologists in each African country. Data on cancer registries was obtained using the African Cancer Registry Network and the Global Cancer Observatory of World Health Organization. We mapped pathologists to the cancer registry in each African country. Data analysis was done using SPSS v26 and Spearman's correlation test was used to determine the association between the two variables.

RESULTS: We identified 438 reports; 15 studies were eligible and included in the quantitative analysis. The median number of pathologists was 2 with an interquartile range of 12.75 and a range of 242. The median number of cancer registries was 1 with an interquartile range of 1 and a range of 7. There were 11 countries with neither pathologists nor cancer registries. There was a significant positive correlation between the number of pathologists and the number of cancer registries in African countries rs (34) = 0.73, P< 0.001.

CONCLUSION: There is an association between the number of pathologists and the number of cancer registries in Africa. There is a shortage of pathologists which needs improvement to accurately collect and complete cancer data for cancer registries which can be used for accurate disease tracking, epidemiological research, and guidance of public policy formulation.

Key words: Pathologists, Cancer, Africa, Registries, Death

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FACULTY DEVELOPMENT: WHAT DO WE KNOW ABOUT BARRIERS, ENABLERS, AND SATISFACTION LEVELS AMONG AFRICAN ONCOLOGY FACULTY?

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Background
Faculty development (FD) programs and initiatives have been shown to improve teaching, learning, and overall satisfaction levels of academic faculty. However, these benefits are not fully realized in resource constrained settings like those found in some Sub-Saharan African academic institutions, that often face many FD challenges. Improving FD activities in the region may enhance the capacity of oncology faculty to address these challenges. We sought to examine African oncology faculty's satisfaction and the perceived enablers and barriers with current FD opportunities.

Methods
We randomly surveyed oncology faculty (n = 21) through the African Organization for Research and Training in Cancer (AORTIC) listserv and conducted semi-structured interviews with nine (n = 9) faculty involved in African oncology training programs to ascertain their perspectives on faculty development activities including curriculum development, teaching, and learning. All survey respondents and interview participants are current members of the AORTIC. Descriptive and inferential statistical techniques, and thematic analysis were used to analyze the survey and interview data respectively.

Results
Interim survey results revealed that 64% of academic oncology faculty believe that there are barriers to their FD at their current academic institutions. Barriers cited for FD from the interviews include the competitive nature of FD courses and programs, limited online learning opportunities, poor internet access, time constraints, language barriers, and high costs associated with FD activities. A significant minority of the survey respondents (43%) were dissatisfied with their overall FD. Access to curriculum development opportunities ($\chi2 = 10.97$, $p = 0.001$) and longer duration of practice ($\chi2 = 7.9$, $p = 0.019$) were significantly associated with an increased overall satisfaction with FD of oncology faculty. Themes emerging from the interviews also revealed that participants believe that addressing issues relating to access to local institutional support and opportunities including funding, reduced fees for individuals from low- and middle-income countries, getting time off work from local institution, and availability of online FD education will enable them to increase their participation in FD activities.

Conclusion
A considerable number of African oncologists face many FD challenges and are therefore dissatisfied with the current state of their FD. Incorporating the recommendations offered by participants into faculty development planning activities may improve faculty satisfaction levels, remove barriers, and improve outcomes for learners. Also, the finding that access to curriculum development opportunities leads to increased levels of satisfaction with FD could guide FD for faculty in African oncology training programs.

FEASIBILITY AND CLINICAL ACCEPTABILITY OF AUTOMATION-ASSISTED 3D CONFORMAL RADIOTHERAPY PLANNING FOR CERVICAL CANCER PATIENTS IN TANZANIA

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OBJECTIVE: The Ocean Road Cancer Institute (ORCI) in Dar es Salaam, Tanzania began offering 3D conformal RT (3DCRT) in 2018, but steep learning curves, high patient volume, and a limited workforce resulted in longer RT planning workflows. We aimed to establish the clinical acceptability of an automation-assisted cervical cancer 3DCRT planning system that would have the potential to significantly decrease planning timelines while maintaining high quality RT delivery.

METHODS: We performed chart abstraction on 30 patients with cervical cancer treated with 3DCRT at ORCI. The Radiation Planning Assistant (RPA) was accessed to generate an automated set of contours and plans based on anonymized CT images. RPA contours and plans were assessed for edit time requirements, dose-volume safety metrics, and clinical acceptability by two ORCI physician investigators. DICE similarity coefficient (DSC) agreement analysis was conducted between contour sets. Dosimetric coverage was compared using Wilcoxon signed-rank testing.

RESULTS: RPA contours and plans were successfully created for 28 of 30 patients (93.3%) with two failures due to atypical bony anatomy and incomplete imaging. We will report the percentage of RPA contours and plans that were found to be clinically acceptable for use with or without manual editing, and the median and interquartile range of the editing time. We will report the median DSC between ORCI and RPA contours. We will compare dosimetric coverage of the originally delivered and RPA plans on both the original contours and RPA contours.

CONCLUSIONS: Employing RPA for automation-assisted 3DCRT contour and planning was found to have high levels of agreement to manual contours of normal structures, meet all planning safety metrics, and sustain high levels of clinical acceptability with minimal manual edit times. Implementation of this tool offers the potential to significantly decrease RT preparation timelines and increase high quality patient care capacity in resource-limited settings.

INDOOR WOOD COMBUSTION, CARCINOGENIC EXPOSURE AND ESOPHAGEAL CANCER IN SOUTHWEST KENYA

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OESOPHAGEAL CANCER Co-convened by AORTIC and NCI, STREAM 2, November 7, 2021, 1:45 PM - 3:00 PM

Objective: Exposure to polycyclic aromatic hydrocarbons (PAHs) has been shown to be a risk factor for esophageal squamous cell carcinoma (ESCC) in high-incidence areas of China, Iran and Brazil. However, PAH assessments have not been conducted in East Africa which is an ESCC hot spot. This study aimed to evaluate demographic or lifestyle factors associated with the PAH biomarker concentrations in the study population, and whether PAH metabolite concentrations showed any associations with esophageal precancerous lesions.

Methods: in this study funded by AORTIC's Beginning Investigator Catalytic Grant (BIGCAT), we recruited a community-based sample of 289 asymptomatic adults from a rural area of Kenya and performed Lugol's chromoendoscopy to detect esophageal squamous dysplasia (ESD); participants completed a questionnaire and provided a spot urine specimen. We analyzed urine for seven hydroxylated metabolites of naphthalene, fluorene, phenanthrene, and pyrene at the U.S. National Center for Environmental Health, and compared creatinine-corrected PAH metabolite concentrations with questionnaire data and the presence of ESD.

Results: PAH metabolite concentrations among never tobacco users in these rural Kenya residents were 2.4-28.1 times higher than those reported from never tobacco users in Iran, Brazil and the USA. Female sex, cooking indoors, having no post-primary education, and age <50, but not tobacco use, were positively and significantly associated with PAH metabolite concentrations. Almost all participants used wood as cooking fuel. Nine participants had advanced ESD. Adjusted logistic regression showed a significant association between 2-hydroxynaphthalene (OR = 4.19, 95%CI: 1.01-17.47) and advanced ESD. All other PAH metabolites had positive but non-significant associations with advanced ESD.

Conclusions: Urinary PAH metabolite concentrations among never tobacco users are markedly higher in this group from Kenya than in other populations and are associated with indoor cooking with wood on open, unvented stoves. These metabolite concentrations were also associated with the presence of advanced esophageal dysplasia. This study highlights the importance of assessing alternative cooking conditions to reduce PAH exposure in this population.

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THE ROLE OF MENTORSHIP IN ADVANCING CANCER RESEARCH AND CARE IN AFRICA

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AFRICAN CANCER LEADERSHIP INSTITUTE (ACLI), STREAM 1, November 8, 2021, 7:00 PM - 8:30 PM

Mentorship has been key in the growth of cancer research on the continent. In addition, mentorship also provides an opportunity to nurture the professional and career development of early career researchers.

This presentation is a compliation of reflections on the role that mentorship has had on the authors career progression as well as the opportunities that are available to leverage mentorship relationships to advance research on the African Continent.

The African Cancer Leaders Institute has been a catalyst of research over the years with impact in any fields in oncology.

OUTCOMES FOLLOWING COVID-19 INFECTION IN PATIENTS WITH HAEMATOLOGICAL MALIGNANCIES AT AGA KHAN HOSPITAL NAIROBI (AKUH, N)

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Patients with haematological malignancies infected with COVID-19 are at increased risk of mortality. Factors associated with poor outcome include older age, progressive disease, acute myeloid leukaemia (AML), non-Hodgkin lymphomas, and plasma cell neoplasms, whereas timing of therapy has no impact.
Methods:
A retrospective analysis of all patients with haematological malignancies followed up at the AKUH,N, who were infected with COVID-19 was conducted. The disease type, stage, treatment received, remission status, severity of COVID-19 and patient outcome were recorded and analysed using descriptive statistics.
Results:
Out of the 2433 patient-visits to the Haematology-Oncology Department from July 2020 to present, 23 patients with haematological malignancies had documented infection with Sars-COV-2.
The ages ranged from 20y to 84y (median 68.5y), and included cases of chronic lymphocytic leukaemia [5/24], AML [5/24], multiple myeloma [5/24], chronic myeloid leukaemia [1/24], Hodgkin lymphoma [1/24], diffuse large B-cell lymphoma (DLBCL; 2/24), myeloproliferative neoplasms (MPN; 4/24), as well as large granular lymphocyte disease [1/24].
Treatment was in line with AKUH,N COVID-19 protocols. 17/24 (68%) required in-patient management, with two of these [2/24; 8%] presenting with asymptomatic COVID-19 during admission for underlying disease (new AML and DLBCL on cycle 5).
Majority of in-patients required oxygen therapy and dexamethasone, and 5/17 [29% of in-patients] also received tocilizumab. 9/24 (37%) patients died, constituting 59% of those admitted to hospital (4 with severe COVID-19, one with moderate COVID-19 complicated by myocardial infarction, 4 due to underlying haematological malignancy).
None of the patients with MPN or those in remission for more than six months, regardless of diagnosis experienced an adverse outcome.
Conclusions:
We found a relatively high mortality rate comparable to reports of much larger cohorts. Additionally, with more than 50% mortality in aggressive disease (AML [3], progressive DLBCL [2]) and patients above age of 74y [4], our findings are consistent with those reported.

PSYCHOMETRIC PROPERTIES OF THE EORTC QLQ–C30 IN UGANDA

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PSYCHOMETRIC PROPERTIES OF THE EORTC QLQ–C30 IN UGANDA

Allen Naamala , Lars E. Erickson, Jackson Orem, Gorrette K. Nalwadda1, Zarina Nahar Kabir and Lena Wettergren

ABSTRACT

OBJECTIVE:
Generic instruments used to assess self-reported HRQoL need validation. Such instruments adapted for use among Ugandans with cancer is lacking; this study aimed at evaluating the psychometric properties of EORTC QLQ-C30 in adults with cancer in Uganda.

METHOD
Adult patients with various types of cancer (n = 385) cared for at the Uganda Cancer Institute answered the EORTC QLQ-C30 in Luganda or English language, the two most spoken languages in the country. The two language versions were evaluated with regard to data quality (floor and ceiling effects and missing responses), reliability (internal consistency) and validity (construct, known-group and criterion). Construct validity was examined through CFA. Mean scores were compared between groups differing in disease stage to assess known-group validity. Criterion validity was examined according to associations between two QLQ-C30 subscales (Global QoL and Physical function) and the Karnofsky Performance Scale (KPS).

RESULTS
Floor and ceiling effects were observed for several scales in the Luganda and English versions. All EORTC scales with the exception of Cognitive function (Luganda α = 0.66, English α = 0.50) had acceptable Cronbach's alpha values (0.79–0.96). The CFA yielded good fit indices for both versions (RMSEA = 0.08, SRMR = 0.05 and CFI = 0.93). Known-group validity was demonstrated with statistically significant better HRQoL reported by stages I–II compared to stages III–IV patients. Criterion validity was supported by positive correlations between KPS and the sub scales Physical function (Luganda r = 0.75, English r = 0.76) and Global QoL (Luganda r = 0.59, English r = 0.72).

CONCLUSION
The Luganda and English versions of the EORTC QLQ-C30 appear to be valid and reliable measures and can be recommended for use in clinical research to assess HRQoL in adult Ugandans with cancer. However, the cognitive scale did not reach acceptable internal consistency and needs further evaluation.

IMPROVING THE INTEGRATION PROCESS OF PAEDIATRIC PALLIATIVE CARE INTO ONCOLOGY SERVICES AT MULAGO HOSPITAL: A QUALITY IMPROVEMENT PROJECT

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BEST OF THE BEST ABSTRACTS (4), STREAM 2, November 9, 2021, 6:30 PM - 7:30 PM

Background: Globally, 21 million children need pediatric palliative care (PPC) services yet these services have not been prioritized. Among the low- and middle-income countries, they are only available in few institutions or are not integrated into the health care systems. In Uganda most of the children with cancer present in late stages where cure may not be possible, this calls for palliative care at the time of diagnosis to help manage the symptoms in a less aggressive manner while keeping dignity for the child. The range of PPC services provided at the facilities are still wanting and low compared to the WHO minimum essential package of PPC services.

Aim: To develop an integrated network of children-centered PC services in Mulago hematology-oncology based on an interdisciplinary approach which is sensitive to the child's and family's wishes regarding treatment throughout the course of illness.

Methods: This quality improvement project will run for up to 6 months. The team includes the clinical care team at Mulago (PHO) and collaborators. Services being provided initially focus on end-of-life and bereavement support guided by the WHO (2018) essential package of PPC services. These are aimed at offering relief from physical, psychosocial and spiritual suffering. Activities include home visits, availing IEC materials like assessment tools, training personnel, offering internal and external support supervision and mentorship, generation of data base of children in palliative care, a needs assessment to ascertain the level of need for PPC and the appropriate model of care delivery and perioding monitoring and evaluation of the interventions.

Activities status: Between December 2020 and to date, 37 patients requiring end of life and bereavement support have been reached, of which 17 have died. Of the 17 that have died, 14 families have received bereavement support: In total, 53 phone calls with 25 of these being bereavement follow ups have been made. Four home reviews and 16 hospital reviews have been done too.

Utility: Findings will enable development of an integrated network of children-centered PPC services in Mulago hematology oncology based on an interdisciplinary approach which is sensitive to the child's and family's wishes regarding treatment and choice of care setting throughout the course of illness. The program may also promote continuity of the link nurse (provider) program given its demonstrated effectiveness.

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UNDERSTANDING THE BARRIERS TO IMPLEMENTATION OF PAEDIATRIC PALLIATIVE CARE BY HEALTH WORKERS AT UGANDA CANCER INSTITUTE AND PAEDIATRIC ONCOLOGY UNIT MULAGO HOSPITAL

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Objective: To determine the barriers to their implementation by health workers at Uganda cancer institute (UCI) and Mulago hospital pediatric hematology and oncology (MPHO) unit.

Methods: Data was collected through scheduled verbal, audio recorded interactive interviews using a key informant interview (KII) guide composed of open and close-ended questions. Data from the audio files was transcribed, analyzed manually and reported verbatim.

Results: Thirteen health workers were purposively selected. Major barriers identified were inadequate pediatric palliative care (PPC) training, limited human resource, poor coordination, inadequate communication stock outs of medicines, negative cultural and religious beliefs, financial constraints with lack of family support, language barrier with health workers (HWs) and limited autonomy for the patients.

Conclusion: The range of PPC services provided by health workers at UCI and MPHO unit is still wanting and can be improved.

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THE CURRENT STATUS OF CERVICAL CANCER IN AFRICA: PALLIATIVE CARE

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CURRENT STATUS OF CANCER IMAGING IN AFRICA, STREAM 3, November 10, 2021, 12:00 PM - 1:00 PM

Cervical cancer is the second most common cancer among women, with the majority of the cases occurring in low-middle income countries. Data shows a variation in the incidence, with Eastern and Southern Africa shouldering the highest burden of the disease. Notably, close to one third of all global cervical cancer deaths occur in sub-Saharan Africa, a region that has just about 14% of the global female population. The burden of cancer in Africa is further exacerbated by the high prevalence of HIV, the poor coverage of HPV vaccination, low cervical cancer screening.
A review of existing National Cancer Control plans and plans for Non-communicable Disease plans has shown good coverage of measures for physical activity, alcohol consumption, obesity, tobacco, screening, HPV vaccination and WHO essential medicines. Most of these plans lack sections on cost of care, a gap which deserves attention. More so, many patients continue to present with advanced disease, which limits the utility of curative options. Access to radiotherapy services remains a challenge. For example, statistics from Directory of Radiotherapy Centres shows that the number of radiotherapy machines per million population stands at 1.207 for North Africa, and 0.078 for middle Africa, some countries have no known service. The lack of a critical mass trained staff to deliver quality comprehensive cancer care also remains a challenge in Africa.

A minimum package for women with cervical cancer has been proposed, and should be popularised. Countries are scaling up cervical cancer screening services for early detection and treatment, but given that most patients present with advanced disease, palliative care should be an integral part of the cervical cancer control and treatment package. Integration of cervical cancer screening within the public health mainstream and strengthening referrals to palliative care services for those with complex symptoms and concerns equally warrants attention.

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AN AFRICAN ESOPHAGEAL SQUAMOUS CELL CARCINOMA RISK PREDICTION MODEL AND RISK SCORE DECOMPOSITION PROFILE: THE ESCAPE CASE-CONTROL STUDIES

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OESOPHAGEAL CANCER Co-convened by AORTIC and NCI, STREAM 2, November 7, 2021, 1:45 PM - 3:00 PM

Background: Risk prediction models for esophageal squamous cell carcinoma (ESCC) have been developed in China, Iran, Japan, Sweden and Norway, but not yet for Africa's ESCC corridor. In the present study, our aims were: (i) to develop an ESCC risk score for East/Southern Africa based on easy-to-ascertain risk factors and (ii) decompose the risk score into contributing factors.
Methods: Analyses consisted of four steps. (1) Relative risks (RR), estimated as mutually-adjusted odds ratios, were generated from an ESCC case-control study in Kenya, Tanzania and Malawi, of 1279 cases and 1346 controls. Criteria for the inclusion of risk factors were ease-of-assessment and association with ESCC risk substantiated by consistent effects across countries. (2) The model's discriminatory accuracy and calibration were assessed using AUC statistics. (3) A risk score decomposition was conducted by quintiles of country and sex-specific relative risks score in controls. (4) Absolute 5-year risk of ESCC were predicted for Kenya, by incorporating population-based incidence rates.
Results: In addition to age, sex and country, the risk prediction model included six risk factors: tobacco use (never, 1<10 cigarettes per day or smokeless tobacco users, 10+ cigarettes/day), alcohol (never, beers/wines only, drinker including of spirits), thermal exposure index (TEI), number of missing teeth, sleeping by fire and educational level. The model had good discrimination [AUC = 0.74; 95% confidence interval, 95% CI (0.70, 0.78)]. In the sex-specific models, the c-statistic in men was higher [AUC = 0.78; 95% CI (0.75, 0.80)] than women [AUC = 0.67; 95% CI (0.64, 0.71)].
Conclusion: This practical African risk prediction model of ESCC showed good discrimination to identifying individuals at high risk of ESCC. It may enrich aetiologic research and early detection in this setting.

I GOT TO UNDERSTAND WHAT IT MEANS TO HAVE A CANCER DIAGNOSIS, WHAT IT MEANS TO BE A PATIENT IN OUR HEALTHCARE SYSTEM, BECAUSE I WENT THROUGH THAT MYSELF. I NOW UNDERSTAND WHAT PAIN MEANS, WHAT IT MEANS TO GO THROUGH CHEMOTHERAPY. PHENOMENOLOGICAL EVIDENCE FROM HEALTHCARE PROFESSIONAL CANCER SURVIVORS IN UGANDA

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Objective
The study sought to; (1) examine healthcare professionals' (HCPs) lived experiences of cancer and (2) generate evidence to inform policy and clinical practice for cancer care

Methods
This was a qualitative phenomenological study conducted on HCPs who are ill with, and or survived cancer in Uganda. The study was approved by Hospice Africa Uganda Research Ethical Committee (HAUREC) protocol number HAUREC-079-20. Purposive sampling was used to recruit eligible participants. A demographic form and an open-ended topic guide were used to collect. Face-to-face and telephone interviews were conducted in English, audio-recorded and data saturation was reached. Colaizzi's framework of thematic analysis was used.

Findings
Eight HCPs cancer patients from medical, allied health, and nursing backgrounds participated in the study. Their mean age was 56 years with age range of 29-85 years. Five were female and three were male. Four themes emerged from the interviews; (1) pre-diagnosis and receiving bad news experience, (2) impact of cancer on the HCPs, (3) healthcare system and treatment experiences, and (4) the gaps and what needs to be done.

Conclusions
Many HCPs are increasing receiving a diagnosis of cancer. Becoming ill with cancer is a challenging experience for the professional. It is associated with remarkable disruptions and suffering in nearly all domains of their quality of life i.e. their professional identity and work, social, emotional, physical and economic. Like lay cancer patients, HCPs cancer patients as well experience practical challenges in accessing cancer care. The study showed that health workers are not well prepared to handle their colleagues (HCPs) who become cancer patients. Policy makers and other stakeholders need to work towards improving cancer care services for both the HCPs who are patients of cancer, and also the general (lay) cancer patients.

NEW INSIGHTS INTO C.815_824DUP PATHOGENIC VARIANT OF BRCA1 IN INHERITED EARLY ONSET BREAST CANCER

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OBJECTIVES: Early onset breast cancer has been associated with genetic risk linked to two high-penetrance genes: BRCA1 and BRCA2. We investigated the genetic variability of BRCA1 genes in early onset breast cancer in Senegal.

METHODS: After free informed consent, 62 unrelated index cases diagnosed with early onset breast cancer (age under 50 years) and a control population of 90 healthy women without known cancer were recruited. BRCA1 exons were Sanger sequenced for the first 15 cases recruited. For the following cases and the controls, a recurrent pathogenic variant of BRCA1 identified in the first group studied was genotyped by PCR.

RESULTS: Mean age at breast cancer diagnosis was 36 years (age between 21 to 49 years). Overall, 57.6% of recruited patients were diagnosed before age 40. Mutation screening identified a recurrent pathogenic variant at heterozygous state of BRCA1 gene in 24 patients out of 62 with early onset breast cancer This is a duplication of ten nucleotides (c.815_824dupAGCCATGTGG, p.Thr276Afs) located in exon 11 of BRCA1 according to the HGVS nomenclature. The variant leads to a frameshift and a spurious stop codon 14 amino acids further down and has been reported as a founder mutation of West African origin. Allelic frequency was estimated at 19, 35% in breast cancer cases and 0.55% in the control population of healthy women. This is the highest allelic frequency never reported in a population for the pathogenic variant and confirmed its founder effect in West Africa.

CONCLUSION: We identified a founder pathogenic variant of BRCA1 predisposing to early onset breast cancer and enabled the establishment of an affordable genetic test and genetic counselling for breast cancer prevention in Senegalese women at risk. Mutation screening for other causal genes should be further implemented to identify the full genetic variability associated with early onset breast cancer in Senegal.

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ENSURING QUALITY CHEMOTHERAPY IN ZIMBABWE: A CLINICAL VIEWPOINT

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ENSURING QUALITY CHEMOTHERAPY IN AFRICA, STREAM 1, November 5, 2021, 10:00 AM - 11:30 AM

Systemic therapies play an important part in curative and palliative therapies in most cancers in Zimbabwe. Whilst poorer outcomes of treatment are attributed to late presentation in Africa, this is not the only contributor. Other factors such as safe chemotherapy administration have been considered to positively impact outcomes. However, no matter how safe the administration of the drug is, safety and efficacy begin with quality of the drug and its handling from source to the patient. Application of evidence-based therapies become irrelevant as poor quality medicines lead to poor response to therapy and increased drug toxicity. Adverse events lead to patient drop out from therapy which results in high morbidity and mortality. Costs of treatment therefore increase for impoverished of clients who mostly pay out of pocket.

There are several challenges to identifying "substandard" or "spurious" cancer chemotherapy. Sophisticated manufacturing of counterfeit drugs makes it difficult to identify counterfeit medicines. Shortages of medicines encourage parallel imports that are difficult to detect from neighboring countries. There are inadequate resources and capacity for post market surveillance activities. It is costly to adopt track and trace systems for medicines including chemotherapy medicines.

Medicines marketed for use in Zimbabwe are registered through the Medicines Control Authority of Zimbabwe (MCAZ). Registration involves submission of a dossier, samples and paying the relevant fee. Manufacturing site assessments are done to check compliance with Good Manufacturing Practices. Two special permits, a Bulk Section 75 Permit and Section 75 Permit allow for import of unregistered medicines as required. Such medicines should be registered in the country of origin. Procurement is regulated through several processes by the MCAZ. Potential options for monitoring cancer drug potency, purity and sterility in Zimbabwe and Africa exist must continue to be explored and implemented.

PUBLISH OR PERISH - REALITIES FROM A LOW-RESOURCE PERSPECTIVE

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PUBLISHING IN GLOBAL ONCOLOGY, STREAM 2, November 8, 2021, 11:00 AM - 12:00 PM

African researchers are faced with many challenges to conducting research and publishing the results thereof. In the relatively low output of published research from Africa, the main authors are usually from other continents. This reflects the paucity of African journals and external funding patterns of the research carried out. The need for local evidence that is based on available resources on the ground is most needed but lacking. Most journals have a bias towards publishing papers that address the most recent technologies and drugs compared to innovative repurposing of older treatments in keeping with African practice. Most oncology clinical trials are conducted in Egypt, South Africa, Algeria, and Kenya.

In low-resource settings, conditions are not conducive to research as there is no protected time and little local funding. Obstacles to research also include lack of research infrastructure, shortages of personnel coupled with heavy clinical workloads. Therefore, individuals must mostly use their personal time and even resources to conduct and write up the research. Many academic institutions require, as career advancement, research competency and the number of publications in credible peer reviewed journals is used as a measure of this. The large volumes of patients seen do not equally translate to volumes of documentation of the work done. The old saying of publish or perish still stands today and there is need to break down barriers to publication in peer reviewed journals for African researchers for them to be recognized for the work they do. Collaborative research is an important tool as it addresses some infrastructural and personnel barriers with opportunities for mentoring younger researchers to build capacity. This also enhances the chance to address local patients' needs and in turn, improve on publishing. The is need for more African journals and those that have a global outlook.

ROLE OF COMPETENCY-BASED MEDICAL EDUCATION (CBME) FOR ONCOLOGISTS IN AFRICA |OPPORTUNITIES AND CHALLENGES: DEBATE ABOUT CBME IN AFRICA

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FACULTY DEVELOPMENT FOR AFRICAN ONCOLOGISTS, STREAM 1, November 5, 2021, 12:00 PM - 3:30 PM

Competency-based medical education (CBME) is an approach to training medical professionals that has arisen due to an increasing demand for a curriculum that offers measured or assessed outcomes that ensures the competency and proficiency of the graduates. Previous emphasis on the need for competency-based curricula for the training of oncology professionals in developing countries to enable them to effectively manage patients in the most professional and efficient manner has been made. The need for improvement in the oncology curricula also applies to most African countries and special emphasis had to be given to the need of incorporating competency-based learning and assessment. In the process of curriculum development it must be ensured that there will be improvement in the quality of the graduates. At the end of training learners should have acquired all the relevant knowledge attitude and skills to enable them to competently manage cancer patients.
Opportunities to develop Afrocentric and comprehensive CBME for cancer professionals exist and must be fully explored. To effectively develop such curricula, firstly a focused needs assessment has to be conducted to have information on the level of knowledge regarding required competencies. Goals have to be set addressing expectations of what learners should have acquired at the end of the training. These should be all the relevant knowledge attitude and skills to enable them to competently and comprehensively manage cancer patients in their respective fields of practice. Objectives of the training and educational strategies should be defined with the means of assessment to verify the acquisition of competencies clearly outlined. Use of educational portfolios is encouraged and curricula must be regularly evaluated.

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CANCERS PLEUROPUMONAIRES A GAROUA: EXPERIENCE DU SERVICE DE PNEUMOLOGIE DE L'HÔPITAL MILITAIRE

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BEST OF THE BEST ABSTRACTS (1), STREAM 2, November 7, 2021, 10:00 AM - 11:00 AM

OBJECTIF : Il s'agissait de déterminer la proportion des cancers pleuropulmonaires chez les patients en file active dans l'unique service de pneumologie des 3 régions septentrionales du Cameroun. METHODOLOGIE : c'était une étude transversale et rétrospective, menée du 1er au 30 Mars 2021, concernant la période du 1er Janvier 2019 au 31 Décembre 2020.Tous les patients résidents dans le septentrion, présentant une pneumopathie et ayant bénéficié d'une consultation de pneumologie quels que soient le sexe, l'âge et la symptomatologie étaient inclus. L'analyse des données avait été effectuée grâce à des logiciels d'analyse statistique et de traitement de texte.
RESULTATS : Au total, 2470 patients recensés. 219 avaient des lésions cliniquement suspectes et 78 avaient bénéficié d'une biopsie. Il s'agissait de 40 biopsies bronchiques et 38 pleurales. Le sex ratio H/F pour les lésions suspectes était de 1.8/1 et l'âge moyen de 50.12 ans avec des extrêmes de 16 et 80 ans. Les lésions précancéreuses et cancéreuses concernaient 47,43% des biopsies réalisées ; 29,49% des biopsies avaient concerné la tuberculose et le reste (23,08%) était constitué d'inflammations chroniques non spécifiques. Concernant les lésions bronchiques, 35% étaient malignes 8% étaient précancéreuses et le reste concernait la tuberculose et les autres inflammations chroniques. Les cancers étaient essentiellement des carcinomes non à petites cellules, avec une prédominance de l'adénocarcinome (86.36%) les autres types histologiques étant le carcinome épidermoïde (9,09%) et une métastase de sarcome (4,55%). Les lésions malignes pleurales, comptaient pour 47,36%. C'était essentiellement de métastases d'adénocarcinomes (83,33%) et quelques lymphomes non hodgkinien (16,67%). CONCLUSION : les cancers pleuropulmonaires sont une réalité dans le septentrion camerounais; le manque de sensibilisation, les conditions socio-éconmiques et l'absence de spécialités de cancérologie favorisent l'errance des patients et limitent l'accès au diagnostic et à la prise en charge qui n'est pas bien codifiée dans ces régions.

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CANCERS PLEUROPUMONAIRES A GAROUA: EXPERIENCE DU SERVICE DE PNEUMOLOGIE DE L'HÔPITAL MILITAIRE

Ngo Pambe C[1], Ntyo'O Nkoumou A[2], Balkissou A[1], Essame Oyono J[3], Sando Z[3]
[1]University of Ngaoundere, [2]Garoua Military Hospital, [3]University of yaounde I

OBJECTIF : Il s'agissait de déterminer la proportion des cancers bronchopulmonaires chez les patients en file active dans le seul service de pneumologie que comptent les 3 régions septentrionales du Cameroun.

METHODOLOGIE : c'était une étude transversale et rétrospective, menée du 1er au 30 Mars 2021, concernant la période du 1er Janvier 2019 au 31 Décembre 2020.Tous les patients résidents dans le septentrion, présentant une affection pleuropulmonaire et ayant bénéficié d'une consultation de pneumologie quels que soient le sexe, l'âge et la symptomatologie étaient inclus. L'analyse des données avait été effectuée grâce au logiciel SPSS V16.0 ; GRAPHPAD PRISM 5.0 et Word 2013.

RESULTATS : Au total, 2470 patients recensés. 219 (8,86%) avaient des lésions cliniquement suspectes et 78 avaient bénéficié d'une biopsie. Il s'agissait de 40 biopsies bronchiques et 38 pleurales. Le sex ratio H/F pour les lésions suspectes était de 1.8/1 et l'âge moyen de 50.12 ans avec des extrêmes de 16 et 80 ans.

Les lésions précancéreuses et cancéreuses concernaient 37 sur 78 (47,43%) des biopsies réalisées ; 23 biopsies avaient concerné la tuberculose soit 29,49% et les 18 (23,08%) autres biopsies étaient des inflammations chroniques non spécifiques.

Concernant les lésions bronchiques, 35% étaient malignes 8% étaient des précancéreuse et le reste concernait la tuberculose et les autres inflammations chroniques. Les cancers étaient essentiellement des carcinomes non à petites cellules, avec une prédominance de l'adénocarcinome (86.36%) les autres types histologiques étant le carcinome épidermoïde (9,09%) et une métastase de sarcome (4,55%). Les lésions malignes pleurales, comptaient pour 47,36%. C'était essentiellement de métastases d'adénocarcinomes (83,33%) et quelques lymphomes non hodgkinien (16,67%).

CONCLUSION : les cancers pleuropulmonaires sont une réalité dans le septentrion camerounais; le manque de sensibilisation et l'absence de spécialités de cancérologie favorisent l'errance des patients et le diagnostic à des stades tardifs.

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ERRANCE DIAGNOSTIQUE ET DIFFICULTES DIAGNOSTIQUES ET THERAPEUTIQUES DES PATIENTS CANCEREUX DANS LES REGIONS SEPTENTRIONALES DU CAMEROUN

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[1]University of Ngaoundere, [2]University of Yaounde I, [3]Garoua Military Hospital, [4]Groua Regional Hospital

METHODOLOGIE : c'était une étude prospective et transversale sur 8 mois, de septembre 2020 à Avril 2021, à travers la mise sur pied d'un laboratoire d'anatomie pathologique dans la région du Nord. Etaient inclus tous les patients cancéreux quels que soient le sexe, l'âge, la localisation et le type de cancer. Les données recueillies provenaient des carnets des patients, des bons de demande d'examen et des résultats d'analyses histopathologiques. L'analyse était faite avec les logiciels SPSS V 16.0, GRAPHPAD PRISM 5.0 et Word 2013.

RESULTATS : Au total,117 prélèvements avaient été examinés dont 33 (28,20%) cancers. L'âge moyen au diagnostic était de 48,56 ans, extrêmes : 9 et 86 ans.

Les principaux cancers étaient épithéliaux, avec des carcinomes épidermoïdes d'un effectif de 10 (30,30%) dont 4 (40%) cancers du col de l'utérus et 14 adénocarcinomes (42,42%) parmi lesquels 8(57,14%) carcinomes mammaires, et 5 cancers prostatiques (37,71%)

93 patients (79,49%) avaient consulté plusieurs médecins et personnels soignants. 82,05% avaient eu recours aux médecines alternatives. 78,63 % étaient des stades III et IV.

81% de cancers gynécologiques et mammaires avaient bénéficié d'une première intervention chirurgicale sans biopsie initiale ou bilan radiologique et étaient soit des récidives soit des reliquats tumoraux.

De tous les patients cancéreux, 21,06 % avaient les ressources nécessaires pour le traitement, parmi eux 16% ne pouvaient pas des raisons de logement et d'alimentation

CONLUSION : Les cancers et l'errance des patients sont une réalité dans le septentrion ; les conditions socio-économiques limitent l'accès au diagnostic et à la prise en charge qui n'est pas bien codifiée dans ces régions, d'où la nécessité de création d'unité de cancérologie dans ces régions.

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EVALUATION OF A MULTI-COMPONENT STRATEGY FOR CANCER TREATMENT GUIDELINE IMPLEMENTATION AT A NATIONAL REFERRAL HOSPITAL IN TANZANIA.

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Objectives: To promote uptake of Tanzania's new National Cancer Treatment Guidelines, a theory-driven implementation strategy was employed. This was facilitated through three phases: 1) guideline dissemination; 2) training; and 3) ongoing reinforcement of guideline-concordant practice. We aimed to evaluate implementation outcomes of this multi-component strategy through analyses of feasibility, acceptability, and fidelity.

Methods: We conducted a process evaluation using a mixed methods approach with direct observation, pre- and post-intervention surveys, and a qualitative focus group discussion to evaluate the experiences of Implementation Champions.

Results: Several components of the implementation strategy were completed with fidelity: guideline distribution via hard copies and a new smartphone application; a publicity campaign; and reinforcement by Implementation Champions. Others required modifications: a planned meeting for guideline training was reduced in length and scope; implementation of clinical treatment planning forms was disrupted by delayed conversion from paper to electronic versions. Pre-intervention surveys were completed by 54 oncology clinicians, and post-intervention surveys were completed by 22. A higher proportion of respondents reported utilization of national guidelines in post-intervention surveys, as compared to pre-intervention surveys. In the post-intervention survey, respondents were overall satisfied with their performance using the guidelines. The focus group found that Implementation Champions felt positively about being agents of change, education, and capacity building. Ward rounds, outpatient clinics, and departmental meetings were listed as conducive environments for guideline promotion. The main barrier to guideline uptake was resistance to change from physicians, as reported predominantly by nurses. Audit and feedback for completion of clinical forms was emphasized as a critical yet challenging responsibility of Champions.

Conclusion: Overall, the implementation strategy was feasible and acceptable but required some modifications. With recent increases in new cancer treatment guidelines developed for resource-constrained settings, our lessons learned from this approach may serve to inform strategies to promote guideline implementation.

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GENOTYPES DES VIRUS DU PAPILLOME HUMAIN ASSOCIEES AU CANCER DU   COL DE L'UTERUS AU SENEGAL

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OBJECTIF

Ii s'agissait d'identifier les génotypes de HPV trouvés chez les femmes sénégalaises atteintes de cancer du col de l'utérus permettant d'améliorer la précocité des diagnostics et d'anticiper l'agressivité de cette maladie.

METHODES

Le groupe d'étude était composé de femmes sénégalaises atteintes de cancer du col de l'utérus venues en consultation ou hospitalisées au Centre Juliot Curie de le Dantec. L'ADN total des 120 biopsies cervicales a été extrait grâce à la méthode Qiagen (Kit Qiagen Tissue). Trois méthodes ont été utilisées pour détecter les génotypes de HPV: le génotypage par séquençage SANGER (Applied BioSystems), la technique d'approche par PCR temps réel (kit HPV 16 & 18 RealTime PCR) et l'approche de génotypage de Chippron (kit HPV) 3.5 LCDArray).

RESULTATS

Dans cette étude, Tous les échantillons cervicaux prélevés chez des femmes ayant un cancer du col de l'utérus confirmé histologiquement avaient au moins un génotype HPV détecté. Les types de HPV les plus fréquemment détectés chez les femmes atteintes d'une ou de plusieurs infections à HPV étaient le HPV 16 (systématiquement détecté chez toutes nos patientes), 18 (83%), 45 (33%), 33 (31%), 59 (28%), 35 (12%), 31 (11%), 58 (8%), 39 et 73 (4%), 44, 54 et 68 (3%) et le reste moins de 1%. Il a été également noté que la plupart des femmes étaient infectées par deux ou plusieurs HPV à haut risque (75 ,83%), et que ces dernières étaient particulièrement répandues chez les patientes âgées de 45 à 55 ans.

CONCLUSION

Au regard des résultats obtenus dans la présente étude, l'utilisation du nouveau vaccin Gardasil-9® qui opère contre 9 génotypes de HPV (6, 11, 16, 18, 31, 33, 45, 52 et 58) pourrait fournir des résultats efficaces de prévention du cancer du col de l'utérus chez les adolescentes ou les jeunes sénégalaises.

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VARIATIONS DES TAUX PLASMATIQUES DE CYTOKINES PRO ET ANTI-INFLAMMATOIRES DANS LES NÉOPLASIES GYNÉCO-MAMMAIRES

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Introduction :
Les néoplasies gynéco-mammaires constituent un fléau planétaire associé à une forte morbi-mortalité notamment dans les pays comme le Sénégal. Le système immunitaire et les cytokines en particulier jouent un rôle capital dans la protection contre ces pathologies et influenceraient l'efficacité de la prise en charge thérapeutique, d'où la nécessité d'acquérir des connaissances sur les cytokines dans ces cancers. L'objectif de ce travail était d'évaluer les variations des taux plasmatiques de cytokines pro-inflammatoires et anti-inflammatoire, dans des cancers gynécologiques et mammaires.

Matériels et Méthode :
Chez des patientes atteintes de cancer du sein (CS), du col(CC) et de l'ovaire(CO), des échantillons de sang ont été collectés sur tube EDTA, permettant ainsi le dosage de cytokines pro-inflammatoires (l'IL-17, l'IL-6 et TNF-α) et anti-inflammatoires (IL-10) par technique ELISA sandwich. L'analyse statistique des données a été réalisée grâce au logiciel Statview5.1.

Résultats :
Notre population d'étude était constituée de 146 patientes atteintes de CS (n=92), du CC (n=35) et de CO (n=19). Pour les patientes ayant reçue une cure de chimiothérapie, nos résultats ont montré des taux plasmatique de TNF-α plus élevés chez le groupe CC (médiane= 5,29ng/ml ; min= 0,00; max= 68,29) en comparaison aux groupes CS (médiane=3,32ng/ml ; min= 0,00; max= 158,20) et CO (médiane= 1,533ng/ml ; min= 0,00; max= 12,710) (p= 0,008). La même différence a été observée, en comparant pour ces trois groupes le rapport taux TNF-α/ IL10 (p= 0,020). Par contre Aucune différence n'a été observée pour les taux des autres cytokines. Par ailleurs une corrélation positive forte entre la taille tumorale et les taux d'IL-10 a été retrouvée pour le groupe CO.

Conclusion : Nos résultats suggèrent l'existence d'une différence des profils des taux cytokines et des réponses immunitaires d'une néoplasie gynéco-mammaire à l'autre.

Mots clés : cancer, sein, col, ovaire, cytokine

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ASSESSING KNOWLEDGE AND PRACTICE REGARDING CERVICAL CANCER SCREENING WITH VISUAL INSPECTION WITH ACETIC ACID/ VISUAL INSPECTION WITH LUGOR IODINE (VIA/VILI) AMONG THE NURSES AND MIDWIVES AT RUTONGO DISTRICT HOSPITAL AND ITS CATCHMENT AREA

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Abstract

Objective: Visual Inspection of cervical with Acetic Acid (VIA) and Lugol's iodine (VILI) are cervical cancer screening options recommended by World Health Organization (6). The current study aims to assess knowledge and practice regarding cervical cancer screening with visual inspection with acetic acid/ visual inspection with lugor iodine among the nurses and midwives at Rutongo district hospital and its catchment area.

Methodology: It was a quantitative, descriptive study where a convenient sampling strategy was used to obtain the study sample. After data collection with a questionnaire, analysis using SPSS version 21 was done.

Results: A total of 97 nurses participated in the study. Only 39.2% of the respondents were aware of the meaning of VIA/VILI as a technique of cervical cancer screening whereas 60.8% did not. It was found that only 36.1% knew the role of VIA/VILI screening test as detection of the precancerous state of cervical cancer whereas about 63.9% of the respondents did not. Slightly less than half (41.2%) knew the eligibility age of VIA/VILI as it is for women aged between 30 to 49 years whereas 58.8% did not. The current study found that only 16.5% knew that screening should occur at least once in 3 years or 5 years according to woman's HIV status whereas 83.5% did not knew VIA/VILI follow-up. Among the respondents, 1.0% of them performed VIA/VILI whereas about 99.0% have never performed the VIA/VILI. Likewise, only 1.0% of the respondents had knowledge of abnormal VIA/VILI results whereas about 99.0% of the respondents did not knew the VIA/VILI screening test results.

Conclusion and recommendations: The observed lack of knowledge among the nurses/midwives in this study support the need for training to improve the knowledge and practice regarding cervical cancer screening with VIA/VILI among the respondents working at Rutongo Hospital and its catchment area.

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AVERTING THE CHALLENGES IN THE IMPEMENTATION OF CERVICAL CANCER PROGRAM AMONG WOMEN LIVING WITH HIV AMIDST COVID-19 IN WESTERN PROVINCE, ZAMBIA

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[1]Western Provincial Health Office, [2]Centers for Disease Control and Prevention (CDC), Zambia

1.   Introduction and objective

Zambia is estimated to have the second highest cervical cancer rate in the world with Western Province of Zambia being among the provinces with the highest incidences. In March 2020, Zambia recorded the first Covid-19 case with an up-surge of more cases in the preceding months till the second wave of the pandemic in December, 2020.

The main objective of the study was to look at the activities conducted to avert challenges in the implementation of cervical cancer program among women living with HIV amidst covid-19 in Western Province of Zambia.

2.   Methods

The study used secondary data from the 16 districts in the province which is submitted monthly. Both quantitative and qualitative methods were used in the analysis of the data from the districts to ascertain the magnitude of the challenges.

3.   Results

There was a decline in the Women Living with HIV (WLHIV) accessing clinical appointments, also reduced number of patients accessing Out Patient Departments (OPD) for fear of Covid-19 in all the facilities. There was a lag in attainment of the fiscal year target by respective districts with the majority (19%) being below 50% threshold as at Semi-Annual Progress Reports (SAPR). Engagement of traditional leaders, conducting outreaches to Primary Health Care Units (PHCU) to Neighbourhood Health Units (NHUs) yielded more numbers than concentrating at facility level. Information Education and Communication through district local radio stations contributed in informing the communities on the availability of cervical cancer services in facilities. Decentralisation through opening new sites (15) to offer basic cervical cancer screening services also contributed to the attainment of the SAPR targets. The province also relied on the use of WhatsApp media to review cervicograms.

4.   Conclusion

The study concluded that using a multidisciplinary approach (community and stakeholder engagement) in conducting sensitization on availability of cervical cancer services is key in reaching all WLHIV even in the advent of Covid-19, making information available through radio programs and addressing all the myths, the use of visual aids e.g. poster, social media, virtual meetings and scaling up to more facilities for basic cervical cancer screening is another strategy to reach all WLHIV in the program.

Keywords: Cervical Cancer, Pandemic

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RETROSPECTIVE STUDY OF THE TREATMENT OUTCOMES OF CERVICAL CANCER IN YOUNG WOMEN TREATED AT A SINGLE INSTITUTION

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OBJECTIVES: The aim of the study was to evaluate demographics and treatment outcome in young women under the age of 40 years with cervical cancer treated at a single institution in South Africa.
DESIGN AND METHODS: Retrospective study that reviewed medical records of patients younger than 40 years with cervical cancer referred for radiation from January 2015 to December 2018. The MOSAIQ® patient management system was used as the source of patient names. Data collected included patient demographics; HIV status; stage; treatment and survival outcome.
RESULTS: In the study time period 96 patients under the age of 40 years were referred for radiotherapy. The median age was 33 years (24-38 years); 15.6% (n=15) were under the age of 30. Overall, 36.5% were HIV-positive.
Disease characteristics included 91.7% squamous cell carcinoma on histology; 65.6% (n=63) were Stage IIIB and above. The very young (under 30 years) had a high proportion presenting with advanced stage disease, 73.3% (n=11).
Seventy-one patients (74%) received radical CCRT, RT or adjuvant CRT – 77 patients (80.2%) received >40Gy. HIV-negative patients were significantly more likely to be prescribed curative therapy (82% vs 60%; p=0.018).
Of the 71 patients who received radical therapy, 17 (23.9%) had a recorded date of death by study end, with no significant difference by HIV-status.

CONCLUSION
The young women presenting with cervical carcinoma at our institution had a high prevalence of HIV and advanced stage. Though HIV status impacted treatment intent, more than 80% of the cohort received a high dose of radiation.

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AN INTERNATIONAL REPORT ON BACTERIAL COMMUNITIES IN OESOPHAGEAL SQUAMOUS CARCINOMA

Nomburg J

OESOPHAGEAL CANCER Co-convened by AORTIC and NCI, STREAM 2, November 7, 2021, 1:45 PM - 3:00 PM

The incidence of esophageal squamous cell carcinoma (ESCC) is disproportionately high in the eastern corridor of Africa and parts of Asia. Emerging research has identified a potential association between poor oral health and ESCC. One proposed biological pathway linking poor oral health and ESCC involves the alteration of the microbiome. Thus, we performed an integrated analysis of four independent sequencing efforts of ESCC tumors from patients from high- and low-incidence regions of the world. Using whole genome sequencing (WGS) and RNA sequencing (RNAseq) of ESCC tumors and WGS of synchronous collections of saliva specimens from 61 patients in Tanzania, we identified a community of bacteria, including members of the genera Fusobacterium, Selenomonas, Prevotella, Streptococcus, Porphyromonas, Veillonella, and Campylobacter, present at high abundance in ESCC tumors. We then characterized the microbiome of 238 ESCC tumor specimens collected in two additional independent sequencing efforts consisting of patients from other high-ESCC incidence regions (Tanzania, Malawi, Kenya, Iran, China). This analysis revealed a similar tumor enrichment of the ESCC-associated bacterial community in these cancers. Because these genera are traditionally considered members of the oral microbiota, we explored if there is a relationship between the synchronous saliva and tumor microbiomes of ESCC patients in Tanzania. Comparative analyses revealed that paired saliva and tumor microbiomes are significantly similar with a specific enrichment of Fusobacterium and Prevotella in the tumor microbiome. Together, these data indicate that cancer-associated oral bacteria are associated with ESCC tumors at the time of diagnosis and support a model in which oral bacteria are present in high abundance in both saliva and tumors of ESCC patients. Longitudinal studies of the pre-diagnostic oral microbiome are needed to investigate whether these cross-sectional similarities reflect temporal associations.

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ASSESSMENT OF ESSENTIAL AND NON-ESSENTIAL ELEMENTS AS RISK EVALUATION INDICES IN MEN WITH PROSTATE CANCER IN CALABAR SOUTH-SOUTH NIGERIA

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Objectives: This study assessed serum levels of heavy metals (selenium [Se], copper [Cu], chromium [Cr] and lead [Pb], iron [Fe], zinc [Zn], magnesium [Mg] and cobalt [Co]) in men with prostate cancer (PCa) and their possible use as indices for monitoring disease progression.

Methods: Ninety men aged 40-75 years comprising 30 men with PCa, 30 with benign prostatic hyperplasia (BPH) and 30 controls were recruited into this case control study. Prostate specific antigen (PSA) was estimated by enzyme linked immunosorbent assay and heavy metals by atomic absorption spectrophotometry. Body mass index (BMI) was determined. Data were analysed using t-test, multiple regression and correlation analysis at $P<0.05$.

Results: Men with PCa had significantly higher BMI, PSA, Fe and Pb and lower Mg, Zn, Cu and Se compared to controls, and higher PSA, Fe and Co compared to BPH ($P<.05$). Men with BPH had higher BMI, PSA, and Fe and lower Mg, Zn, Cu, Se and Co compared to controls ($P<.05$). Zn correlated positively with Mg ($r=0.937$, $P=.000$), Cu ($r=0.548$, $P=.002$), Se ($r=0.731$, $P=.000$) and Co ($r=0.733$, $P=.000$) only in men with PCa. Levels of Cu, Mg and Se were associated with risk of BPH and PCa ($R2=0.911$, $P=.000$).

Conclusion: Men with prostate disease have higher levels of lead and iron and lower magnesium, copper, selenium and zinc which may suggest that assessment of these elements may be useful for early detection of men at increased risk of of prostate cancer and monitoring progression of the disease.

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OVERVIEW OF THE SESSION: SPECIAL INTEREST GROUP: PALLIATIVE CARE

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SPECIAL INTEREST GROUP: PALLIATIVE CARE, STREAM 2, November 6, 2021, 10:00 AM - 11:30 AM

The Palliative Care Session Interest Group is a multidisciplinary symposium intended to bring together African and international experts in palliative and supportive care, health policy, global, and public health to share experiences, research and data and resource allocation for palliative care, and the form of cancer care in the Africa continent. Speakers will address the impact of biomedicine vs biosocial perspectives in end-of-life care, the challenges and opportunities of Covid-19 on palliative care, the models of integration and collaboration that have fostered or hindered universal palliative care, and the status and recent shifts across cultures in stigma and attitudes to dying and death and to palliative care.

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HOW CAN WE MORE EFFECTIVELY SUPPORT AND ENCOURAGE INTERNATIONAL COLLABORATION TO ADVANCE IMPLEMENTATION RESEARCH IN AFRICA?

Odedina F[1], Iwelunmor J
[1]Mayo Clinic

ADVANCING IMPLEMENTATION SCIENCE IN AFRICA TO ADDRESS THE RISING CANCER BURDEN IN THE CONTINENT, STREAM 1, November 7, 2021, 4:00 PM - 5:30 PM

To address the Implementation Science (IS) research workforce shortage in Africa, the African Organization for Research and Training in Cancer (AORTIC), African Behavioral Research (ABeR) Center, Africa Cancer Research and Control ECHO (Africa Cancer ECHO) and International Cancer Research Partnership (ICRP) partnered to create the Implementation Science for Cancer Control in Africa (ISC2-Africa) Network. The primary goal of the ISC2-Africa Network IS conference is to elevate IS research scholarship in Africa. Utilizing an innovative framework, the conference will foster: (1) the mobilization of resources within Africa for Afro-centric IS strategies; (2) partnership with key stakeholders within and outside Africa for effective and culturally appropriate IS research; and (3) the development and successful application of IS research across Africa. This panel discussion will focus on how to effectively support and encourage international collaboration to advance implementation research in Africa.

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NEXT STEPS FOR IMPLEMENTATION SCIENCE IN AFRICA (AORTIC SIG)

Odedina F[1], Iwelunmor J
[1]*Mayo Clinic,* [2]*Prostate Cancer Transatlantic Consortium (CaPTC)*

ADVANCING IMPLEMENTATION SCIENCE IN AFRICA TO ADDRESS THE RISING CANCER BURDEN IN THE
CONTINENT, STREAM 1, November 7, 2021, 4:00 PM - 5:30 PM

To address the Implementation Science (IS) research workforce shortage in Africa, the African
Organization for Research and Training in Cancer (AORTIC), African Behavioral Research (ABeR) Center,
Africa Cancer Research and Control ECHO (Africa Cancer ECHO) and International Cancer Research
Partnership (ICRP) partnered to create the Implementation Science for Cancer Control in Africa (ISC2-
Africa) Network. Our long-term goal is to effectively address cancer prevention and control in Africa
through IS research by addressing the dearth of IS researchers in Africa. Building on the combined
experiences of our network, we will launch an AORTIC Implementation Science Special Interest Group
(SIG). The strategic plan for the IS-SIG will be presented during this session.

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ROADMAP FOR IS IN AFRICA: CRITICAL GAPS, PRIORITIES, AND OPPORTUNITIES

<u>Odedina F[1]</u>, Iwelunmor J
[1]*Mayo Clinic*

ADVANCING IMPLEMENTATION SCIENCE IN AFRICA TO ADDRESS THE RISING CANCER BURDEN IN THE CONTINENT, STREAM 1, November 7, 2021, 4:00 PM - 5:30 PM

The World Health Organization projects that morbidity and mortality from non-communicable diseases (NCDs) in Africa will surpass that of communicable diseases by 2030. As the second most populous continent in the world, cancer in Africa has been described as a running train. While Africa faces several challenges in controlling cancer, the field of Implementation Science (IS) offers a ray of hope for cancer control in Africa. Defined by the National Cancer Institute as the "study of methods to promote the adoption and integration of evidence-based practices, interventions, and policies into routine health care and public health settings to improve the impact on population health", IS is crucial to stopping the runaway train of cancer in Africa. Unfortunately, Africa does not have the much needed research workforce for IS. To address the IS research workforce shortage, the African Organization for Research and Training in Cancer (AORTIC), African Behavioral Research (ABeR) Center, Africa Cancer Research and Control ECHO (Africa Cancer ECHO) and International Cancer Research Partnership (ICRP) partnered to create the Implementation Science for Cancer Control in Africa (ISC2-Africa) Network. The roadmap for IS in Africa panel discussion will focus on discussing critical gaps, priorities, and opportunities for IS in Africa.

MEASURES AND POLICY TO RECONCILE ACCESS TO ONCOLOGY TREATMENTS WITH SPENDING EFFICIENCY AND SUSTAINABILITY; THE REVOLVING FUND PHARMACY PROGRAM AT INTERNATIONAL CANCER INSTITUTE

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[1]International Cancer Institute

BACKGROUND: Inaccessibility to medicines causes suffering from cancer which can easily and inexpensively be prevented or cured when diagnosis is made early. The current unmet health needs have resulted in high morbidity and mortality, creating a vicious cycle of poverty, disease, disability and death. The problems are further compounded by limited access to safe, effective, quality and affordable medicines, vaccines and diagnostic tools.

OBJECTIVE To identify, evaluate, and implement policy options that can address the identified challenges in access to oncology medicines which will ultimately improve patient care programs.

METHODS: As a policy option, Revolving Fund Pharmacy (RFP) program was established, funded and piloted in 8 counties across Kenya to guarantee access to cancer medicines for patients in marginalized public healthcare facilities. Revenue generated from the supply of the drugs to other healthcare facilities and patients who can afford to purchase out-of-pocket is used to support other indigent patients. The model also uses a pay-back system in which medication supplied to the marginalized rural healthcare facilities are reimbursed in the exact strength, brand and quantity. An Access to Medicine (AtM) program has been established as a collaborative financing model intended to increase access to treatment. Partnerships have been established with pharma to provide innovative approaches to address affordability concerns.

RESULTS: In one year, the RFP model has been effective in addressing medication stock outs in public healthcare facilities with an estimated 80% success rate. The model has supported 2,109 (1,108 females and 1,001 males) patients who have been able to complete chemotherapy, with a total of 10,393 initial and return encounters made. The mean age of the male and female patients who have benefited from the program is 62.5 and 55.3 years respectively.

CONCLUSIONS: Revolving Fund Pharmacy has the potential of solving problems of access to essential therapies for patients living with cancer and other chronic illnesses. Indigent patients can access cancer medicines dispensed free of charge or with a low fixed co-payment as is the case for patients enrolled in such programs. Through such programs, patients can access medicines at cost per prescription, sometimes with the amount reduced further for vulnerable population through reimbursable costs.

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LEVERAGING HUMAN-CENTRED DESIGN PRINCIPLES TO CREATE A DIGITAL PATIENT NAVIGATION PROGRAM FOR PEOPLE LIVING WITH CANCER IN SUB-SAHARAN AFRICA

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[1]mDoc Healthcare

BEST OF THE BEST ABSTRACTS (3), STREAM 3, November 9, 2021, 6:30 PM - 7:30 PM

OBJECTIVES: To describe how to harness the three phases of human-centred design (HCD) to co-create digital patient navigation programs for people living with cancer in sub-Saharan Africa.

METHODS: In this session, we will use our refinement of a web-based platform for digital patient navigation – CompleteHealth™ to describe our use of the three-phased HCD approach to co-create, implement and improve on digital patient programs for cancer in Nigeria.
Since 2018, we have adapted a three-phased approach based on the IDEO principles of HCD to co-create an impact-driven, person and family-centred digital patient navigation program for cancer. In the first phase, the Inspiration phase, to understand and define patients' needs, clinicians interview cancer survivors to understand their experiences throughout their cancer care journey. Next, during the Ideation phase, the clinician and technology teams devise a set of solutions based on identified gaps primarily focused on community-based support and patient needs to improve the patient journey. The solutions are continually tested with patients throughout the development process to ensure that patients' feedback are integrated into the product. The final phase, Implementation, is a continuous phase of learning and refinement of the digital platform based on patients' input throughout their experience of the virtual program.

RESULTS: Our application of these key elements of HC has led to the development of a digital platform that has supported patients living with cancer in Nigeria and their families throughout their journeys. During the presentation, we will share the results of patient satisfaction and self-efficacy surveys administered to patients using the platform to demonstrate the impact of user-centred design on patient experience as well as outcomes.

CONCLUSION: Human-centered design is a necessary process to ensure that digital patient navigation programs for cancer are accessible, available and of value to people living with cancer and their families in sub-Saharan Africa.

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MULTIVISCERAL RESECTION OF LOCALLY ADVANCED COLORECTAL CANCER IN AN AFRICAN REFERRAL CENTRE

Oke O[1,2], Coetzee E[2], Warden C[2], Goldberg P[2], Boutall A[2]
[1]Lagoon Hospitals Hygeia Ltd., [2]University of Cape Town

OBJECTIVE: Colorectal cancer (CRC) is common and often presents with advanced disease in Africa. Multivisceral resection (MVR) improves survival in locally advanced (T4b) CRC. The aim was to describe the management and outcomes of patients with clinical T4b CRC without metastatic disease who underwent MVR.
METHODS: A retrospective review of patients with T4 CRC who underwent MVR between January 2008 and December 2013 at the Groote Schuur Hospital, Cape Town, South Africa.
RESULTS: Four hundred and ninety-four patients were included. Of the 158 with suspected T4 cancer, 44 had MVR, of which one was excluded due to metastases. The mean age was 64 years. The male to female ratio was 1:1. The most resected extra-colorectal structure was the abdominal wall (21%). The median survival was 68 months (SD 13.9). The 5-year disease free (DFS) and overall survival (OS) were 45.6% and 55.1%, respectively. Survival of patients with colon and rectum cancer was similar. Intraoperative tumour spillage, vascular/perineural invasion, and anastomotic leakage were independent predictors of survival.
CONCLUSION: Multivisceral resection of locally advanced (T4b) CRC is feasible in the African context. Complete resection improves survival and should be the goal.

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EPIDEMIOLOGICAL PROFILE OF ESOPHAGEAL CANCER IN PATIENTS FOLLOWED AT DR. BAPTISTA DE SOUSA HOSPITAL IN S. VICENTE ISLAND, CAPE-VERDE, BETWEEN 2010 AND 2015

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[1]Institute of Hygiene and Tropical Medicine, NOVA University Of Lisbon & Global Health And Tropical M, [2]Hospital Dr. Baptista de Sousa, Ministério da Saúde de Cabo-Verde, [3]Portuguese Institute of Oncology, Porto , [4]Center for Innovative Care and Health Technology, ciTechCare,School of Health Sciences, Polytechnic of Leiria

OBJECTIVE. Africa has high incidence and mortality rates of esophageal cancer; over time there has been significant geographic variations in the epidemiology of esophageal cancer and incidence rates vary substantially across the region. The objective of this study was to characterize, for the first time, the esophageal cancer incidence, mortality and survival at Dr. Baptista de Sousa Hospital (BSH) in S. Vicente Island, Cape-Verde.

METHODS. BSH registers from 1 January 2010 until December 2015 were used to describe and analyse the epidemiological profile of EC. We estimated incidence rate ratios by sex, place of residence and age and used Kaplan-Meier estimator to analyse survival curves.

RESULTS. Our study includes 141 hospital-based patients, of which 77,3% (109) are men. Mean age is 62,4 (SD=13,5), 43,3% are married and 57,4% live in urban area; alcohol prevalence is 61,7% and 51,8% smoke tobacco; 42% of patients have cancer history in their family. Median incidence rate ratio for 6 years is 3,65 for men (vs women) and 1,91 for patients living in urban areas (vs rural). Survival rate is 5,7%; median survival time is of 135 days, being lower for men (121 vs 180 days), for those living in rural areas (106 vs 174 days), and for patients consuming alcohol (105 vs 253) and tobacco (104 vs 185 days). Young patients have lower median survival time: 134 days for patients with less than 40 years and 163 for those older than 80. However, these differences are not significantly different at the 5% level.

CONCLUSION. In this first study conducted in Cape-Verde on the epidemiology of esophageal cancer, we estimated an incidence rate higher in men than in women, with a rate ratio of about 4. Smoking and alcohol consumption, two known risk factors for oesophageal cancer were relevant for Cape-Verde. As in other African countries esophageal cancer mortality was very high.

ANAEROBES AS FACILITATORS OF PROSTATE CANCER (PC) DEVELOPMENT AND POSSIBLY OFFERING NEW APPROACHES TO IMPROVE PROSTATE CANCER TREATMENT & PREVENTION.

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Background: The sun-sensitive microaerophylic bacterium C. acnes, is linked with prostate cancer (PC) in 3 cohort studies involving 288,081 normal teenage individuals followed for up to 36 years reporting significant risk of late occurrence of PC if the subject had teenage acne (OR 1.67, 1.7, 1.43).. That circumcision reduces PC risk, supports anaerobic bacteria involvement as these bacteria are reduced after circumcision. A 1988 study linked anaerobes with PC but considered them opportunists. These reports and those linking microaerophilic H. pylori to stomach cancer led us to reinvestigate the association of PC and anaerobes

Methods: MOLDI-TOF methodology has been previously reported (https://www.nature.com/articles/s41598-017-13782-6). This report updates outcome on a further 21 patients and follow up extended from 1 month to a median of 43 months. In total there were 21 PCs on active surveillance and 18 Benign Prostatic Hypertrophy

Results: 12 cases had obligate anaerobes (OA), 8 microaerophylic bacteria (MA) and 20 none of these (ie 2 with both OA & MA). Logistic regression analysis demonstrated significant association with increased PSA for obligate anaerobes (OR 1.24) but not Microaerobic bacteria (OR 1.11), though statistically significant trend was demonstrated (t = 2.64 p = 0.004). In 21 with prostate cancer, 2 of 10 (20%) with anaerobes and 7 (64%) of 11 without anaerobes remain on Active Surveillance (p = 0.08 Fisher's exact test). In 18 without cancer, 5/7 (71%) with anaerobes and10/11 (91%) without remain without the need of TURP intervention. When combined there was a statistically higher urological intervention rate associated with anaerobes (p = 0.045)

Conclusions: . This data provides a new insight into how, by starting in puberty and then being found in prostate glands 40+ years later suggests that chronic inflammation precedes carcinogenesis. Treating Helicobacter infection with combined antibiotics and gastric acid suppression prevents stomach cancer. Evidence that anaerobic bacteria resist rejection through inducing expression of targets for checkpoint inhibitors suggests that, in an era of excessive antibiotic resistance, exploration of modern immunotherapy in patients with these bacteria using serotherapy, vaccines and checkpoint inhibitors might improve outcome for both local and advanced PC.

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KNOWLEDGE AND PERCEPTION ABOUT CERVICAL CANCER AND ITS PREVENTIVE AND SCREENING MEASURES AMONG PREGNANT WOMEN ATTENDING ADEOYO MATERNITY TEACHING HOSPITAL IBADAN. (PILOT STUDY)

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ABSTRACT

Objective: Cervical cancer is still the most common gynecological cancer and is estimated to be the fourth most common cancer in women worldwide and the leading cause of cancer death in some of the world's poorest countries in sub-Saharan Africa. However, it is easily preventable and curable if screening is done and early diagnosis and treatment is done at the precancerous stage. The study aimed to assess the knowledge and perception about cervical cancer and its preventive and screening measures among pregnant women attending AMTH Ibadan. The findings of this study will be helpful in creating recommendations for promoting awareness and knowledge of cervical cancer screening.

Methods: This pilot study adopted a descriptive cross-sectional design among 38 pregnant women admitted to the antenatal ward of AMTH while the main study is still in progress. A simple random sampling technique through balloting was used by the researcher to select pregnant women that gave their consent. Data was analyzed using Descriptive and inferential Statistics via the Statistical Package for Social Sciences (SPSS 20) software version 20.

Results: Most of the participants, 76.3% were not aware of the prevention of Cervical Cancer (CC) and its detection. Most of the respondents (73.6%) did not know the definition and causes of CC while the majority of them lacks knowledge of risk factors, signs, and symptoms of the disease. Also, approximately 24% of the participants know that CC can be prevented by vaccination against Human papillomavirus. The findings of the study revealed perceived barriers to preventive measures which include lack of recommendation by healthcare providers, cost of the investigation, and lack of awareness.

Conclusion: In order to further reduce the burden of this disease, it is highly recommended that the ANC may be used to disseminate vital information about CC screening. Furthermore, the cost of the screening tests should be subsidized and made available at different health facilities.

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INCIDENCE AND IMPACT OF PRESENTATION DELAY IN YOUNG BREAST CANCER PATIENTS: THE EGYPTIAN EXPERIENCE

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OBJECTIVE:
Breast cancer in young (BCY) represents a large proportion of breast cancer (BC) women in Africa. We sought to determine the prevalence of presentation delay and its impact on tumor stage and survival in BCY.

METHODS:
We reviewed the data of BCY aged ≤40 diagnosed between 2008-2017 in two centers in Alexandria, Egypt. Presentation delay was defined as ≥90 days from the initial sign or symptom to the first consultation visit. We determined and compared the incidence, clinicopathological characteristics, and disease-free survival (DFS) by the Kaplan-Meier method in those with and without presentation delay.

RESULTS:
Six hundred and eighty-six patients with the presentation data were included in this analysis. The majority (98%) presented after accidentally noticing a breast lump. Fifty-nine percent (n=405) of the total 686 BCY presented late, and their median delay was eight months (Range: 3-48). There was no significant difference in age at diagnosis (p=0.494). Compared to patients who presented early, patients with presentation delay had significantly more T3-T4 tumors (p=0.018), more stage III-IV disease (p=0.036), and a higher incidence of involved extracapsular extension (p=0.08). Patients with delay underwent more modified radical mastectomy than breast-conserving surgery (p=0.037). After a median follow-up of forty-four months, the patients with presentation delay had a significantly worse DFS than those presenting early (76.7 vs. 89.5 months, 95% CI-: 70-98; p=0.019).

CONCLUSIONS:
The majority of BCY presented late, and had an advanced disease with poor survival outcomes. Since young women represent a high percentage of BC patients in developing countries, there is an unmet need to develop screening programs in this cohort.

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PAIN-RELATED BELIEFS AND MISPERCEPTIONS VERSUS ETHNICITY AND RELIGIOSITY: STATUS QUO FOR NIGERIAN MEDICAL UNDERGRADUATES

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Background: Pain can have a negative, multifaceted impact on patient well-being. However, negative attitudes of clinicians reinforced by wrong beliefs can hinder effective pain management. This study examined extent of pain-related beliefs and misperceptions existing among Nigerian medical undergraduates and the relationship between such beliefs and religion and ethnicity.

Methods: This cross-sectional study recruited medical students from five accredited medical schools in Nigeria. Participants voluntarily completed an online survey consisting of 35 items evaluating pain-related beliefs and misperceptions and items adapted from Duke's religiosity Index. Responses were described using frequency counts and percentages. Correlation analysis was performed between questionnaire items and religiosity measures. Comparison of pain-related beliefs across ethnic groups and various religious sects was done using Pearson's chi-square and 2-sided exact test, respectively. Phi-coefficient was used to quantify significant relationships.

Results: In total, 360 medical students completed the survey with a mean age of 23.52 years and a slight female predominance (55.3%). The most widely held pain-related belief was 'Most patients use pain to gain attention' (53.3%), and the most common misperception pertaining to opioids and analgesics was 'Pain medication taken over a long time, tend to be ineffective' (82.8%). There was a weak correlation between pain-related beliefs and intrinsic (rhos = 0.02, ρ = 0.74) and extrinsic religiosity (rhos = 0.20, ρ < 0.001), while religious affiliation and ethnicity were significantly associated with some items in the questionnaire (ρ < 0.05).

Conclusion: A wide scope of pain-related beliefs and misperceptions exist among Nigerian medical students, of which religiosity and ethnicity are strong predictors. Development of a culturally-sensitive medical undergraduate pain curriculum is highly indicated to positively influence medical students and forestall future development of negative attitudes towards pain and analgesic use (especially opioids) in these budding physicians.

Keywords: Pain-related beliefs, Misperceptions, Opioids, Religiosity, Ethnicity, Medical undergraduates, Nigeria.

CULTURALLY ADAPTING VIDEOS TO INVOLVE NIGERIAN PATIENTS WITH CANCER IN CLINICAL TRIALS

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BEST OF THE BEST ABSTRACTS (3), STREAM 3, November 9, 2021, 6:30 PM - 7:30 PM

Background: Low health and clinical trial literacy among Nigerian patients have been sighted as significant barriers to ensuring that patients enrolled on clinical trials are truly informed. Video intervention has been shown to be the most proactive method to improving patient's clinical trial knowledge. Thus, this study aimed to apply and adapt video interventions addressing attitudinal barriers peculiar to Nigerian patients.

Methods: A hospital-based representative mixed method study was conducted at the Lagos State University Teaching Hospital (LASUTH) from July to December 2020 comprising of 63 cancer patients aged 18 and above. We first administered a cancer literacy survey to determine patients' knowledge about clinical trials. For patients' who had prior knowledge, a pre-intervention test was administered, after which a 15-minute video (Attitudes and Intention to Enroll in therapeutic clinical Trials (AIET)) was played. For patients who had no prior knowledge, the AIET video was played for them. Finally, all patients completed a post-intervention test and participated in a focus group discussion.

Results: Out of 63 patients sampled, 43 (68.3%) had breast cancer. On average, patients agreed to understanding their cancer diagnosis and treatment very well. 84.1 % of patients had never heard about cancer clinical trials and 85.7% did not know what cancer clinical trials were. There was a strong positive relationship (r=0.916) between the pretest and posttest, which means that the intervention improved patients' knowledge, perception, and attitudes about cancer clinical trials. In the focus groups, patients recommended adapting the video in Nigerian settings and representing all religions, in order to address trust in local clinical trialists.

Conclusion: Due to small size of patients, change in clinical trial knowledge was not statistically significant. However, there is a trend suggesting that culturally adapted video interventions can be used to improve knowledge and perception about cancer clinical trials.

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COST-EFFECTIVENESS ANALYSIS OF CHOP AND R-CHOP TREATMENT OF DIFFUSE LARGE B CELL LYMPHOMA IN MALAWI

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OBJECTIVE: Cost-effectiveness data for cancer treatment are needed from sub-Saharan Africa (SSA), where diffuse large B-cell lymphoma (DLBCL) is a common, curable cancer. In high-income countries, the standard of care for DLBCL is R-CHOP (rituximab, cyclophosphamide, doxorubicin, vincristine, and prednisone) chemoimmunotherapy. Rituximab is often not available in SSA due to cost, and treatment with CHOP is common.

METHODS: We evaluated the cost-effectiveness of DLBCL treatment using Malawi-specific data. Clinical data were from a prospective observational cohort treated with CHOP, as well as a clinical trial of R-CHOP. We used a decision-tree model to calculate costs per disability adjusted life year (DALY) averted from the health system perspective and estimated a willingness to pay (WTP) threshold of three times GDP per capita.

RESULTS: On a per-patient level, compared to no chemotherapy, CHOP is estimated to avert 7·9 DALYS, at an incremental cost of $1,500, for an incremental cost-effectiveness ratio (ICER) of $194 per DALY averted, which is well below WTP. In probabilistic sensitivity analysis, CHOP was cost-effective for DLBCL in >99% of simulations. Compared to CHOP, R-CHOP is estimated to avert 2·9 DALYs, at an incremental cost of $3,198 and ICER of $1,104 per DALY averted, which is at the WTP threshold and was below WTP in 45% of simulations.

CONCLUSIONS: CHOP is cost-effective for DLBCL in Malawi, and the addition of rituximab may be cost-effective. Future studies in SSA and other LMIC settings should include rigorous economic evaluation to promote continued cancer treatment investments and prioritization.

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ADVANCING TOBACCO CONTROL ON THE AFRICAN CONTINENT

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DAY 4 | PLENARY (2), November 8, 2021, 6:00 PM - 7:00 PM

While tobacco use is declining in many parts of the world, especially among high income countries, Africa is one of only two WHO world regions where tobacco use, among the leading causes of preventable cancer death worldwide, is projected to continue to rise. While most countries on African continent have ratified the WHO Framework Convention on Tobacco Control, implementation of effective evidence-based tobacco control measures remains limited and incomplete. Moreover, the tobacco industry is increasingly targeting African countries as a growth market for their products and employing tactics to counter effective tobacco control measures. Given the central role of tobacco control for global cancer control, it is critical to strengthen collaboration between the cancer and tobacco control communities. This session will review the most cost-effective tobacco control measures, strategies for monitoring and countering tobacco industry influence, and how research can enhance implementation and scale up of tobacco prevention and cessation programs. As session Chair, Dr. Parascandola will provide brief opening remarks to outline the rationale for the session and expected outcomes. Dr. Parascandola will also facilitate discussion and summarize results from the Mentimeter poll for audience input.

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ETUDE DE FACTEURS DE RISQUES GENETIQUES DU CANCER DU SEIN AU BENIN

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Le cancer du sein est le premier cancer chez la femme au Bénin aussi bien en termes d'incidence que de mortalité et affecte des patientes jeunes. Bien que la connaissance des types moléculaires de cancer du sein des femmes béninoises reste encore limitée, les études disponibles montrent clairement que ces femmes font plus de cancers triples négatifs, formes particulièrement agressives.

Objectifs: Actuellement, aucune analyse génétique du cancer du sein au Bénin n'a été effectuée et donc aucune information sur les gènes qui abritent le plus souvent des mutations pathogènes dans cette population n'est disponible. Les objectifs de nos travaux sont d'évaluer la survie en fonction du stade de diagnostic, de l'accès au traitement mais aussi d'identifier les gènes du cancer du sein qui abritent le plus souvent des mutations pathogènes dans la population béninoise.

Méthodes/Résultats: Les progrès technologiques permettent aujourd'hui de rechercher des mutations sur plusieurs gènes de façon simultanée. Une étude prospective et rétrospective à partir de bloc de paraffine est réalisée, le séquençage à haut débit va nous permettre de tester un ensemble de gènes susceptibles d'intervenir dans la prédisposition au cancer du sein et d'identifier des variations dont il faudra définir le caractère délétère ou non (selon la classification en 5 classes). Afin de classer les variants de signification inconnue potentiellement identifiés lors de cette étude, des tests fonctionnels seront développés.

Conclusion: Compte tenu des ressources limitées pour le dépistage chez les béninoises par mammographie, ces informations génétiques sont d'autant plus importantes pour l'identification des femmes présentant un risque particulièrement élevé de cancer du sein, utile pour concentrer les efforts de dépistage et leur proposer un suivi personnalisé.

ASSESSMENT OF KNOWLEDGE AND PRACTICE OF BREAST SELF EXAMINATION AMONG MENOPAUSE WOMEN IN RURAL AREA, RWANDA

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OBJECTIVE
This study aimed at assessing the knowledge and practice of breast self-examination among menopause women in a selected sector in rural area in Rwanda. To achieve this, the researchers assessed menopause women's level of knowledge of breast self-examination and describe the extent of practice of breast self-examination among menopause women

METHOD
A quantitative descriptive cross-sectional survey was conducted from June to July 2020. A total number of 75 menaupose women aged above 45years old was selected among 1050 menopausal women from three Villages of Kigabiro sector in Rwamagana district. A stratified random sampling technique was used.Proportionate Stratified Random Sampling Formula was used in calculation: nh = (Nh / N) * n then each stratum(Village) = (350/1050) ×75=25 menaupose women , Data were collected using a structured questionnaire which contain 14 items developed by Salam Hussein Ewaid in Iraq (2018) .Privacy and confidentiality had been ensured. The instrument was translated into Kinyarwanda language and pretested .The results of a Cronbach's alpha indicated the value of 0.640 . The validity of instrument was checked in terms of face, content and construct validity. Descriptive statistics and Chi square test was used .The data were analysed using SPSS vision 24.

RESULTS
The finding from this study reported that the majority of the study participants 43(57.3%)were aged between 45 to 55 years old, Among 75 menopause women 48(64.0%) of them have heard about the Breast Self Examination while 27(36.0%) did not get any information ,19(25.3%) of the participants reported that they didn't know all warning signs of breast cancer,64(85.3%) responded no on the question asking if the skin puckering and change shape or size of the breast are signs of breast cancer .The greatest number of study participants 46(61.3%) reported that they didn't practiced breast self-examination. Level of education is strongly positively related to participants didn't practice Breast Self Examination with statistical coefficient of r(75)= 0.388,P=0.008** than occupation with r(75) = 0.321,P=0.030* , and negative correlated to the Age of r(75)=-0.110 ,P=0.468 .

CONCLUSION
Assessment of knowledge and Practice of breast self examination among menopause women identified the lack of knowledge concerning warning signs of Breast Cancer and lack of awareness of practice of Breast Self Examination due to limited knowledge therefore there is a need for authorities to identify the gap related to the lack of knowledge and intervene accordingly to raise awareness among women this will help in breast cancer early detection.

INVERSE ASSOCIATION OF PLASMODIUM FALCIPARUM POSITIVITY WITH ENDEMIC BURKITT LYMPHOMA IN THE EPIDEMIOLOGY OF BURKITT LYMPHOMA IN EAST AFRICAN CHILDREN AND MINORS (EMBLEM) CASE-CONTROL STUDY: ROLE OF ANTI-MALARIA TREATMENT

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Objective: Plasmodium falciparum (Pf) and endemic Burkitt lymphoma (eBL) are co-endemic in Africa, consistent with a causal role of malaria in eBL. A lower prevalence of parasitemia in eBL patients than controls reported in some studies is controversial. We investigated this issue using participants with a well-characterized history of anti-malaria treatment.

Methods: We studied cases and controls aged 0-15 years enrolled in East Africa during 2010-2016. Pf was diagnosed using thick blood film microscopy (TFM) and rapid diagnostic tests (RDTs). A structured questionnaire was administered about malaria lifetime history and treatment, along with socio-demographics, animal exposures, fevers, and hospitalizations. We conducted exploratory factor analysis to reduce 40 questionnaire variables into six factors, which accounted for 83-90% of the variance in the questionnaire data, including Inpatient and Outpatient malaria factors, considered surrogates of prior anti-malaria treatment. We assessed the association of eBL with overall Pf (TFM/RDTs), recent (RDT only) or current (TFM) positivity, versus negative using odds ratios and 95% confidence intervals (OR, 95% CI) from logistic models adjusted for age group (0-2, 3-5, 6-8, 9-11 and 12-15 years), sex, and study site as apriori confounders and afore-mentioned extracted factors.

Results: Among 677 eBL and 2920 healthy controls, Pf prevalence was lower in cases than controls (25.6% versus 45.7%, aOR= 0.46, 95% CI: 0.37-0.56; P<0.0001), including recent (6.9% versus 13.5%, aOR= 0.44, 95% CI 0.29-0.65, P<0.0001) and current (18.7% versus 32.1%, aOR=0.51, 95% CI 0.39-0.66, P<0.0001) infection. These associations were significant whether we adjusted for the six factors, including Inpatient and Outpatient malaria factors, or not. Higher scores on all factors were independently associated with eBL (aOR range: 1.72-7.30; all P≤0.0003).

Conclusion: Pf prevalence was lower in eBL patients independent of prior anti-malaria treatment. These results increase support for the hypothesis that eBL propensity is correlated with intrinsic resistance to Pf.

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CREATING THE TOOLS FOR UP-TO-DATE ONCOLOGY RESEARCH IN AFRICAN ANCESTRY

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GENETICS, STREAM 3, November 9, 2021, 10:00 AM - 11:00 AM

Cancer is an increasing public health burden, including in sub-Saharan Africa (SSA), where cancer-deaths raised by 27% since 2002 and incidence will double in the next 20 years. These rates ask for a better understanding of the epidemiological, clinical, and molecular characteristics of cancer across SSA regions, which display variable genetic and environmental features. Current ethnic disparities in cancer research, persisting in large sequencing consortia such as TCGA, produce inequalities in cancer research which consequently impact basic and translational research. The problem persists in terms of availability of ethnic-informative in vitro models. Basic cancer understanding and testing has been accomplished over the past 50 years by recurring to cancer cell lines. Thousands of cancer cell lines have been established, but African ancestry is limited to only ~5%, and the few cancer cell lines available were mostly derived from African-Americans, whom represent only West African diversity. Differences in immune response, cell metabolism, methylation profile and drug response between European and African ancestries are being revealed, unsupporting direct extrapolations from cancer studies based on European cancer cell lines into African oncobiology. It is thus urgent to generate cancer cell models in diverse SSA backgrounds, taking advantage of the more efficient technologies of propagation of patient-derived cells as conditional reprogramming of cells and organoid establishment. In this presentation we will present how we are establishing a diverse SSA cancer cell line panel, in collaboration with colleagues from several African countries, aiming to provide reliable tools that enable up-to-date oncology research in the African ancestry.

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IRONMAN: AN INTERNATIONAL REGISTRY TO IMPROVE OUTCOMES IN MEN WITH ADVANCED PROSTATE CANCER: FACILITATING BETTER UNDERSTANDING OF PROSTATE CANCER IN NIGERIA

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OBJECTIVE: Prostate cancer is a major health burden in sub -Saharan Africa with high mortality. A major cause of the high mortality is the fact that most patients in sub – Saharan Africa present at late stage. IRONMAN: An International Registry to Improve Outcomes in Men with Advanced Prostate Cancer provides an opportunity to facilitate a better understanding of the disease. Recruitment of Nigerian patients into the clinical trial will help to achieve a greater understanding of the disease with global implications being the country with the largest population of black men.

ii) METHODS: This study intends to present the process of establishment of the IRONMAN registry in Nigeria and coordination of a multi-center project in Nigeria. This study also sets to lay out the methodology of accomplishing this 5-year study involving 4 sites and 6 additional subsites.

iii) RESULTS: The IRONMAN registry has been established in Nigeria in many centers. The process has led to the establishment of multidisciplinary teams in 10 centers in Nigeria that are sufficiently trained and developed to work on multidisciplinary projects like the IRONMAN and future projects. The project is likely to achieve a better understanding of prostate cancer in a milieu of an international registry.

iv) CONCLUSIONS: IRONMAN Project in Nigeria is likely to improve understanding of prostate cancer and improvement of care and outcomes among Nigeria men. The project has already produced ten multidisciplinary teams in 10 Nigerian institutions which can effectively undertake future projects requiring multidisciplinary teams and many centers in different geopolitical zones in Nigeria. It will also provide understanding of inter-ethnic disparities of the disease in Nigeria.

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ACCESS TO CANCER DRUGS IN THE FRANCOPHONE AFRICAN NETWORK

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PAEDIATRIC CANCER, STREAM 3, November 8, 2021, 1:00 PM - 2:45 PM

Franco-African Group for Pediatric Oncology (GFAOP) was founded in 2000. It federates Pediatric Oncology Units (UOP) in order to treat and cure African Children with cancer in African by trained African teams. GFAOP actions are based on formation, expertise exchanges and, since 2005, donation of essential drugs, mainly cancer drugs. These shipping from France are organized and based on African team's needs. Nevertheless, UOP are more and more numerous since years (from 14 in 2005 to 24 in 2021), and, nowadays, GFAOP fails to send enough drugs. Moreover, discrepancies between needs and shipping were increased during COVID pandemia (supply chain broken, delays, etc). Then, in it Strategic Plan 2021 -2030, GFAOP planned to develop local supplying of cancer drugs, with local pharmacists involved in order to secure drug circuit (ordering, handling, etc…) and finally to stop inefficient drug donations from France. To achieve this goal, a strategic group was created. First actions were to develop a pharmacists committee (Senegal, Côte d'Ivoire, Democratic Republic of Congo, France) to share experiences and to develop pharmacist's knowledge in paediatric oncology. As results, for instance, the Ivoirian Society for Oncology Pharmacy (SIPO) was created in Côte d'Ivoire, with GFAOP members as honorary members. It cooperates with French Society for Oncology Pharmacy (SFPO) to upgrade African pharmacist's competency in paediatric oncology. These actions are developed in alignment with WHO GICC.

IMPLEMENTATION SCIENCE RESEARCH FUNDED BY THE U.S. NATIONAL CANCER INSTITUTE: AN ANALYSIS OF GRANTS WITH INTERNATIONAL COLLABORATORS

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IMPLEMENTATION SCIENCE: NUTS AND BOLTS FOR AFRICAN PRACTICE Co-convened by AORTIC and NCI (Part 2), STREAM 3, November 6, 2021, 1:00 PM - 5:00 PM

OBJECTIVE: The U.S. National Cancer Institute (NCI) funds implementation science, the study of methods to promote the adoption and integration of evidence into practice, both domestically and globally. We analyzed NCI's implementation science portfolio to examine international grants and identify research opportunities.

METHODS: NCI-funded grants (2000-2020) with foreign principal investigators or collaborators were identified using NIH databases. A text search was conducted, and six coders reviewed abstracts to determine which awards included implementation science aims. Grants were categorized by collaborating countries, content area, cancer sites studied, and cancer care continuum. Analyses were conducted in Microsoft Excel.

RESULTS: Thirty-four NCI-funded grants met the criteria for inclusion. Twenty-four awards were to investigators collaborating with scientists in LMICs, 13 of which were in Africa, including, Kenya (n=4), South Africa (n=4), Botswana (n=3), Malawi (n=2), Rwanda (n=2), and Uganda (n=2). All 13 Africa-based grants studied HIV-associated malignancies; over half focused on HPV/cervical cancer screening (n=7) and four on breast cancer. Africa-based grants spanned the cancer control continuum: prevention (n=3), screening (n=8), treatment (n=6), and survivorship (n=2).

Outside of Africa, collaborating countries included Australia (n=4), Canada (n=4), and those in Asia (n=9), Europe (n=8), and Latin America (n=5). Across all 34 grants, the top research content areas were HPV/cervical cancer screening (n=10) and tobacco control (n=7). In addition to cervix (n=10) and lung (n=7), other cancer sites studied included breast (n=4) and colorectal (n=3). Grants spanned the cancer control continuum but most focused on prevention (n=19) and screening (n=15).

CONCLUSIONS: NCI's current portfolio of global cancer implementation science grants is growing but still limited in number and scope. This analysis helps highlight gaps and identify opportunities for future research.

TRENDS OF PROSTATE CANCER INCIDENCE IN SELECTED MAGISTERIAL AREAS IN EASTERN CAPE PROVINCE, SOUTH AFRICA, 1998-2017

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OBJECTIVE: Prostate cancer is rated the second most common cancer and sixth leading cause of death among men (Bray et al, 2018). In South Africa, it is rated as the leading cancer accounting for 26.1% of total cancers observed in 2018 (Bray et al, 2018). Little is known about the rural population in the Eastern Cape Province for which a population-based cancer register. The aim of this study is to describe prostate cancer patterns and trends in this selected population.

METHODS: Secondary data was used from which a sample of 940 prostate cancer (C61.9) cases was extracted. Data was extracted from CANREG program into STATA version 14 for descriptive analysis. Direct method was used to estimate the age standardized incidence rates (ASR) and age specific rates (Boyle & Parkin, 1991). Keyfitz, 1966 method was used to calculate standard error (SE) and confidence interval (CI). Joinpoint program was used to calculate annual percentage change.

RESULTS: The mean age was 64 years, with SD of 9.9. Annual percentage change in prostate cancer incidence was 8.8%, which was statistically significant. Lusikisiki had the highest incidence rates range; 2.6 to 53.4 per 100 000, (CI 0.8-61.4). Centane was the second highest with incidence rates range; 5.5 to 21.7 per 100 000 (CI 2.3-27.6). Bizana shows a constant increase over the periods of years 2.3 to 12.1 per 100 000 (0.2-16.3. Willowvale had the fourth highest incidence from 3.9 to 10.9 per 100 000 population.

CONCLUSIONS: There was a significant increase in incidence trends over 20 years period of 1998-2017 in Eastern Cape, however, with variations across the surveillance area. Lusikisiki accounts for the highest incidence rates compared to other magisterial areas. It is not clear whether the increase is associated with awareness and increase in screening or changing lifestyle in this population.

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SURVIVING AFTER CANCER: SEXUAL HEALTH

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DAY 3 | PLENARY, November 7, 2021, 7:15 PM - 7:45 PM

With increased detection and curability of cancer worldwide, the number of cancer patients and survivors is rapidly increasing. Sexual health, an important aspect of quality of life, may initially be a low priority for newly diagnosed patients with cancer. Sexual health is impacted regardless of cancer type and /or treatment .

There are numerous factors that influence whether or not conversations about sexuality take place. There is universal acceptance and guidelines that in All People With Cancer there be a discussion with the patient, initiated by a member of the health care team.

 Screening checklists to assist in diagnosing sexual dysfunctions and difficulties include the Female Sexual Function Index (FSFI) Arizona Sexual Experiences Scale, International Index of Erectile Function 5.
 Symptoms and Interventions for Sexual Dysfunction (CCO & ASCO) for men and women with cancer i.e. Sexual response, Fertility, Body image, Intimacy & relationships, Altered sexual function and satisfaction, Vasomotor symptoms, and Genital symptoms . Erectile/ejaculatory dysfunction and the absence of ejaculate (men) by using THERAPY that is Integrative/Combined Biopsychosocial Cultural Sex Therapy with psycho education and sexual renegotiation are the stepping stones .Maximizing the sexual and erotic function or abilities is the Core Care pathway of the Multi Modal team. Balancing erectogenic modalities agents, physical therapies, Hormone manipulation and psychotherapeutic agents with consultation in the team is ideal. Alternate or complimentary health approaches together with balanced lifestyles further enhance the therapeutic milleu

The psychosocial and sexual care pathway for cancer patients in Africa with integration of cancer programs into existing health care services in primary health-care facilities": MAKES IT ACCESSIBLE to most patients and will create one of the most reliable, cost-effective interventions that can be utilized in Africa. Using telemedicine and web based services can increase access to scarce resources in Africa.

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THE PREVALENCE OF MYELOID DIFFERENTIATION PRIMARY RESPONSE 88 (MYD88) AND CLUSTER OF DIFFERENTIATION 79B (CD79B) ACTIVATING MUTATIONS IN A COHORT OF ABC-DLBCL CASES AT A SOUTH AFRICAN TERTIARY ACADEMIC HOSPITAL

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OBJECTIVE: Diffuse large B-cell lymphoma (DLBCL) is a highly aggressive cancer of high prevalence among HIV-positive individuals. Despite receiving achieving viral suppression, the outcome of HIV-positive patients with DLBCL remains poor compared to the general population. Research shows that this cancer has a unique pathobiology. Recent studies found activating mutations within MYD88 and CD79B to be associated with the activated B-cell DLBCL subtype (ABC-DLBCL), which is predominant among HIV-infected individuals, and associated with poorer prognosis. This study aims to determine the prevalence of specific MYD88 and CD79B mutations in archived formalin-fixed paraffin embedded (FFPE) ABC-DLBCL tumours from patients referred to Groote Schuur hospital in Cape Town, South Africa, within a specific timeline.

METHODS: Archived ABC-DLBCL FFPE will be identified and sectioned. Total DNA will be extracted and the quality analysed. PCR will be performed using primers that allows for the amplification of regions spanning the mutations. Sanger sequencing will be performed to assess the presence/absence of the MYD88 and CD79B mutations.

RESULTS: A total of 95 archived ABC-DLBCL FFPE tumour samples were identified, of which 54 had sufficient tumour tissue for the study. These were sectioned, and total DNA isolated using a commercially available kit. Quality assessments revealed that the DNA was generally highly fragmented. PCR assays showed that a short product of ~150 bp could be amplified from approximately 80% of the tumours. The prevalence of MYD88 and CD79B mutations is currently being assessed.

CONCLUSIONS: There is a high level of variability within the FFPE samples, with respect to quantity and quality of the extracted DNA, and approximately 80% of the samples could be amplified using PCR. Sanger sequencing will be used to determine the prevalence of the specific MYD88 and CD79B mutations in our sample population and analysed to determine whether this data has diagnostic and/or prognostic significance.

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CREATION D'UN CENTRE DE REFERENCE POUR LE DIAGNOSTIC DES CANCERS DE L'ENFANT, DAKAR,SENEGAL

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i) OBJECTIF: la précision diagnostique est le prérequis indispensable de la prise en charge de toute pathologie tumorale. Dans le but d'atteindre les objectifs prioritaires de l'OMS pour l'oncologie pédiatrique et afin de répondre aux critères diagnostiques pour les tumeurs, un Centre de Référence pour le Diagnostic des Cancers de l'Enfant (CRDCE) a été créé à Dakar.

ii) METHODES : la création du CRDCE comporte deux phases (2020-21) et (2022-2024). Au cours de la réalisation de la première phase, l'hématologie biologique de 2 hôpitaux universitaires, Aristide Le Dantec et Dalal Jamm ainsi que l'Anatomie et cytologie pathologiques de l'Université Cheick Anta Diop constituent le CRDCE sous forme de Fédération. Outre l'amélioration des techniques standard de morphologie, plusieurs axes ont été développés au cours de cette première phase : le renforcement de la télépathologie pour l'obtention rapide d'un second avis, la mise en place des techniques d'immunophénotypage avec la cytométrie en flux pour les leucémies et lymphomes et l'immunohistochimie avec un panel d'anticorps complet pour les tumeurs solides de l'enfant. L'organisation d'une banque de prélèvements avec la conservation des cellules, tissus, plasma, ADN et ARN permettra la mise en place de projets de recherche clinico-biologiques et fondamentaux. Les données diagnostiques et de suivi des patients dans le cadre du CRDCE sont enregistrées dans un logiciel commun.

iii) RESULTATS : les résultats de la première phase sont atteints avec l'envoi de cas sur la plateforme de télépathologie i-Path pour un second avis, la mise en route de la cytométrie en flux pour les hémopathies, la mise en place de l'immunohistochimie avec la réalisation du premier atelier d'immunohistochimie du Sénégal (Mars 2021) dans le cadre de l'Université en lien avec l'Hôpital principal de Dakar.

iv) CONCLUSION: l'expérience de cette première phase montre la faisabilité de cette organisation sous forme de Fédération justifiant la poursuite de la mise en place des techniques complémentaires comme la cytogénétique (caryotypes et FISH) et la biologie moléculaire pour la recherche de transcrits nécessaires à l'établissement d'un diagnostic précis selon les critères de l'OMS. De plus, l'ouverture du CRDCE de Dakar pour l'ensemble du Sénégal, la sous-région d'Afrique de l'Ouest, les structures d'oncologie pédiatriques d'Afrique francophone et des connexions avec l'Afrique anglophone (Ghana) est un des buts de ce Centre

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ESSENTIAL MEDICINES FOR CHILDREN – THE GHANA EXPERIENCE

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PAEDIATRIC CANCER, STREAM 3, November 8, 2021, 1:00 PM - 2:45 PM

Information on context-specific challenges with regards to access to essential medicines for children with cancer is important as this would determine strategies to improve outcomes for children with cancer in low and low-middle income countries such as Ghana.

A mixed methods study with quantitative assessment of drug availability and qualitative interviews to document health system and sociopolitical determinants of access was undertaken in Accra, Ghana. Forty-one cancer and supportive care drugs from the WHO Essential Medicines list were analyzed for price and stock data from both private and public institutions. Policy documents were assessed and 21 interviews conducted with key health system stakeholders.

Only 47% of essential childhood cancer drugs were included in the National Essential Medicines List. Stock-outs were recorded for 88% of the drugs with a median stock-out duration of 70 days. Median price ratios for 32% of the drugs were above internationally-accepted efficiency limits. Determinants of access included a lack of sociopolitical priority for childhood cancer and the effects of policy and regulatory environment on availability, affordability and quality of the drugs.

The setting up of a National Cancer Registry, a nationally coordinated procurement strategy for childhood cancer drugs, public financing for childhood cancer services and policies to control drug pricing are of paramount importance. An understanding of system level impediments in-country is critical to inform strategies that will improve drug access.

CLINICOPATHOLOGY AND TREATMENT PATTERNS OF HEAD AND NECK CANCERS IN ETHIOPIA

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Background: Head and neck cancer is one of the most common cancers worldwide and its incidence is reported to be increasing both in developed and developing countries. Head and neck cancer incidence in Ethiopia was estimated to be 47,311 cases in 2020 but likely under reported. There is a lack of published data on clinicopathology and treatment patterns of head and neck cancers in Ethiopia.

OBJECTIVE: To assess clinicopathology and treatment patterns of head and neck cancers at Tikur Anbessa Specialized Hospital, Radiotherapy Center, Ethiopia

METHODS: A retrospective cross-sectional study design with a simple random sampling technique of histopathologically confirmed head and neck cancers treated from 2014 to 2017 with analysis of descriptive data.

RESULTS: Four hundred twenty patient charts were analyzed in this study. The male to female ratio was 2:1. Median age was 45 years (IQR 26-59). The most common primary site of head and neck cancers was pharynx (n=156/422, 37%) and the major histologic type was squamous cell carcinoma (n=330/422, 78%). Majority of the cases had advanced disease at diagnosis (stage III to IVB) 241/310, 78%. Only small number of patients received concurrent chemoradiation (n=29/422, 7%). There was long duration between diagnosis and initiation of treatment; <3 months, n=109/323, 34%; 3-6 months, n=82/323, 25%; 6-12 months, n=71/323, 22%; >12 months, n=61/323, 19%.

CONCLUSIONS: This study showed that most of the patients with head and neck cancers presented at advanced stage of the disease and waited over 3 months to start treatment. Education strategies should be focused on health care providers and the general population in Ethiopia to increase awareness and early detection of head and neck cancer and well as priority to increase treatment capacity to reduce wait times. Further studies are very important on head and neck cancers to optimize treatment outcomes in low capacity settings.

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LA GESTION DE LA LEUCÉMIE AIGUE MYÉLOÏDE DANS L'ÈRE DU COVID :

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Introduction :
L'infection par le Coronavirus constitue actuellement un problème de santé public sur l'échelle international , les patients atteints d'hémopathies malignes ont été également touché par cette pandémie et cela a eu un impact sur leurs prise en charge thérapeutique .
L'objectif du travail : est de décrire les caractéristiques et les résultats des patients atteints de leucémie myéloïde aiguë (LAM) diagnostiqués avec une infection au covid 19 dans les différents phases de la maladie.
Matériel et méthode : Étude descriptive rétrospective sur une période de 12 mois incluant les malades suivis pour une LAM ayant une infection concomitante par le Coronavirus
Résultat :
Un total de 16 patients infectés par COVID-19 atteints de LAM ont été inclus; 4 (25%) patients étaient de sexe masculin. L'âge médian était de 37 ans. 7 patients avaient une LAM groupe favorable, 7 groupe intermédiaire et 2 groupe défavorable . Aucun cas de syndrome hémorragique n' a été observé et un seul patient a développé une thrombose veineuse profonde en J20 de l'infection . le traitement de la LAM a été reporté chez 11 patients. 4 patients ont eu une infection par le SRAS-COV2 après avoir reçu une chimiothérapie myélosuppressive intensive. 2 patients ont eu un syndrome de détresse respiratoire aigu nécessitant une prise en charge en milieu de réanimation et un seul patient est décédé par un choc septique .
Conclusion :
Les patients atteints de LAM peuvent présenter des résultats favorables de l'infection au COVID 19 même lorsqu'ils sont traités par chimiothérapie intensive. nous avons besoin de plus d'études pour mieux comprendre les différents aspects de ce microorganisme et son impact sur la prise en charge de ces patients.

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LA LEUCÉMIE AIGUE MYÉLOÏDE CHEZ LE SUJET ÂGÉ : ÉTUDE DESCRIPTIVE ET RÉSULTATS THÉRAPEUTIQUES

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Introduction :
La LAM survient dans plus de 50 % des cas chez le sujet de plus de 60 ans . Le traitement de la LAM du sujet âgée est compliqué par les comorbidités.
Objectif de l'étude : optimiser la prise en charge des leucémies aigues myéloblastiques du sujet âgé .
Matériel et méthodes : étude rétrospective descriptive incluant tous les patients de plus de 60 ans suivis pour une Leucémie Aiguë Myéloblastique durant une période de 15 ans Résultats :
Ont été inclus 217 patients , l'âge médian au diagnostic était de 69.5 ans [61-87] avec une prédominance masculine de 51%. Les syndromes anémique, hémorragique et infectieux ont été notés respectivement dans 91%, 24% et 32% des patients. Un PS<2 était présent chez 35% des patients . le score de Charlson pondéré à l'âge est à 2 chez 31% des patients, à 3 chez 28% des patients, et >3 chez 39% des patients. Une leucocytose > 100000/ 〚mm〛 ^3 a été retrouvé dans 52% des cas. Le caryotype a été réalisé chez 51% des cas dont 5% étaient de pronostic favorable, 70% de pronostic intermédiaire, et 25% de pronostic défavorable.La prise en charge thérapeutique a été faite chez 189 patients, 20 patients (9%) ont bénéficié d'une chimiothérapie standard, 118 patients (54%) ont suivi un traitement par une chimiothérapie palliative et 47 patients (22%) ont reçu un traitement symptomatique. Pour les patients traités par chimiothérapie standard, 7 patients (3%) étaient en RC après l'induction I et 13 (6%) étaient en échec thérapeutique. La survie globale à six mois était de 21%, Le taux de décès était de 34%.
Conclusion :
le pronostic du LAM chez le sujet âgé reste sombre avec des résultats décevant , des efforts sont nécessaires pour améliorer la survie et la qualité de vie .

LE PROFIL ÉPIDÉMIOLOGIQUE DES LEUCÉMIES AIGUES MYÉLOÏDES : EXPÉRIENCE DU SERVICE D'HÉMATOLOGIE DE CASABLANCA

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Introduction :
La LAM représente 1% des cancers et 80% des LA de l'adulte avec une incidence qui augmente avec l'âge. Elle est caractérisée par une hétérogénéité clinique cytologique et cytogénétique.
L'objectif de notre étude est de décrire les caractéristiques épidémiologiques, clinico-biologiques et cytogénétiques.
Patients et méthodes : étude rétrospective descriptive sur 4ans incluant les patients de plus de 18 ans suivie pour LAM de NOVO, ont été exclus les LA bi phénotypiques et les LAM secondaires et les PDV au diagnostic
Résultats : 309 patients de plus de 18 ans ont été inclus ce qui correspond à une incidence annuelle de 77. L'étude a colligé 309 patients. L'âge médian était de 43 ans avec un sex-ratio à 0.98. Le tabagisme chronique a été retrouvé chez 17.4 % des cas.Le syndrome anémique était le mode de révélation le plus fréquent chez 80% des patients .l'atteinte extra-médullaire a été noté chez 3 malades. Une hyperleucocytose>100 000 a été retrouvée chez 15% des cas, une blastose périphérique chez 61%. L'analyse cytogénétique a été réalisée chez 261 patients et a permis de classer les malades en groupe favorable, intermédiaire et défavorable chez respectivement 21%, 58.6% et 20.3% des cas. L'anomalie la plus récurrente était la t (15,17) retrouvée chez 9.2%. L'étude de biologie moléculaire a été réalisée chez 15.2% de nos patients et a permis le changement du groupe pronostic chez 11 patients.
Conclusion : La leucémie myéloïde aiguë est une hémopathie sévère avec un risque élevé de rechute et un taux de mortalité élevé. Sa prise en charge diagnostique et thérapeutique nécessite une collaboration pluridisciplinaire. De nombreux efforts sont donc nécessaires pour améliorer notre panel diagnostic pour optimiser la prise en charge thérapeutique

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SWAHILI TRANSLATION AND CULTURAL ADAPTATION OF THE PEDIATRIC PATIENT-REPORTED OUTCOME VERSION OF THE COMMON TERMINOLOGY CRITERIA FOR ADVERSE EVENTS

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Objective: A pediatric version of the adult patient reported outcome adverse event survey (PRO-CTCAE) was developed and validated for use in pediatric cancer clinical trials to better capture the symptom experiences through direct self-report. The aim of this study was to develop a Swahili language version of the Pediatric PRO-CTCAE.

Methods: The survey was translated into Swahili using mixed qualitative and quantitative methods. A total of 15 core symptomatic AEs and 38 assessment questions were selected from the Pediatric PRO-CTCAE library for both patient and parent proxy use, then forward and back translated into Swahili. The translated survey was further refined using the concurrent cognitive interview technique. Each round of interviews included five children, ages 8-17 years-old, receiving cancer therapy at Bugando Medical Centre, the cancer referral hospital for Northwest Tanzania, and continued until >80% concordance reached.

Results: Three rounds of revisions were completed involving 13 patients. A total of 50% of questions (19/38) were fully comprehended after the initial evaluation. After three rounds of interviews, all questions obtained at least 80% comprehension with no further revisions required. Two AEs (peripheral neuropathy and anxiety) were the most difficult for patients to understand, correlating with education level and experience.

Conclusions: A Swahili Pediatric PRO-CTCAE was effective in eliciting patient reported outcomes related to cancer treatment, with good comprehension for children aged 9 to 17. This survey is important to incorporate patient self-reporting of symptomatic toxicities and is an effective tool to increase capacity for pediatric cancer clinical trials throughout East Africa, further reducing global disparities in cancer care.

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THE ECONOMICS OF TOBACCO CONTROL IN AFRICA

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DAY 4 | PLENARY (2), November 8, 2021, 6:00 PM - 7:00 PM

Smoking prevalence in Africa is generally low but rising. The WHO estimates that the number of tobacco-attributable deaths on the continent will double by 2030. Given the state of the smoking epidemic, focusing on prevalence (as opposed to cessation) is the most effective way to avoid these deaths and the associated costs. The societal costs of smoking are already very high, especially in countries with higher smoking prevalence such as South Africa.

Evidence based tobacco tax policy is the most effective and cost-effective measure to prevent tobacco use and improve health outcomes, especially among youth, while also raising government revenues. However, African countries lag behind in implementing strong tobacco tax policies. African countries need to pay attention not only to the excise tax level, but also to the excise tax structure. Many African countries have an inferior ad valorem excise tax regime and wrong base.

The tobacco industry often exaggerates the potential impacts of higher tobacco taxes, and especially their link to smuggling. However, investigations have revealed that major tobacco companies have benefited from and been directly involved in fuelling the illicit tobacco trade.

Nevertheless, tax evasion from cigarette sale in Africa is tiny compared to other tax evasion. Empirical evidence demonstrates that governments can raise tobacco taxes and gain health and economic benefits from these higher taxes even in the presence of illicit trade. Government efforts to improve tax administration and implementing and enforcing strong measures to control illicit tobacco trade will further increase the impact of higher taxes on health and revenue.

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GENOMIC ATLAS OF CANCERS IN AFRICA

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Objective:
Genomic approaches, particularly next-generation sequencing (NGS), are transforming our approach to the diagnosis and management of cancer, but it remains complex and expensive. NGS requires a sequencer and computing infrastructure, as well as a cadre of trained professionals including clinicians, pathologists, and bioinformaticians.

For these reasons, the application of NGS in Africa has been limited. Further, cancers in Africa have been poorly characterized with relatively few studies led by investigators based on the continent.

Our goal is to develop a deeper understanding of cancers in Africa by building local capacity and expertise.

Methods:
We developed the Genomic Atlas of Cancers in Africa project with two main goals:
1. Understand the genomic landscape of cancers in Africa.
2. Develop local capacity and expertise by training a cadre of scientists, clinicians, and pathologists.

The project will be conducted in two stages: First, we will profile 3000 archival tumors that span the spectrum of cancers in Africa. All cases will be subjected to whole exome and whole transcriptome sequencing using NGS assays specifically designed to work with formalin-fixed tissues. Second, we will use the assays, equipment, and bioinformatics approaches developed in Stage 1 at institutions in Africa to enable genomics in a clinical setting.

Each collaborating group will contribute cases across all cancers and develop a project focused on a cancer of interest. Our group will provide the resources for sequencing and training of the next generation of clinicians, pathologists and bioinformaticians in Africa.

Results:
To date, 11 institutions across Africa are participating in the project and the collection of cases has already commenced. Early results demonstrate the feasibility of the project.

Conclusion:
All researchers in Africa are welcome to join the effort. Please contact us if you want to collaborate or want to learn more: caroline.j.roth@duke.edu

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CHALLENGES IN THE MANAGEMENT OF HAEMATOLOGICAL MALIGNANCIES IN LMICS: LYMPHOPROLIFERATIVE DISORDERS (LPDS) INCLUDING LYMPHOMAS AND MYELOMA

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SPECIAL INTEREST GROUP: AORTICHORG (HAEMATOLOGY ONCOLOGY RESEARCH GROUP), STREAM 2, November 6, 2021, 12:00 PM - 2:00 PM

Advances in treatment of LPDs has lead the way for cancer therapy since development of methotrexate in childhood ALL in late-1940s and MOPP in Hodgkin's lymphoma (HL) in mid-1960s. Targeted therapies, especially monoclonal antibodies and small molecule kinase inhibitors, have revolutionised cancer treatment this century, but with enormous costs, unaffordable in most LMICs. Major advances, especially rituximab, which has radically changed the management of B-cell NHLs, from CLL/SLL to DLBCL, in the last 20 years, remains unaffordable in many LMICs. Approvals of newer monoclonals, further enhancing therapy of LPDs, including brentuximab and anti-PD1 immunotherapy in HL, daratumumab in myeloma and more recently anti-CD19 and anti-BCMA bispecific T-cell enhancers (BiTEs) and CAR-T-cells, are very exciting, but unaffordable in almost all LMICs.

Lack of access to vital treatments is not confined to novel immunotherapies but also involves old, previously cheap medicines, that have seen either massive price increases or "abandonment" by pharmaceutical companies. Thalidomide, developed in 1930s, later banned due to serious foetal abnormalities, was shown to be active in myeloma in 1990s. Instead of this breakthrough helping patients, thalidomide was bought by a single company with skyrocketing prices. Safer and better analogues, especially lenalidomide, are even more expensive, further restricting access in LMICS. Access to L-asparaginase, a mainstay in childhood ALL since 1960s, is becoming difficult due to limited profit margins.

The addition of rituximab to WHO EML in 2015 and by individual country EMLs, plus indications outside oncology, have improved access, although costs still remain high. Biosimilars and generics are now helping drive down prices and improve access but we still have a long way to go. Radical changes in access to all cancer therapies in LMICs is essential. We are unfortunately seeing a worldwide increase in more and more novel treatments for less and less people.

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CANCER RISK AMONG ADOLESCENTS AND YOUNG ADULTS LIVING WITH THE HUMAN IMMUNODEFICIENCY VIRUS IN SOUTH AFRICA

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"A paper containing the results of this research has been accepted for publication in The Lancet HIV and may have already been published at the time of the AORTIC 2021 Virtual Conference."

OBJECTIVE: To study the incidence of and risk factors for various cancers in adolescents and young adults living with HIV (AYALWH) in South Africa (2004 to 2014), a group known to have poor adherence to antiretroviral therapy.
METHODS: We included individuals aged 15 to 24 years from the South African HIV Cancer Match study (doi:10.31219/osf.io/w52sb), a large cohort resulting from a linkage between HIV-related laboratory results from the National Health Laboratory Services and cancer records from the National Cancer Registry. We computed incidence rates for the most common cancers. We assessed associations between these cancers and sex, age, calendar year, and CD4 cell count at HIV diagnosis using Cox proportional hazards models. We report adjusted hazard ratios (aHR).
RESULTS: Of 782,454 AYALWH, 867 developed cancer over 1,428,114 person-years (incidence rate: 61/100,000 person-years), including 429 who developed Kaposi sarcoma (30/100,000 person-years), 107 non-Hodgkin lymphoma (7.5/100,000 person-years), 48 Hodgkin lymphoma (3.4/100,000 person-years), 45 cervical cancer (3.4/100,000 woman-years), and 32 leukaemia (2.2/100,000 person-years). Kaposi sarcoma was more common in the 20-24 age group than the 15-19 age group (aHR 1.39, 95% CI 1.03-1.86). Male sex was associated with higher rates of Kaposi sarcoma (aHR 2.06, 95% CI 1.61-2.63), Non-Hodgkin lymphoma (aHR 3.17, 95% CI 2.06-4.89), Hodgkin lymphoma (aHR 4.83, 95% 2.61-8.93), and leukaemia (aHR 5.90, 95% CI 2.87-12.1). Rates of Kaposi sarcoma decreased over the study period. Lower CD4 cell counts at HIV diagnosis were associated with higher rates of Kaposi sarcoma, cervical cancer, non-Hodgkin and Hodgkin lymphoma, but not with higher rates of leukaemia.
CONCLUSIONS: Infection-related cancers are the most common cancers among AYALWH in South Africa, and they occur more frequently in individuals with lower CD4 cell counts. These cancers' burden may be reduced through targeted HIV testing, early initiation of antiretroviral therapy, improvement of treatment adherence, and human papillomavirus vaccination.

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UNDERSTANDING WOMEN'S EXPERIENCES NAVIGATING A BREAST CANCER EARLY DETECTION PROGRAM IN 2 RURAL DISTRICTS OF RWANDA

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OBJECTIVE: In 2017, Rwanda launched a Women's Cancer Early Detection Program (WCEDP) which offered clinical breast exam (CBE) at rural primary healthcare centers (HCs) to women receiving cervical cancer screening and/or women with breast concerns. We sought to understand women's experiences as they progressed along the breast cancer diagnostic pathway.

METHODS: Using purposeful sampling we selected 30 women (15 from Rwamagana and 15 from Rubavu) with varied CBE findings and recommendations. We conducted semi-structured interviews and analyzed findings using iterative thematic analysis. We also gathered quantitative data on financial costs and facility wait times.

RESULTS: Six women were <30 years old, 10 were 30-50 and 14 were >50. Eight were only evaluated at the HC , 22 were referred to the district hospital (DH) and 8 were ultimately diagnosed with breast cancer at the referral hospital (RH). At HCs, most patients felt they received adequate information on their diagnosis and next steps and were appropriately connected to DH services. At DHs, most patients reported limited understanding of providers' recommendations and next steps. At the RH, patients' transportation costs (median 19 USD round-trip) were 3-4 times higher than healthcare costs and 6-15 times higher than transport to the DH. Average wait time at HCs, DHs, and RHs were 1.5-2, 3, and 4-6 hours respectively. Most patients worried about transportation costs and their ability to navigate the referral system.

CONCLUSIONS: Women described declining understanding of provider recommendations as they went to higher levels of care for breast cancer evaluation. Average wait times were longer, and direct and indirect healthcare costs were high, with associated anxiety. These challenges likely contribute to patient attrition and could impede successful success of early detection efforts in Rwanda. Efforts are needed to improve patient experience and reduce the financial and psychosocial burden of breast cancer diagnosis.

ONCOLOGY PHARMACIST MENTORSHIP, A MODEL FOR TRAINING AND CONTINUED MENTORSHIP TO PHARMACISTS AND PHARMACEUTICAL TECHNOLOGISTS IN RESOURCE CONSTRAINED SETTINGS

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Objective
Cancer is the third leading cause of death according to the Kenya cancer policy reports. The incidences have increased from 37,000 cases to 47,887 from 2012 through 2018.Despite the increasing burden and mushrooming oncology centers, there is paucity of specialized oncology programs to upskill the pharmacists and pharmaceutical technologists to cater for the unmet need in Kenya. We aim to evaluate the oncology mentorship model used in upskilling pharmacists and pharmaceutical technologists in resource limited setting s in Kenya.

Methods
A three to four months short oncology course was developed by the International Cancer Institute (ICI), for pharmaceutical technologist and pharmacist between centers with trained oncology pharmacists and counties that are setting up oncology units. Moreover, the monitoring and evaluation team supported the training with tools, including sending the pharmacist to oncology centers for further in-job training and mentorship for six months.

Results
A total of 10(56%) pharmacists and 8(44%) pharmaceutical technologists, 11(61%) male and 7(39%) female from 15 counties in Kenya have been trained.

Conclusion
Oncology pharmacy short courses and Capacity building through on job training and mentorship by the specialized Oncology pharmacist to pharmacists and pharmaceutical technologists   has shown improved and access to oncology care in low middle-income resource settings over a shorter duration of time.

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ESTABLISHING A MULTI-DISCIPLINARY BREAST CANCER CLINIC (MBC) TO PROMOTE BEST PRACTICE IN BREAST CANCER CARE:

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Objective:
Tumor boards provide a multi-disciplinary, peer and data-driven approach to the management of complex cancer cases. What is often lost is the patient's input on their management and overall multidisciplinary care plan. At the Aga Khan University Hospital Nairobi (AKUHN), we instituted a Multi-disciplinary Breast Cancer Clinic (MBC) specifically dedicated to newly diagnosed breast cancer patients whereby each patient's case is discussed at the breast tumor board (BTB) followed by a face to face MBC session with all treating consultants. We provide our MBC experience over the first 9 months amid the Covid pandemic.

Methods:
Starting July 2020 all patients with confirmed newly diagnosed breast cancer were discussed at the BTB followed by an in-person MBC session where the patient was interviewed, examined, and the case presented to the team by a lead oncologist. This was followed by face to face discussion of the consensus treatment plan with the patient and family. MBC team included RN coordinator, medical oncologist, radiation oncologist, and breast surgeon.

Results:
A total of 71 patients were seen between July - Mar 2021. This was > 90% of all patients diagnosed with breast cancer at AKUHN during this period amid Covid 19 pandemic-related restrictions. Initial clinical staging is available for 65 patients (stage 1: 23%, stage II: 54%, stage III: 10%, stage IV: 12%).

All patients were accompanied by family members who were present during the discussion with the entire MBC team. MBC discussion resulted in the adjustment of the treatment plan based upon input/preference from the patient in approx. 10% of cases. Only 2 patients were lost to follow-up and the remaining followed the outlined treatment plan. Approx. 1/5 women requested psychosocial counseling, and 10% requested nutritional counseling following MBC. 10% of patients had additional interventions performed as a result of MBC discussion e.g. genetic testing/counseling, Oncotype Dx. etc. 100% of patients/family members expressed a positive response to the MBC session, and a majority expressed a better understanding of their total breast cancer care plan following MBC.

Conclusion:
MBC provides an important patient-centered approach to multi-disciplinary care and treatment planning above and beyond BTB. This platform allows for patient's input and buy-in for the entire plan of care. Since the process is real-time, the MBC will also allow us to maximize enrollment of patients onto available neo-adjuvant and adjuvant trials which can be proposed at the time of MBC.

CARACTERISATION PHENOTYPIQUE DES LEUCEMIES ET LYMPHOMES AU SENEGAL

Sall A[1], Sene A[1], Ndour M[1], Raphaël M[2], Touré A[1]
[1]Hôpital Dalal Jamm, [2]Université Paris Sarclay

Introduction
L'introduction de l'immunophénotypage par la cytométrie en flux, depuis quelques années au Sénégal, constitue un apport certain dans la précision diagnostique des néoplasies hématologiques.

Matériels et Méthodes
Il s'agit d'une étude rétrospective regroupant toutes les suspicions de Leucémie/Lymphome, adressées dans notre structure pour immunophénotypage. Grâce à une fiche d'enquête, nous avons précisé pour chaque patient, l'âge, le sexe, l'origine géographique, des facteurs étiologiques, alors que les données cliniques ont été fournies par les médecins traitants.
Les paramètres hématologiques étudiés étaient l'hémogramme (XT 2000i, Laboratoires Sysmex Japon), le myélogramme avec coloration cytochimique à la myéloperoxydase ainsi que la cytométrie en flux (FacsCalibur et FacsLyric, Becton Dickinson, USA).
Les données ont été saisies et analysées avec le logiciel R.

Résultats
L'immunophénotypage a été réalisée chez 124 patients
Les patients atteints de leucémies aiguës (LA), étaient au nombre de 61 (31 adultes et 30 enfants). L'âge moyen des enfants était de 11,5 ans [1-15 ans] avec un sex rario de 1,7. La cytologie et la cytochimie ont permis de noter selon la classification FAB, 13 cas de LAM et 17 cas de LAL. L'immunophénotypage a permis de préciser la lignée en cas de LAL (16 LAL-B dont 8 pré-B et 8 pro-B et 1 cas de LAL-T mature). Chez les adultes, l'âge moyen était de 43 ans [19-78 ans] avec un sex ratio de 1,21. La LAM était majoritaire avec 68%. La LAL était présente dans 9 cas (5 LAL-B et 4 LAL-T cortical) et il y avait 1 cas de LA de phénotype mixte avec MPO+, CD19+ et CD79a+.
Le score de Matutes a permis le diagnostic 42 patients avec leucémie lymphoïde chronique. Les marqueurs CD11c, CD25 et CD103 ont permis de discriminer lymphocytes villeux des tricholeucocytes. Les syndromes lymphoprolifératifs T étaient marqués par 6 cas de syndrome de Sézary (CD4/CD8>10, CD26-), 6 cas de leucémie/lymphome T de l'adulte (perte CD7 et CD25+) et 3 cas de leucémie prolymphocytaire T.

Conclusion
L'immunophénotypage, outil important dans le diagnostic comme le suivi de certaines hémopathies malignes, est maintenant intégré dans notre routine. La prochaine étape serait la mise en place de la cytogénétique et de la biologie moléculaire afin d'affiner encore le diagnostic de nos patients et de respecter les recommandations de l'OMS.

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PHENOMENE D'ENTOSE AU COURS D'UNE LEUCEMIE AIGUE MONOBLASTIQUE

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L'entose est l'internalisation d'une cellule vivante par une autre cellule du même type. À la suite de leur intrusion dans la cellule hôte, les cellules internalisées sont encapsulées dans une vacuole et sont généralement dégradées par des enzymes d'origine lysosomale. C'est un phénomène surtout décrit dans les tumeurs solides et est associé à un mauvais pronostic.
Nous décrivons ce phénomène d'entose au cours d'une LAM5.

Il s'agissait d'une patiente 16 ans, adressée dans notre hôpital pour asthénie profonde et gêne à l'alimentation évoluant depuis 2 semaines. L'examen physique révélait une pâleur et une hypertrophie gingivale importantes. Il n'y avait ni adénopathies ni hépato splénomégalie.
L'hémogramme révélait une anémie arégénérative à 7 g/dl, une thrombopénie à 80 G/L et une hyperleucocytose (72 G/L) faite majoritairement de cellules de la lignée monocytaire. On notait une augmentation de l'uricémie (2N) et des LDH (2N).
Le myélogramme montrait une moelle riche avec de rares mégacaryocytes et envahie par une population majoritairement monocytoïde (monoblastes 62% et promonocytes 11%) associée à la présence quelques myéloblastes (7%). La cytologie médullaire révélait par ailleurs la présente de monoblastes dans des monoblastes (phénomène d'entose). Les cellules internalisées étaient intactes, entourées souvent d'un halo clair. La cytochimie à la myéloperoxydase était faiblement positive que dans de rares cellules.
A l'immunophénotypage, les blastes étaient CD34+ et HLA DR+. On retrouvait la positivité des marqueurs myéloïdes CD33 et CD117 et ceux monocytaires avec les CD64 et CD14. La cytogénétique ainsi que la biologie moléculaire n'étaient pas disponibles.

Le phénomène d'entose est peu décrit dans les tumeurs du sang. Ce phénomène devrait être mieux étudié au cours des leucémies afin de déterminer son impact sur la croissance des cellules blastiques.

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MYCOPLASMA CO-INFECTION ASSOCIATED CERVICAL INTRAEPITHELIAL NEOPLASIA

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Cervical cancer is still the highest burden in Tanzania. In this study we found the bacterial family Mycoplasmataceae is associated with higher levels of human papillomavirus (HPV), human immunodeficiency virus (HIV), and pre-cancerous cervical lesions.

Objectives: Mycoplasmataceae infection in Tanzania is not well understood, especially when considering the differences between sexually transmitted species of Mycoplasmataceae.

Methodology: To establish the prevalence of common Mycoplasmataceae cervical infections and evaluate their relationship with risk factors for cervical cancer, 1160 Tanzanian women responded to an epidemiological questionnaire and were tested for HIV, HPV, cervical lesions, Mycoplasma genitalium, Mycoplasma hominis, Ureaplasma spp., and Lactobacillus iners.

Results: A total of 134 women were used for 16s metagenomic sequencing of cervical DNA to establish the relative abundance of Mycoplasmataceae and Lactobacillus present. PCR detection of bacteria at the cervix found Ureaplasma spp. in 51.4% of women, M. hominis in 34%, M. genitalium in 2.3%, and L. iners in 75.6%. M. hominis and M. genitalium infection were significantly more prevalent among women with HPV and HIV. M. hominis prevalence was similar despite severity of cervical lesions; however, an abundance of M. hominis increased significantly in women with cervical lesions.

Conculusion: Further studies should be done to understand the relationship between M. hominis and HPV-related cervical pathogenesis. Management of STIs should be integrated with cervical cancer screening to reduce the observed bacteria infection among these women population

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REINVENTING CANCER CARE IN AFRICA THROUGH PARTNERSHIPS

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REINVENTING CANCER CARE IN AFRICA THROUGH PARTNERSHIPS Brought to you by C/CAN, STREAM 3, November 9, 2021, 11:00 AM - 12:00 PM

ASCO has been involved with City Cancer Challenge (C/Can) as a technical and implementation partner since the organization was formed in 2017. ASCO is committed to working with C/Can to further its mission of supporting cities around the world through improved access to equitable, high-quality cancer care. Before the pandemic, ASCO was in discussions with colleagues from both Kumasi, Ghana and Kigali, Rwanda to host in-person multidisciplinary educational events and guidelines discussions. However, once it became clear that the pandemic would be with us for some time, a virtual program was created. The oncology community in Kumasi developed breast and cervical cancer treatment guidelines based on their available resources and health systems structure. Then ASCO convened expert panel reviews, together with input from several institutions and organizations, to provide international expert consultations of the guidelines. Final guidelines were developed over the course of three months and are now being implemented and tested throughout the city of Kumasi. To further support and continue the work done through the guidelines discussion, ASCO organized 12 virtual educational sessions including didactic presentations on breast and cervical cancer, as well as local case presentations from Kumasi colleagues. Vanessa Sarchet will provide an overview of these activities as well as an update related to the guidelines implementation and use. She will share data on attendee feedback on the virtual educational sessions and plans for continued collaboration. She will comment on the opportunities (and sometimes challenges) presented through ASCO's multi-partner collaborations and activities with C/Can. If time allows, she will also share information about other opportunities with ASCO for C/Can participants, including professional development, research and training opportunities.

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BODY IMAGE PERCEPTION AND COPING MECHANISMS OF BREAST CANCER PATIENTS ACCESSING CARE AT A TERTIARY HOSPITAL, SOUTH WEST NIGERIA

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Objective: Breast cancer poses serious psychosocial challenges among women diagnosed in resource limited settings like Nigeria. Women with breast cancer often experience changes in bodily appearance and other concerns around sexual function, which may result to negative body image perception and compromised coping mechanism. This is aimed at assessing the body image perception and determining coping mechanisms used by women living with breast cancer in an institutional hospital-based setting.
Methods: This was a cross-sectional study of women living with breast cancer and assessing care at the Radiation Oncology Department, University College Hospital (UCH) Ibadan. A total of 159 women who were 18years and above with a confirmed histologic diagnosis of breast cancer and have accessed care for at least 12 months in the facility were recruited with a systematic random sampling technique. Data was collected with a self-developed socio-demographics instrument, a 10-item scale developed by Hopwood et al for body-image perception assessment which was revalidated for cultural sensitivity and the Brief Cope by Carver et al was used to assess coping mechanism. Data was analyzed using SPSS v22. All analysis was carried out at 5% level of significance. Ethical approval for study was obtained from the UI/UCH institutional Review Committee with number: UI/EC/190195.
Results: It was observed that 62.75% of the women were aged above 40 years, with majority married (80.63%). Majority of the women had been diagnosed with breast cancer for more than 3 years (74.38%), while 84.38% had been on treatment for less than 3 years. Low body image perception was observed in 62.5%, while the highest mean scores were recorded in the religion, active coping and using instrumental support subscales of coping mechanism method. Acceptance, religion, behavioural disengagement and self-blame were significantly associated with body image perception; however, women with increasing symptoms reported a significantly higher mean body image perception than those who reported low symptoms ($p < 0.05$).
Conclusion: This study revealed religion and active coping, as the most preferred coping mechanisms used by the breast cancer patients and the likelihood of maintaining positive body image perception after initial diagnosis and subsequent treatment for breast cancer.

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EARLY DIAGNOSIS OF LYMPHOMA IN CHILDREN AND YOUNG ADULTS IN SUB-SAHARAN AFRICA

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LYMPHOMA, STREAM 2, November 7, 2021, 12:30 PM - 1:45 PM

Infections from Epstein-Barr virus (EBV), malaria and HIV can all contribute to causing childhood lymphoma in sub-Saharan Africa, in particular Burkitt's Lymphoma (BL), Hodgkin's lymphoma and diffuse large B-cell lymphoma. The treatment is widely available and free-of-charge in most sub-Saharan countries. However, currently, the majority of children either remain undiagnosed, present late to hospital, or are diagnosed late while in hospital. Alongside raising cancer awareness, strengthening histopathology services in three referral hospitals and performing health-economic analyses of different diagnostic approaches, a multidisciplinary team of researchers based in Oxford, Tanzania and Uganda with mentorship from Prof Anna Schuh have developed a method to identify children presenting with suspected lymphoma using DNA analysis from liquid biopsies, a simple blood test that measures circulating tumour DNA (ctDNA) to make the diagnosis of cancer specifically for the EBV-related lymphomas in sub-Saharan Africa. Plans to use liquid biopsies for other cancer screenings across Africa in the future are part of the programme's sustainability plan.

In close collaboration with the Muhimbili University of Health and Allied Sciences (MUHAS), the team has equipped a DNA laboratory for local DNA sequencing, cloud-based data analysis and clinical data collection. Efforts are underway to build additional capacity for a DNA sequencing laboratory in Uganda, in partnership with the Ugandan Central Public Health Laboratory. The programme not only contributes to building in-country capacity to analyse ctDNA, but also helps create capacity for other genomic research and diagnostics for example of infectious or inherited diseases.

Prof Schuh will present a summary of the programme including preliminary data on the first 160 children recruited.

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ACCESS TO RADIOTHERAPY IN GHANA: A GEOSPATIAL ANALYSIS

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[3]International Atomic Energy Agency, Vienna, , [4]Department of Radiation Oncology, University of Toronto, Toronto,

BEST OF THE BEST ABSTRACTS (4), STREAM 2, November 9, 2021, 6:30 PM - 7:30 PM

OBJECTIVE:
Radiotherapy (RT) is a crucial component of comprehensive cancer care, but there are large global gaps in access. Within Ghana, a West African country with a population of 31 million people, there are only 3 RT centres with 5 external-beam (EBRT) and 2 high-dose rate (HDR) brachytherapy (BT) machines located in 2 cities in the south. This study aims to describe the gaps in RT capacity and geographic accessibility.

METHODS:
A retrospective review of data from all RT centres in Ghana was done to determine the number of RT courses, EBRT fractions, and BT insertions delivered annually between 2018-2020. The additional RT capacity required for optimal utilization was estimated from GLOBOCAN 2020 cancer registry data and the Collaboration for Cancer Outcomes Research and Evaluation radiotherapy utilization rate (RUR) model for all cancers. Geospatial modeling was used to calculate the distances that patients currently need to travel to access RT, and how access would be improved with new RT centres strategically located throughout the country.

RESULTS:
In 2020, Ghana delivered 1,794 RT courses and 34,624 EBRT fractions for all cancers, and performed 497 HDR BT insertions for cervical cancer (the 2nd most common cancer in the country). Based on a RUR of 48%, an additional 9,730 RT courses, 188,948 EBRT fractions and 4,538 HDR BT insertions are required. This translates to 5 additional RT centers, each with 4 EBRT units and 1 HDR BT afterloader.

Based on the current capacity and distribution of RT centres, patients have a median one-way travel distance from their regional capital to the nearest RT centre of 157 km, with 54% of patients traveling less than 100 km, 15% traveling 100-150 km, 9% traveling 150-200 km, and 22% traveling more than 200 km. The North East, Upper East, and Upper West regions have the longest travel distances of 424 km, 533 km, and 439 km, respectively. Establishing a third RT centre in Tamale in northern Ghana would decrease median one-way travel distance from their regional capital to the nearest RT to 145.5 km, and the proportion of the population with a travel distance of over 200 km to 4%. Optimization of the location of other new centres is needed to further reduce the travel distances.

CONCLUSIONS:
Ghana has a major national deficit of RT capacity, with significant geographic disparities among regions. Well-planned infrastructure scale-up that accounts for the population distribution can improve RT accessibility.

DEMOGRAPHIC, CLINICAL AND PATHOLOGICAL CHARACTERISATION OF PATIENTS WITH COLORECTAL AND ANAL CANCER FOLLOWED BETWEEN 2013 AND 2016 AT MAPUTO CENTRAL HOSPITAL, MOZAMBIQUE

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[1]Maputo Central Hospital, [2]Maputo Central Hospital, [3]Maputo Central Hospital, [4]Maputo Central Hospital, [5]Maputo Central Hospital, [6]Maputo Central Hospital, [7]University of Eduardo Mondlane,, [8]Portuguese Institute of oncology, [9]University of Porto, [10]Portuguese Institute of oncology

Purpose: The aim of this study was to investigate colorectal cancer (CRC) data and anal cancer data from Maputo Central Hospital (MCH), the largest hospital and a reference for oncological diseases in Mozambique, with the aim of characterising the disease profile in view to define an appropriate control programme.

Methods: MCH records from the Pathology and Surgery Services and MCH Cancer Registry database were assessed to obtain retrospective clinical and pathologic data of patients with CRC or anal cancer admitted to and treated between 13 December 2013 and 23 March 2016.

Results: The female gender was more prevalent (54.8%), even when anal cancers were excluded. Median age was 54 years (20–99). Most patients (51.6%) lived in the city of Maputo. The most common presenting symptom was found to be rectal bleeding. Adeno- carcinoma was the most frequent histological type, and the most prevalent anatomical site was the rectum. Most of the cases were diagnosed at MCH in advanced stages. Colostomy was the most frequent surgical procedure and performed in 38.7% of the patients. Most cases of anal cancer occurred in human immunodeficiency virus-infected patients. Most patients had a poor prognosis due to advanced stage at first diagnosis.

Conclusion: We observed an increase in cases of CRC and anal cancer in Mozambique and mostly diagnosed at advanced stages, which anticipates a dismal prognosis. Our data supports the urgent need of a comprehensive public health programme dedicated to solving this growing concern.

DETERMINANTS OF PATHOLOGICAL RESPONSE TO NEOADJUVANT CHEMOTHERAPY IN KENYAN WOMEN WITH BREAST CANCER.

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[1]*Aga Khan University Kenya*

BACKGROUND -OBJECTIVE

Breast cancer is the commonest cause of cancer deaths in Kenya. Neoadjuvant chemotherapy (NAC) facilitates surgery and prognosticates outcomes. This study investigated the determinants of pathological response to NAC for breast cancer patients at the Aga Khan University Hospital Cancer Centre, Nairobi.

METHODS

Retrospective charts of 67 breast cancer patients receiving NAC were reviewed. Demographics, treatment, and tumor characteristics were analyzed seeking associations with pathological response evaluated by Residual Cancer Burden index (RCBI). The impact of pathological response and chemotherapy regimen on event-free survival was analyzed.

RESULTS

Sixty seven (67) patients were included in this study. The mean age at diagnosis was 46.1 years . Most patients (87.8%) had clinical stage III disease, the remainder (12.2%) being stage II (n=41) (Table 2). Invasive ductal carcinomas (IDC, NOS) was the most common morphology (83.3%, n=54), with the majority of tumours being intermediate (56.6%, n=) or high grade (28.3%, n-53) The most common IHC subtype was luminal (67.3%), with 17.3% TNBC, and 1.4% HER-2-enriched.

Most patients received standard AC-T (n=22, 49%) or FEC-T (n=9, 20%). Nine of 67 patients (13.4%) had breast conserving treatment. The Residual Cancer Burden was available for 57 cases. Seven (12.3%) showed complete response, and five (8.8%) had minimal residual disease (low risk, total 21.1%). 21 (36.8%) had moderate (intermediate risk), and 24 (42.1%) had extensive residual disease (high risk). Low risk patients had better event-free survival at 24 months (cumulative survival 1.0 versus 0.5 for intermediate/high risk; p=0.109, n=45). Better response was seen with higher initial tumor grade (p=0.269, n=61). IHC subtype was not associated with response. Six of 40 cases (15%) had clinically significant alterations in biomarker expression. Choice of chemotherapy regimen did not influence pathological response, breast conserving treatment rate, or outcomes.

CONCLUSIONS

Standard NAC in Kenyan women with breast cancer achieved a pathological complete response rate (12.3%) comparable to similar studies from other low to middle income countries. Breast conservation rate (13.4%) was higher than other African studies. 21.1% of patients had low risk residual disease, with better outcomes. IHC subtype did not affect response, but higher grade tumors tended to respond better. Changes in biomarker expression underline the importance of repeat testing.

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TOWARDS A UNIFYING MODEL FOR THE DIFFERENT VARIANTS OF BURKITT LYMPHOMA BY INTEGRATING EPIDEMIOLOGY, MOLECULAR ABNORMALITIES AND CELLULAR PROLIFERATION

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LYMPHOMA, STREAM 2, November 7, 2021, 12:30 PM - 1:45 PM

Different variants of Burkitt lymphoma (BL) are being recognised by the 4th Edition of the WHO Classification of Tumours of Haematopoietic and Lymphoid Tissues, namely endemic, sporadic and immunodeficiency-related BL. All three variants differ in epidemiologic features and also in part in their molecular characteristics, but in turn show considerable biologic similarities. For example, a chromosomal translocation juxtaposing the MYC-gene nexto one of the immunoglobulin (IG) loci is the hallmark genetic alteration in all three subtypes. Secondary genetic alterations include somatic pathogenic variants in genes like MYC or TP53, genes encoding the TCF3/ID3 or SWI/SNF complexes or in cell cycle regulators like CCND3. Notably, the frequency of these aberrations varies with epidemiologic variant, but also at least in the sporadic variants with age. Explanatory for these differences could be that the frequency of mutations inversely correlates with presence of EBV in the tumor cells. Indeed, EBV positivity is associated with signficant alterations of the epigenome of BL cells, and e.g. altered DNA methylation might substitute for genomic mutations in BL. Finally, germline predisposition likely also contributes to BL pathogenesis, e.g. via modifying the risk for EBV infection or malaria. Basing on the wealth of recent whole genome, epigenome and transcriptome data pulbished by us and others and taking into account the clinical and epidemiologic characteristics of the BL variants as well as infectious agents we here will discuss a simplified model for BL which shows the option to link the pathogenesis of the three variants.

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IN RESOURCE-CONSTRAINED ENVIRONMENTS, WHAT ARE THE "BEST BUYS" IN SYSTEMIC THERAPY FOR EARLY BREAST CANCER?

Simonds H[1]
[1]*Stellenbosch University*

BREAST CANCER, STREAM 1, November 8, 2021, 1:00 PM - 2:45 PM

Oncological therapy is a high cost business.
In breast cancer, this is even more notable due to the multiple available lines of therapy. The variables to be considered in a resource-constrained environment are user fees or universal healthcare; generics vs patented drugs; clinical benefit and most importantly equitable access.
We will review the clinical benefit of hormonal and systemic therapies; tools to assist in decision-making and evidence from health economic data.

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THE ROLE OF PET-CT SCAN IN MANAGEMENT OF GYNAECOLOGICAL MALIGNANCIES

Simonds H[1]
[1]*Stellenbosch University*

GYNAECOLOGICAL CANCERS, STREAM 1, November 9, 2021, 12:30 PM - 2:00 PM

Improvements in imaging over the past 2 decades have vastly increased our ability to accurately stage patients, decide of appropriate therapy and assess response.
PET-CT is ideally placed for use in gynaecological malignancies in particular squamous cell carcinomas as it has a high sensitivity to pick up involved nodes.
PET-CT can, in addition, be part of the radiotherapy planning algorithm and add accurate volume delineation and increased quality assurance in the planning process.
Indications and suggested incorporation into management and treatment protocols will be reviewed.

DISTRIBUTION AND TRENDS OF CANCER IN BUFFALO CITY, EASTERN CAPE PROVINCE, 1991-2009: A RETROSPECTIVE STUDY.

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BACKGROUND: Cancer burden continues to grow globally demanding the implementation of preventative and control initiatives. Informative reports on existing routine cancer data are therefore required. This study describes the distribution and trends of cancer in Buffalo City (BFC) population, Eastern Cape (EC) Province for period 1991-2009.

METHODS: Cancer patients were retrospectively surveyed in the database of Frere Hospital Oncology-Radiation Unit. Proportion by sex, race and top cancer sites were calculated. Direct Method of Standardisation was used to calculate Age Standardised Rates (ASR) for a sub-population of patients residing at BFC. Trends with 95% Confidence Intervals (CI) for two most common cancers in males and females over time adjusted for age and sex were assessed using Poison Regression.

RESULTS: A total of 19 737 patients' records were analysed; 38.8% (7 656) males and 61.2% (12 081) females. Top five cancers in males were lung [22.5%, ASR 21.0], prostate [14.7%, ASR 9.2], larynx [5.8%, ASR 5.0], mouth [4.4%, ASR 3.7] and tongue [3.8%, ASR 2.9] in females; cervix [20.9%, ASR 23.0], breast [23.6%, ASR 20.2], lung [3.4%, ASR 4.7], ovary [2.1%, ASR 3.0] and corpus uteri [3.4%, ASR 2.8]. Trends showed a decrease in lung and prostate cancers in males while cervix and breast remained stable in females. White males were two times (95% CI: 1.87-2.49) more likely to have lung cancer and five times (95% CI: 3.90-6.21) more likely to have prostate cancer than Black Africans. White females were 0.43 (95% CI: 0.44-0.73) less likely to have cervical cancer and three times (95% CI: 2.45-3.14) more likely to have breast compared to Black Africans.

CONCLUSION: The availability of routine cancer data at Frere Hospital contributes to strengthening of the national cancer notification regulation as the results of this study suggest that the burden of cancer in the EC Province remains high.

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TRACKING AND UPDATING THE VITAL STATUS OF CANCER PATIENTS IN THE DATABASE OF THE EASTERN CAPE CANCER REGISTRY

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BACKGROUND: Accurate estimation of cancer survival is done through identification of cancer cases from high-quality cancer registries and establishing their vital status from well-established death registers. However, in Sub-Saharan Africa very few cancer registries are deemed to be high quality and death registries are limited. The aim of this paper is to report on methods used by Eastern Cape Cancer Registry (ECCR) to track and update the vital status of cases in its database and results obtained during 2016 to 2020 follow ups.

METHODOLOGY: Four methods were used: Home Affairs Death Register Linkage using South African identity numbers, Telephone Calls using telephone numbers, Home Visits using village addresses and Hospital Death Resister Linkage using patient numbers. In 2016 cases from 01 January 2008 to 31 December 2015 with an "alive" vital status were selected from the ECCR database for follow up. The following year 2017 the period was extended by one year to include cases up to 31 December 2016 and this was done every year until 2020.

RESULTS: A total of 4 282 cases were followed up during the 5-year period. Cases linked to Home Affairs register were 26% (1 235), with telephone numbers 3% (112), hospital death register 24% (1 046) and those visited at home were 44% (1 889). Reported still alive 58% cases, dead 33% and Unknown 9%. Home Affairs linkage and home visits were the most suitable methods to follow up cases that were lost to follow up. Both methods reported the highest percentages (33% and 19%) of dead patients followed by telephone calls (8%) and hospital death register (1%).

CONCLUSION: Comprehensive recording of cancer patient information in the database of ECCR enabled the use of multiple methods to track and update the vital status. The information will contribute to collaborative studies for accurate estimates of cancer survival.

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PATTERN OF QUALITY OF LIFE OF PATIENTS WITH ADVANCED HEAD AND NECK CANCERS IN AHMADU BELLO UNIVERSITY TEACHING HOSPITAL ZARIA.

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ABSTRACT

OBJECTIVE: Head and neck cancer is the 10th most common cancer globally, accounts for about 550,000 cases annually. Nigeria incidence is unknown but prevalence ranges from 3% to 21%, 19.9% in Zaria and 6.74% in Lagos. The aim is to assess the pattern of quality of life of patients with advanced head and neck cancers in a tertiary instituition.

 METHODS: A prospective cross-sectional study. Structured questionnaire- EORTC QLQ-C30 (version 3) and EORTC QLQ-H&N35 (Appendix) was administered to the patients by trained staff. Statistical analysis was done using the statistical package for social sciences (SPSS) version 22.

RESULTS: 220 patients analysed had male to female ratio of 3 :1, age range between 18 and 82 years, mean age of 45 years and peak age was between 46 to 55 years. 83.6% were married. 38.6% were unskilled labourers and farmers. Majority, 32.7% had secondary education. 55% were neither smokers nor alcohol drinkers but 16.4% indulged in both. Smokers only and alcohol drinkers only accounted for 23.2% and 5.5% respectively. Nasopharynx (34.1%) and larynx (19.1%) were the common cancers seen. Squamous cell carcinoma(81.8%) was the commonest histology. 38.2% received both chemotherapy and radiotherapy. 37.2% had only chemotherapy, while 24.5% received only radiotherapy. High level of disruption in nearly all domains of quality of life was seen. Cognitive, emotional and physical functions mean scores were 1.07(SD 0.25), 1.14(SD 0.34), 2.33(p=0.001) respectively. Mean score of 3.48 for financial difficulties was high in the group that had only radiotherapy but was 3.32 in those who received chemotherapy alone.

Conclusion: A pattern of high level of financial difficulties among patients and high level of physical functioning in patients that received radiotherapy was observed. There was a low mean score in cognitive, social and emotional functions.

Key words: Quality of life, Head and Neck Cancers, effects of treatment.

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PILOT IMPLEMENTATION OUTCOMES FROM AN ULTRASOUND-GUIDED BREAST BIOPSY TRAINING PROGRAM IN NIGERA

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BEST OF THE BEST ABSTRACTS (2), STREAM 3, November 8, 2021, 11:00 AM - 12:00 PM

OBJECTIVE: Nigeria has one of the highest age-standardized breast cancer mortality rates worldwide, making implementation of breast cancer early diagnosis a priority. Early diagnosis requires accessible breast imaging and ultrasound (US)-guided biopsy capability, which is needed for cancer detection and tissue diagnosis. One barrier to early diagnosis is a major shortage of Nigerian radiologists trained to perform US-guided biopsies. To address this need, we developed a mobile health (mHealth) US-guided breast biopsy training program for radiologists. The purpose of this study was to evaluate preliminary implementation outcomes, including feasibility, acceptability, adoption, and sustainability, among a pilot cohort of program trainees.

METHODS: Radiology trainees (n=13) engaged in a 30-minute semi-structured interview after completing the program. Interviews elicited feedback on the course structure and barriers and facilitators to clinical implementation. Data were coded based on the implementation constructs of feasibility, acceptability, adoption, and sustainability, using a matrix analysis approach.

RESULTS: 1) Feasibility: The course's e-learning modules facilitated flexible education, allowing participants to review and practice course material at their own pace. 2) Acceptability: All trainees would recommend the program to others; many felt the training enhanced their clinical skills and was relevant to their practice. 3) Adoption: Post-training, most radiologists felt confident independently performing US-guided breast biopsy in their own clinical practice. 4) Sustainability: Barriers to sustainable clinical implementation included lack of patient referrals, limited administrative support, and pathology delays. Facilitators included the adoption of a train-the-trainer model: many participants have already begun training residents at their Centers.

CONCLUSIONS: This pilot identified important implementation considerations for an mHealth US-guided breast biopsy training program to build capacity for breast cancer early diagnosis. Participants found the program feasible and acceptable. There is a need for feedback and support from the trainers during the clinical implementation phase, to help strategize ways to overcome site-specific barriers.

PULMONARY ARTERY INTIMAL SARCOMA: A RARE CASE TREATED WITH SURGERY AND ADJUVANT RADIOTHERAPY

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Purpose or Objective: Pulmonary artery intimal sarcoma is a rare type of malignant tumor with poor prognosis. In recent literature a multimodal approach to treatment with adjuvant or neoadjuvant chemotherapy and/or adjuvant radiotherapy appears to offer better survival outcomes than surgery alone.

We present a clinical case report of a pulmonary artery intimal sarcoma in a woman treated with surgery and post-operative radiotherapy.

Material/Methods: A 42-year-old woman presented with an 8-month history of progressive dyspnea, cough, and pleuritic pain in the right hemithorax. Due to the worsening of symptoms, an angio-CT was performed and revealed enhancement of a thrombotic mass, indicated a malignant nature.

The patient underwent resection of involved pulmonary artery, pneumonectomy and reconstruction of the involved pulmonary artery with graft subsequently.

Histopathologically, the tumor was located at the right branch of the pulmonary artery and the morphological and immunohistochemical study was consistent of intimal sarcoma.

The patient was referred for postoperative radiotherapy volumetric-modulated arc therapy (VMAT) with daily image guided radiotherapy with CBCT.

Results: During radiotherapy treatment there was a decrease in the amount of liquid occupying the right pleural cavity which determined a slow and gradual change to the mediastinum with a rotation of the vascular structures to the right visible in the daily CBCT which led to the need for new radiotherapy planning.

Patient completed treatment the treatment with no interruptions and the main adverse effect was dry cough. 5 months, after treatment the patient is free of disease.

Conclusions: Early diagnosis of pulmonary artery intimal sarcoma is essential to allow a complete resection of tumor and a multidisciplinary approach is important to increase survival and improve the quality of life.

PLACE DES FACTEURS DE RISQUE ET FACTEURS PRONOSTIQUES DANS LES CANCERS DU SEIN CHEZ LA FEMME AU SÉNÉGAL.

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Objectif: relater l'impact des facteurs de risque et des facteurs pronostiques dans la survenue et dans l'évolution des cancers du sein chez la femme et d'évaluer la prise en charge des patientes
Méthode: étude rétrospective portant sur des femmes suivies pour cancer du sein à l'institut Joliot Curie
Résultats: l'étude portait sur 278 patientes avec une moyenne d'âge de 47,32 ans et une parité moyenne de 4,9 enfants par femme;137des patientes étaient ménopausées;33 patientes étaient sous contraception hormonale;22 patientes avaient un antécédent de cancer; le principal motif de consultation était une masse du sein chez 211 de nos patientes;Cliniquement la taille tumorale était classée T4 chez 180 patientes; Une atteinte ganglionnaire chez 188 patientes ;Le type histologique prédominant était le carcinome canalaire infiltrant avec 90,3% des cas ; Une prédominance des grades SBRII et SBR III respectivement 41 % et 46% ; Les récepteurs hormonaux (RH) étaient positifs dans 8 cas;La surexpression du gène HER 2 était positive chez seulement 4 ; Les limites de la chirurgie étaient précisées que chez 48 patientes avec des marges envahies chez 7 patientes;La présence d'emboles vasculaires était notée chez 18 patientes parmi les 29 dont la recherche a été effectuée soit 62%;Au moment du diagnostic initial, 45 soit 19,7% des malades présentaient au moins une métastase à distance; Le siège des métastases synchrones était ganglionnaire dans 38% et pulmonaire dans 26% des cas; les stade III et IV étaient prédominant ;91% des patientes ont bénéficié d'une chirurgie radicale;La chimiothérapie était réalisée chez 76,25 % des patientes, en néo-adjuvante dans 75,47% des cas;adjuvante dans 13% des cas et palliative dans 11% des cas;La radiothérapie était réalisée chez 66 patientes en situation adjuvante soit 23% des patientes ; Une hormonothérapie à base de tamoxiféne était réalisée chez 21% des patientes; Le délai moyen de suivi était de 20,42 mois chez les patientes ; Une récidive était retrouvée chez 10% de nos patientes avec un délai moyen d'apparition de la récidive de 33,38 mois ; La chimiothérapie était indiquée chez 82% des récidives ; La survie globale pour les cancers du sein était à 72 % à 3 ans et 30 % à 5 ans
Conclusion:Au décours de ce travail nous découvrons le caractère multifactoriel ou complexe dans la survenue du cancer du sein. Le pronostic péjoratif pour la majorité des patientes diagnostiquées à un stade avancé de la maladie

AVAILABILITY AND UTILIZATION OF PSYCHOSOCIAL SERVICES FOR BREAST CANCER PATIENTS IN ADDIS ABABA, ETHIOPIA: A MIXED METHOD STUDY

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Objective: Psychosocial services has substantial impact in cancer care by reducing emotional distress and improving quality of life and survival of patients, but the availability and utilization of the services have been not well-studied in developing countries. Therefore, we explored the types of psychosocial services available for breast cancer patients in Addis Ababa, Ethiopia.

Methods: A mixed method study was conducted using a cross-sectional survey involving a sample of 428 patients with breast cancer, followed by a qualitative study in seven health facilities in Addis Ababa, Ethiopia. A total of nine in-depth interviews (IDIs) were conducted with purposefully selected four breast cancer patients and five key informants using two separate interview guides. In addition to descriptive statistics, logistic regression was done to identify factors associated with provision of psychosocial services. Thematic analysis was used for the qualitative data using NVivo 12 plus software.

Results: Only 47 (11.1%) patients received psychosocial services, either in the form of counseling, emotional support or provision of information. Addis Ababa residency, severity of pain and longer duration since diagnosis were factors associated with provision of psychosocial services. Health professionals reportedly provided such services along with their routine activities, and patients predominantly received social/emotional support from family members, friends and colleagues. There were no well-structured counseling service, emotional support or group discussion sessions for breast cancer patients in these health facilities. The main reasons for not providing these services were high patient flow/workload, inadequate space, lack of training and not having qualified professionals to organize and deliver psychosocial services in those hospitals.

Conclusions: This study revealed that very few breast cancer patients received psychosocial services from health professionals, and the services were not delivered in a structured way. Therefore, integrating and implementing psychosocial services in cancer care is recommended both in private and government health facilities in Ethiopia.

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EXPANSION OF BREAST CANCER TREATMENT TO SIX REGIONAL HOSPITALS IN ETHIOPIA: IMPACT ON TOTAL NUMBER OF BREAST CANCER PATIENTS INITIATING CHEMOTHERAPY

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IMPLEMENTATION SCIENCE: NUTS AND BOLTS FOR AFRICAN PRACTICE Co-convened by AORTIC and NCI (Part 2), STREAM 3, November 6, 2021, 1:00 PM - 5:00 PM

OBJECTIVE:
Ethiopia faces a high breast cancer (BC) burden. Until 2016, cancer patients could only seek treatment at Black Lion Hospital (BLH), Addis Ababa, which faced a large patient backlog. There is also a national shortage of oncology specialists.
To address these challenges, the MOH expanded BC treatment services to six regional hospitals in 2016, by training general medical practitioners to provide breast cancer diagnosis, surgery, and chemotherapy, and nurses to administer chemotherapy. By 2020, this model expanded to twelve regional hospitals.
The study objective is to measure the increase of BC patients initiating chemotherapy in regional hospitals between 2018 and 2020.

METHODS:
Study outcomes were measured by collecting and comparing 2018 and 2020 patient registration data from hospital registers, at twelve regional hospitals and BLH.

RESULTS:
In 2018, 515 BC patients initiated chemotherapy across six regional hospitals, while 2,676 patients initiated treatment at BLH. In 2020, the number of patients in the same six regional hospitals increased by 59% percent to 818, while the number of patients at BLH decreased by 59% to 1,089. In 2020, an additional 420 BC patients were treated at six other regional hospitals that started offering chemotherapy after 2018.
The total number of BC patients starting chemotherapy in public hospitals in Ethiopia decreased by 27% between 2018 and 2020, going from 3,191 to 2,327. The overall share of patients treated at regional hospitals vs BLH increased from 16% to 53%.

CONCLUSIONS:
The program increased the number of BC patients starting chemotherapy in regional hospitals, thus reducing travel barriers to care. The overall decrease in number of BC patients in 2020 is attributable to care disruptions at BLH caused by COVID19. We will update study results with forthcoming data on the number of cycles completed by BC patients in regional hospitals.

IMPROVING CANCER KNOWLEDGE AND PATIENT EMPOWERMENT THROUGH EDUCATIONAL VIDEOS

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Objective
Low health literacy is a leading cause of treatment abandonment among patients receiving cancer care at Kamuzu Central Hospital (KCH) in Malawi.

Methods
We developed cancer educational videos featuring Malawian providers and played them in the KCH oncology clinic waiting and infusion rooms. The videos addressed cancer-related topics, including disease biology, common myths, diagnostic procedures, treatment, side effects, and survivorship. After 6 months of implementation, we compared results from 50 pre- and post-intervention surveys to assess change in cancer knowledge and care experience. Analyses were conducted using R 3.5.2 (New York, New York).

Results
Both pre- and post-intervention cancer knowledge were good: >90% of patients correctly answered questions about managing symptoms and the importance of receiving timely chemotherapy. Despite the intervention, most continued to incorrectly identify cancer as an infection (pre: 26/52%; post: 25/50%). However, improvements were observed in patients' knowledge of correct actions for fever at home (pre: 38/76%; post: 43/86%; p=0.041). Care experiences were overall good. However, post-intervention results indicate an increase in patient dissatisfaction of care as more patients felt they could not understand chemotherapy counseling (pre: 11/22%; post: 22/44%; p<0.001) and fewer felt providers involved them in decision-making (pre: 21/42%; post: 8/16%; p<0.001). Despite this, more patients felt always listened to by their providers (pre: 18/36%; post: 29/58%; p<0.001). Assessments of video satisfaction indicate that patients found the videos very helpful in terms of understanding their disease (47/94%) and side effects of treatment (48/96%) and felt empowered to speak up to their providers (46/92%).

Conclusions
Standardized education materials for patients and families that can be reproduced, translated, and feasibly implemented throughout Sub-Saharan Africa are urgently needed. Cancer educational videos are a low-cost and feasible way to educate and empower cancer patients in low-resource settings, although in-person discussions between patients and providers remain a crucial part of cancer care.

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KUSANKHA PAMODZI: HEALTHCARE DECISION-MAKING PREFERENCES AMONG PATIENTS WITH CANCER

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Objective
Oncology teams are encouraged to include patients' preferences and goals of care in determining appropriate treatment courses. This is especially important in Malawi where many patients present with advanced stages of cancer resulting in challenging and complex treatment decisions. There is no existing data from Malawi exploring decision-making preferences among cancer patients to guide providers.

Methods
In the oncology clinic of Kamuzu Central Hospital (KCH) in Lilongwe, Malawi, 100 patients were surveyed related to healthcare decision-making. Survey data were summarized using simple descriptive statistics.

Results
A majority of cancer patients preferred to engage in shared decision-making regarding their cancer treatment: 68% (68/100) of patients preferred the medical team to make decisions regarding their care together with their input and 29% (29/100) of patients preferred for the medical team to make decisions without their input. About half (55%, 53/96) of cancer patients did not feel that their medical team involved them in decision-making regarding their treatment and 53% (53/100) felt they were never or only sometimes listened to by the medical team. Nearly all patients (91%, 91/100) preferred to have their medical team inform them how likely treatments are to lead to cure; and 62% (62/100) felt the medical team explained this to them in a way that was easy to understand. Most patients (63.6%, 63/99) felt the medical team adequately discussed emotional problems, such as anxiety or depression, related to their cancer treatment.

Conclusions
Shared decision-making is the preferred mode of treatment decision-making by the majority (68%) of surveyed cancer patients in Malawi. There is currently a gap, with about half of patients feeling the medical team did not involve them in their treatment planning. Nearly all patients (91%) wanted to know their risk of mortality. Oncology providers are encouraged to ask their patients' preference in decision-making and involve them in treatment decisions.

COMPARAISONS DES TROIS TECHNIQUES POUR L'IRRADIATION DES CANCERS TETE ET COU

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1-   Introduction :

Les cancers tête et cou constituent la troisième localisation des cancers traités au Centre National d'Oncologie, Nouakchott (CNO). Ces patients sont souvent diagnostiqué à des stades tardifs ce qui rend difficile leurs irradiations.

Nous comparons sur le plan dosimétrique à travers cette étude trois techniques d'irradiation, radiothérapie conformationnelle 3D (RT3D) classique avec ou sans électrons et radiothérapie par Irradiation avec Modulation d'intensitéVolumétrique par ArcThérapie (VMAT).

2-   Matériels et méthodes :

Pour chaque patient et après contourage des volumes cibles, la planification est faite par VMAT et deux plans réalisés en technique conformationnelle 3D avec et sans électrons. La prescription est de 70 Gy en fractionnement et étalement classique sur 95% du volume de planification (PTV).

Pour la RT3D classique sans électrons, une première série à la dose de 50 Gy sur les PTV en utilisant des faisceaux multiples en photons. Dans une deuxième série, de 50 à 70Gy on utilise deux champs en photons sur le volume réduit.

Pour la RT3D classique avec éléctrons, Un premier temps de 0 à 40Gy sur le PTV avec deux faisceaux latéraux et un faisceau antérieur. Dans un deuxième temps, 50Gy sur le PTV avec deux faisceaux latéraux réduits, deux faisceaux spinaux en électrons. Enfin, le dernier temps la dose de 70Gy est donnée par deux faisceaux latéraux en photons.

La planification VMAT repose sur la planification inverse.

3-   Résultats :

30 patients atteints des cancers tête et cou ont été inclus, l'analyse des Histogrammes Dose Volume du 30 patients. La dose de 67Gy est délivrée à 95 % du PTV en VMAT contre 65 Gy en RC3D sans électrons et 63 Gy avec les électrons. Pour 80% des patients les doses maximales à la moelle et au tronc sont respectivement entre 42 et 45 Gy en VMAT contre 45 et 48Gy en RC3D sans électrons et 45 et 49 Gy avec électrons. Les parotides sont épargnées puisqu'on a la dose moyenne pour 90% des patients la dose moyenne inférieure 26Gy en VMAT contre 55 Gy en RC3D sans électrons et 67 Gy en RC3D avec électrons.

4-   Conclusion :

A défaut de la technique VMAT, la technique RT3D sans électrons parait meilleur par rapport la technique RT3D avec les électrons pour la réduction de la dose aux organes à risques tels que la moelle épinière et les parotides ainsi avec une meilleure couverture de la dose au niveau du PTV.

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PATHWAYS AND REFERRAL OF CANCER PATIENTS IN RURAL ETHIOPIA

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IMPLEMENTATION SCIENCE: NUTS AND BOLTS FOR AFRICAN PRACTICE Co-convened by AORTIC and NCI (Part 2), STREAM 3, November 6, 2021, 1:00 PM - 5:00 PM

OBJECTIVE:
Streamlined pathways of cancer patients are essential in Sub-Saharan Africa, where specialized care is only available in few facilities per country. Research on cancer patient pathways has mainly been conducted at tertiary hospitals, missing out on patients who never reached them. In this study, we describe pathways and referral patterns of cancer patients diagnosed at primary and secondary level hospitals in Ethiopia.

METHODS:
This cross-sectional study was set at two primary and six secondary level hospitals in the South-West of Ethiopia. We conducted structured telephone interviews with patients diagnosed with cancer between July 2017 and June 2020. The primary outcome was successful referral - this was achieved when the intended diagnostic or treatment procedure had been initiated at the referral institution.

RESULTS:
Of 365 patients included, more than 80% had entered the healthcare system on the primary level. From the study sites, most patients were referred to private clinics for pathology services or to tertiary cancer centres. The median time from symptom recognition to non-surgical treatment initiation was 160 days. Referrals for diagnostics were successful in 96% of all cases, referrals for treatment in 73%. Being referred for diagnostics (versus being referred for treatment) was the only predictor associated with successful referral on a 95% confidence level (odds ratio 13.3; confidence interval 4.12 – 42.92; p-value < 0.01). Overall, 21% of all patients remained without any therapy, ranging from 14% at secondary referral hospitals to 40 % at primary hospitals.

CONCLUSIONS:
Pathways and referral of cancer patients in rural Ethiopia appear to largely follow coherent patterns. However, time to treatment initiation is unacceptably long and many patients remain without treatment. Expanded pathology services on the primary and secondary healthcare level could reduce the number of referrals and therefore decrease time to treatment initiation for cancer patients in rural Ethiopia.

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CANCER DE L'OVAIRE APRESÈS TRAITEMENT DU CANCER DU SEIN

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Objectif : Discuter du diagnostic et du traitement de deux cas de cancer de l'ovaire survenu après le traitement de cancer du sein.

Présentation des cas : Il s'agissait de deux patientes qui ont bénéficié de traitement radical par chimiothérapie, chirurgie mammaire radicale modifiée, radiothérapie et hormonothérapie pour cancer du sein exprimant les récepteurs hormonaux. Le statut BRCA de deux patientes n'était pas connu mais aucune d'elle n'avait un antécédent familial de cancer. Le délai de diagnostic de la tumeur ovarienne était de 3 ans au minimum. Dans le premier cas, il s'agissait d'un second cancer qui après une chirurgie de résection R2 est actuellement sous chimiothérapie palliative. Le second cas était une métastase ovarienne de cancer du sein décédée dans les 3 mois qui ont suivi le diagnostic.

Conclusion : Après le traitement de cancer du sein, il ne faut jamais omettre de rechercher une localisation ovarienne dont la prise en charge doit être aussi personnalisée.

CANCER MANAGEMENT IN GUINEA: CHALLENGE AND OPPORTUNITIES

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Objective: To describe the challenges and opportunities of cancer care at the Surgical Oncology Unit of Donka, Conakry University Hospital.

Material and methods: The distribution, the referral mode, the stages at diagnosis and the treatments performed were analyzed through a retrospective study of cancer patients received at the Donka Surgical Oncology Unit between 2007 and 2018.

Results: Out of a total of 8903 consultations, 3765 (42.3%) were cancers, an average of 314 per year. The number of annual cases increased from 104 in 2007 to 574 in 2018. The five leading cancer were breast 912 (23.4%), liver 506 (13.0%), cervix 366 (9.4%), soft tissues 245 (6.3%) and lymphoma 209 (5.4%). Subjects aged 15 to 60 accounted for 72.0%. Patients were referred in 73.0%. HIV infection was found in 3.4%. Stages were locally advanced or metastatic in 97.1%. The treatments performed were surgery (21.9%), chemotherapy (28.8%) and radiotherapy (4.0%).

Conclusion: The high and increasing frequency, the emergence of breast cancers, sarcomas, lymphomas and skin alongside cancers of the cervix and liver, an insufficient referral system, advanced stages, unequal distribution and limited access to cancer management are the main challenges. Advanced stages, relatively young patients and the high prevalence of HIV infection open up new opportunities for research into genetic and molecular abnormalities, infections and cancer in our country.

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CHANGE IN MEDICAL PHYSICS PRACTICE DUE TO COVID-19 IN AFRICA

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Objective:
The objective of this study was to determine how Covid-19 has affected medical physics practices in Africa.

Methods:
A survey was sent to various centres in Africa requesting information on staffing, the environment, radiotherapy equipment, patient related issued and education changes during the Covid-19 pandemic. Additional information was obtained from articles in the newsletter of the Federation of African Medical Physics Organizations.

Results:
Most sites placed medical physics staff in a shift system, at least temporarily. Most sites had screening stations at the entrance, but only 16.7% of sites had dedicated radiotherapy equipment to treat Covid-19 patients. The patient flow was adjusted in 75% of sites. Only 50% of sites had facilities for staff to work virtually or remotely and remote patient follow-up was only possible in 58.3% of sites. All sites promoted physical distancing, the use of masks and frequent handwashing or sanitizing. Various centres introduced hypo-fractionated radiotherapy regimes. Logistical issues often hampered the import and use of radionuclides and radiopharmaceuticals. Some medical physicists in the region offered advice and did risk assessments for the safe use of mobile X-ray units in temporary field hospitals. Some hospitals took advantage of the pandemic to motivate for the purchase of digital X-ray imaging systems.

Conclusions:
The pandemic has highlighted severe weaknesses in hospital IT infrastructures. Remote network access was often not possible, either due to bad internet connectivity, restrictive IT policies or network that are not set up properly.
It was found that online teaching offers a great alternative to face-to-face teaching, but is not recommended as the predominant teaching mode.

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THE ZIMBABWEAN CERVICAL CANCER BIOBANK: A MODEL FOR BIOBANKING IN RESOURCE-LIMITED SETTINGS.

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Objective: To establish a well-characterised cervical cancer biobank for future genomics and pharmacogenomics research in Zimbabwe.

Methods: We enrolled 410 women with histologically confirmed cervical cancer between 2016-2019 from an outpatient oncology facility in Harare, Zimbabwe. Potential donors were administered with broad consent for genomics research. Only individuals providing signed informed consent were included in this bioresource. Sociodemographic and lifestyle factors, as well as clinical and treatment information were collected at enrolment to constitute the preliminary patient data repository. This data included age, body mass index, residency, symptoms, tumour histopathology, parity, age at coitarche, number of sexual partners, HIV status, history of sexually transmitted infections, comorbidities, co-medications, and anti-cancer therapies. Matched tumour biopsies and whole venous blood specimens were collected and stored, and from these, genomic DNA was extracted to collectively constitute cellular and sub-cellular components of the biological specimen repository. Individuals were followed up for a minimum of 12 months for response to treatment and survival outcomes. We continue to build this bioresource by ongoing recruitment of participants.

Preliminary Results from analysis of 410 participants: Currently, the Zimbabwean cervical cancer biobank consists of 258 tumour biospecimens, 311 bloods, and phenotype data for 252 individuals. Use, storage and export of the bioresource is governed through a departmental data access committee, and ethics review boards at institutional and national levels. Genetic analysis was conducted for 14 high-risk human papillomavirus (HR-HPV) genotypes, key cancer markers and potential pharmacogenetic markers including ABCC2, CASP8, ERCC1, FASL, GSTM1, GSTT1, GSTP1, NQO1, p53, TLR4, XRCC1. Genetic association studies are underway to determine the host and HR-HPV genotypes effects on the various phenotypes including treatment-induced toxicities, progression-free survival, mortality, relapse and resistance.

Conclusions: Our work provides a fundamental framework to establish biobanks for high quality and high impact data, which can be translated into improved cancer diagnostics and management for pre-emptive and reactive genomics.

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GLOBAL DISPARITY IN ACCESS TO BRACHYTHERAPY AND THE QUEST FOR THE ELIMINATION OF CERVICAL CANCER IN AFRICA

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BEST OF THE BEST ABSTRACTS (1), STREAM 2, November 7, 2021, 10:00 AM - 11:00 AM

INTRODUCTION
Brachytherapy is an essential and integral part of optimal treatment for cervical cancer. About 60% of women with invasive cervical cancer requires radiotherapy in the course of treatment. 100% of FIGO stage IIB-IVA require brachytherapy as the standard of care
One of the WHO strategic actions to achieve 90% treatment of invasive cervical by 2030 is to improve access to radiotherapy
This study examines global disparities in access to brachytherapy and its implication on the elimination of cervical cancer
METHODS
Publicly available data on cervical cancer statistics were derived from GLOBOCAN 2018 database. The current availability of radiotherapy infrastructure was requested and provided by the IAEA directory of radiotherapy centres (DIRAC) The number of brachytherapy units per 1000 new cases of cervical cancer was calculated and compared with other parts of the world from available data.
RESULTS
Globally, there are 3375 brachytherapy units. Europe accounts for 32.9%(1110/3375), North America 26.3% (887/3375), Asia 25.7%(867/3375), Latin America & the Caribbean 11.6% (393/3375) Africa 3.0%(101/3375) and Oceania 0.5%(17/3375). There are 5.92 brachytherapy units per 1000 new cases worldwide with Africa having the lowest, 0.85 brachytherapy units per 1000 new cases and North America having the highest 57.2 units per 1000 new cases. Seventy-three percent (74/101) of the brachytherapy units in Africa are located in the five countries of South Africa, Egypt, Morocco, Algeria and Kenya. 34 of 54 African countries do not have a single brachytherapy unit
CONCLUSION
This study highlights the huge disparity in access to brachytherapy and the need for concerted political will to provide equitable access to quality brachytherapy services

PREVALENCE OF CERVICAL DYSPLASIA IN NORTH-CENTRAL NIGERIA; A TEN-YEAR REVIEW OF CERVICAL CANCER SCREENING AT BINGHAM UNIVERSITY TEACHING HOSPITAL, JOS

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OBJECTIVE: Cervical cancer is the most common gynaecological cancer affecting women in Nigeria. Despite the availability of screening methods for precancerous lesions, screening is largely opportunistic and hospital-based in Nigeria. This study aimed to determine the prevalence and patterns of cervical dysplasia among women in a Tertiary Health facility in North Central Nigeria.

METHODS: A 10-year review of the results of cervical cytology of 1,124 consecutive women who had cervical smears in Bingham University Teaching Hospital, Jos, Plateau State, Nigeria was carried out. The samples were obtained between January 2010 and December 2019. Classification of cytology results was via the Bethesda system 2001. The data were analysed using Statistical Package for the Social Sciences (SPSS) version 21. Bivariate analysis was done and the level of significance was set at $P < 0.05$. The study was approved by Health Research Ethics Committee with the number NHREC/21/05/2005/00736.

RESULTS: Mean age was 43.8 ± 10.2 years (range 16 – 85 years). 212 (18.9%) of the smear results were abnormal of which High Grade Squamous Intraepithelial Lesion (HSIL) was 2.8% (n = 32), Low Grade Squamous Intraepithelial Lesion (LSIL) was 4.7% (n = 53), Atypical Squamous Cells of Undetermined Significance (ASC-US) was 8.3% (n = 93), Atypical Glandular Cells of Undetermined Significance (AGUS) was 0.4% (n = 4) and Atypical Squamous Cells cannot exclude High-Grade Lesion (ASC-H) was 2.7% (n = 30). 2.3% (n = 26) had inflammatory features. Normal cytological features was present in 78.8% (n = 886). There was also significant association between abnormal cervical cytology and increasing age ($p < 0.001$).

CONCLUSIONS: Cervical dysplasia was found to be fairly common at 18.9% among the results obtained. While organized routine nationwide screening is yet to be implemented, this result emphasizes the need for maximizing opportunistic cervical cancer screening among women in Northern Nigeria.

IMPROVING EFFICIENCY AND REDUCING WAIT TIMES FOR ONCOLOGY ADULT PATIENTS RECEIVING CHEMOTHERAPY AT AN ONCOLOGY HOSPITAL IN RWANDA

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OBJECTIVE: Timely administration of chemotherapy is a measure of efficiency and patient experience. This quality improvement (QI) project was conducted at Butaro Cancer Center of Excellence (BCCOE). The primary aim was to utilize QI principles to reduce chemotherapy administration delays.

METHODS: BCCOE clinicians were trained in QI methodology through Dana-Farber Cancer Institute and Partners In Health. A BCCOE nurse educator received further QI training and remote mentorship and led a local QI team. A project charter was established using an iterative plan-do-study-act process. From March 11-19, 2020, baseline wait times were recorded starting from 8:00 AM; time stamps were used to measure time intervals: pre-rounds, rounding, pharmacy, and chemotherapy preparation. Interventions included establishing a dedicated oncology satellite pharmacy and nurse to dispense drugs. Post-intervention data were collected from February 11-23, 2021. Wait times were compared using Mann-Whitney U Test.

RESULTS: At baseline, the median daily wait time was 317 minutes, interquartile range (IQR: 270-381). The longest time-interval occurred while patients waited for pre-rounds. Reasons for delays identified through the fishbone root-cause analysis included shortage of clinicians, limited pharmacy capacity, long ward-to-pharmacy distance, inefficient chemotherapy preparation, and patient coming on non-scheduled dates. Following intervention, the median wait time was reduced to 271 minutes (IQR: 228-334), $p<0.001$. This decrease was attributable to the reduction in wait times pre-rounds from 169 minutes (IQR:123-212) to 134 minutes (IQR: 108-165), $p=0.001$; and at the pharmacy from 45 minutes (IQR: 21-63) to 5 minutes (IQR: 4-10), $p<0.001$.

CONCLUSIONS: The QI project reduced wait time for adult oncology patients at BCCOE. Two unexpected challenges during the implementation were poor internet connectivity and lockdowns due to the COVID-19 pandemic. This project demonstrates QI training's value in improving care delivery at a cancer treatment facility in a low-resource setting.

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KNOWLEDGE OF BREAST CANCER RISK FACTORS AND EARLY SYMPTOMS AMONG RWANDAN WOMEN WITH BREAST CANCER

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OBJECTIVE: Lack of understanding of breast cancer (BC) risk factors and symptoms may contribute to late BC presentation. Here we describe the knowledge of BC risk factors and symptoms among Rwandan patients with BC.

METHODS: A cross-sectional telephone survey including questions assessing knowledge of BC risk and symptoms was administered to female patients receiving curative BC treatment at Butaro Cancer Center of Excellence. Between July and November 2020, 89 (75%) of eligible patients were consented by phone. Patient demographic information and knowledge were summarized. Association of age with knowledge was assessed using two-sample Wilcoxon rank-sum tests.

RESULTS: The median age of participants was 48 years (range: 26-74). The median percent of correct answers for risk factor questions was 63.2%. A majority of women correctly identified that personal BC history (89.9%), family BC history (78.4%), older age (79.6%), and being overweight (80.9%) increase BC risk. Common misconceptions were that wearing a tight bra (84.3%), wearing a bra at all times (83.2%), putting money or carrying a mobile phone in one's bra (79.8%, 76.4%) increase BC risk. The median percent of correct answers for questions related to BC symptoms was 81.3%. A majority of women correctly identified a breast lump (95.5%), armpit lump (86.4%), nipple pulling (86.5%), nipple rash (80.9%), nipple or breast size/shape/position changes (70.8-79.8%), and breast/armpit pain (68.5%, 77%) as possible early symptoms of BC. Only 59.6% and 65.2% of participants correctly identified breast skin hardening and skin color changes as early signs, respectively. Women below the median age of 48 years old were more knowledgeable about BC risk factors than women 48 years and older (p=0.0359).

CONCLUSIONS: Knowledge gaps related to the risk factors and symptoms of BC exist among Rwandan women with BC. More community education and BC awareness programs, especially geared towards older women, are needed.

PATIENT-REPORTED BARRIERS AMONG WOMEN RECEIVING CURATIVE TREATMENT FOR BREAST CANCER IN RWANDA

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OBJECTIVE: Women receiving breast cancer (BC) care in sub-Saharan Africa face unique barriers. Here we describe challenges and concerns that Rwandan patients reported experiencing during treatment.

METHODS: A cross-sectional telephone survey, including 16 questions to assess patients' concerns or challenges during treatment, was administered to female patients receiving curative BC treatment at Butaro Cancer Center of Excellence. Between July and November 2020, 89 (75%) of eligible patients were reached by phone, all of whom provided verbal consent and voluntary participation. Patient demographic information and reported challenges were descriptively summarized. Association between reported challenges and patients' socioeconomic "ubudehe" strata was assessed using chi-square tests.

RESULTS: Fifty-four patients (61%) belonged to the two lowest socioeconomic strata while 35 (39%) patients were in the third stratum, and none in the highest stratum. Patients reported challenges inherent to cancer treatment, such as the duration of treatment (76%), frequency of appointments (62%), and inability to work or loss of employment during treatment (49%). They also reported some challenges, which can be mitigated by health system interventions; these included not understanding the reason for a treatment (77%), treatment side effects (62%), forgetting appointments (61%), high transportation cost (48%) or treatment cost (44%), and difficulty with referrals to other hospitals (41%). Patients also reported challenges faced in their family contexts during treatment, such as meeting domestic family obligations (47%), lack of support from family (38%), and rejection by spouse or family (35%). Patients in the two lowest ubudehe strata were more likely to report challenges in lacking family support compared to higher strata patients (48% vs. 23%; p=0.01).

CONCLUSIONS: A substantial proportion of women experience challenges while receiving treatment for BC in rural Rwanda. Several care barriers can be mitigated by health system interventions such as patient education, family engagement to reduce stigma, and increased financial support.

PERCEIVED QUALITY OF LIFE AND ASSOCIATED FACTORS AMONG INFORMAL CAREGIVERS OF CANCER PATIENTS IN A TERTIARY HEALTH INSTITUTION IN NIGERIA

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Objective: Diagnosis and treatment of cancer has a huge impact on patients and informal caregivers quality-of-life (QOL). However, caregivers QOL has been understudied in most African countries like Nigeria. This study investigated caregivers of cancer patients perceived QOL and associated factors in the following QOL domains: burden, disruptiveness, financial-concern and positive adaptations.

Methods: A descriptive quantitative design was used to study randomly selected 261 caregivers of cancer patients receiving treatment at the University of Nigeria Teaching Hospital, Ituku Ozalla, Enugu State, Nigeria. Data collection tool was Caregiver QOL Index-Cancer (CQOLC) scale with additional socio-demographic variables. Nominal data were summarised descriptively, while Chi -square test was used to determine the association of patient and caregiver factors with the caregivers' QOL at $\alpha= 0.05$.

Results: The CQOLC scores were: Overall QOL (65.80±11.39), burden (19.54±6.24), disruptiveness (8.03±3.37), financial-concern (4.24±2.91) and positive-adaptation (19.63±6.80). Each score was below the mean expected value, indicating poor QOL except positive-adaptation. Significant influencing caregiver factors were stress, altered routines, changed priorities and financial-strain while positive-adaptation was enhanced by religious spirituality, family support and closer patient relationships. Caregivers aged ≤ 30 years, males, unemployed, with less than a tertiary education and caregivers of patients diagnosed with advanced stage cancer and care provision of ≥ 7 months experienced lower QOL.

Conclusion: Informal-caregivers of cancer patients experienced poor QOL from high burden, disruptiveness and financial-strain of caregiving. However, they remained resilient in caring with their positive adaptation. Nursing educative-supportive intervention could enhance caregiver QOL and is recommended.

Keywords: Adaptation, Cancer patients, Informal caregiver, Quality-of-life, Nigeria.

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COMMUNICATION SKILLS TRAINING NEEDS AND PREFERENCES AMONG ONCOLOGY PROVIDERS IN RWANDA

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Objective: International professional societies urge communication skills training (CST) for all oncology providers; however, CST is culturally embedded and research is needed to determine optimal CST approaches in diverse settings. We aimed to understand the CST needs and preferences among oncology providers at Butaro Hospital in Rwanda and culturally adapt an evidence-based CST tool, Ariadne Labs' Serious Illness Conversation Guide (SICG), for the Rwandan context.

Methods: SICG was translated to Kinyarwanda by a health communications researcher and a linguist. A video of local actors roleplaying SICG was recorded. Two focus groups discussions (FGDs) with providers stratified by profession were conducted. A discussion guide that included cognitive interview questions about SICG was used. The FGDs were audio-recorded and transcribed. Thematic analysis was performed using MAXQDA software.

Results: Five oncology physicians, three nurses, two psychologists, and one social worker participated. Participants unanimously reported that disclosure of diagnosis and prognosis are the most challenging part of their work, with emotionally distressing effects on both patients and clinicians. While some were taught communication skills at school, participants believed additional training is needed to respond to real world clinical situations. A combination of CST methods was suggested, with role play, group discussion, and role-modeling preferred over lecturing. SICG was appreciated for giving patients time to express their feelings. However, participants believed it might take too much time in real life, and suggested including only key points. Participants strongly recommended that CST include "self-care techniques" to address clinicians' burnout and additional adaptations to local language and culture to make communication natural.

Conclusion: CST is highly needed in Rwanda to address training gaps and alleviate distress resulting from patient-provider communication. SICG was well received. FGD data will be used to adapt and implement CST for Rwandan setting. This cultural adaptation approach is potentially generalizable to other African settings.

PATIENT NAVIGATION FOR PEDIATRIC WILMS TUMOR (WT) PATIENTS DURING THE COVID PANDEMIC IN RWANDA

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NURSING ONCOLOGY: THE IMPORTANCE OF PATIENT NAVIGATION IN THE ERA OF THE COVID-19 PANDEMIC, STREAM 2, November 9, 2021, 10:00 AM - 11:00 AM

Background: Effective treatment for WT requires a multi-modal approach. For WT patients in Rwanda, these modalities are offered at different health facilities and this can contribute to delays in care.At Butaro Cancer Center of Excellence (BCCOE) the Patient Navigation Program, was established to address barriers to paediatric cancer care completion, increase the timeliness of diagnosis and treatment, improve coordination of referral mechanisms, and reduce loss to follow-up with treatement among children with WT during the COVID- 19 pandemic.

Patient Navigation:The patient navigator(PN), educated the caregivers of newly diagnosed WT patiens on cancer treatement. The PN assessed barriers to care and addressed them through multidisciplinary collaboration. Further, the PN coordinated care by collaborating with clinicians from different institutions and connecting patients to them for seamless care delivery.
Medical appointments reminders were done through phone calls or short messages (SMS) and caregivers were called to follow-up on missed appointements. The PN ensured continuous conversation with patients for consolation and accompagniement throughout the stressful cancer journey.Patients transport was organized for patients from their homes to cancer centers to adhere to their treatments chedule during COVID 19 related travel restrictions.

PN Acceptability: Clinicians at BCCEO evaluated the PN program as bringing significant positive changes to the treamtment process. Fewer patients missed, abandoned or delayed cancer treatment due to the PN's care coordination and ongoing follow-up with patients' families and caregivers compared with a previously treated Wilms Cohort.
Caregivers appreciated the PN due to his accompanignement and provision of emotional support, that encouraged their adherence to planned treatment despite many socio-economic challenges.
Appointment reminders and phone calls relieved stress and helped caregivers cope with their child's disease.
Collaborators outside Butaro hospital especially pediatric surgeons based at CHUK appreciated the program because it helped them plan their surgery in advance thereby preventing patient treatment delays.

UNDERSTANDING PROVIDERS' PERSPECTIVES ON A BREAST CANCER EARLY DETECTION PROGRAM IN TWO DISTRICTS IN RWANDA

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Objective: Sustainable strategies to facilitate earlier detection of breast cancer in low-income countries are not well-understood. In 2018, Rwanda launched a breast cancer screening program in 2 districts, training clinicians at primary health care centers and district hospitals to provide clinical breast exams (CBE) for all patients receiving cervical cancer screening and any other woman requesting breast evaluation. We aimed to understand providers' perspectives on the program and identify implementation barriers to inform scale-up of breast cancer early detection programs nationwide.

Methods: We conducted 34 phone in-depth interviews with health administrators, nurses, and community health workers involved in the early detection program. Results were analyzed using a multi-stage coding process. Here, we describe results from a preliminary analysis of 18 interviews (6 from each category).

Results: Health providers were strongly supportive of the program and believed that it addressed a critical public health need. Health providers reported that the trainings improved their knowledge of breast cancer risk, signs and symptoms, and their confidence in providing services such as sensitization, counseling, and referring patients to the next level of care. However, they felt that follow-up training was needed and felt that the program was understaffed. Providers indicated that the key aspects of the early detection program included community sensitization, organized referral systems, and management of patient traffic. Regarding the success and positive impact of the program, they felt that community breast cancer awareness increased and that the program's referral systems were generally effective. Perceived challenges included low patient literacy and financial barriers; whereby the providers are overwhelmed by high workload and turnover.

Conclusion: To implement feasible and effective cancer early detection programs in resource-limited settings, providers' perspectives can help identify challenges and opportunities for improvement. Close attention to issues of skill maintenance and provider turnover are important to ensure program sustainability.

HAS THE COVID-19 PANDEMIC INCREASED THE REQUIREMENT OF EMERGENCY TRACHEOSTOMIES IN LARYNGECTOMY PATIENTS?

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Objective

At Groote Schuur Hospital in Cape Town, South Africa, advanced cancers of the larynx and hypopharynx are generally treated with total laryngectomy, other than small volume cancers that may be offered the choice of (chemo)radiation therapy. Any delay in cancer treatment has a potential risk of laryngeal cancers progressing to cause upper airway obstruction manifesting a stridor and is managed by emergency tracheostomy unless the tumour can be surgically debulked. Hence the emergency tracheostomy rate of laryngectomy patients can be a proxy for tumour progression.

The South African government instituted a lockdown on 26 March and a 5-level COVID-19 alert system to manage the gradual easing of the lockdown. This led to a significant decrease in admissions of surgical conditions, including malignancies, that required urgent or emergency interventions.

The primary aim was to determine whether delayed access to care during the COVID-19 pandemic led to clinically significant progression laryngeal cancers of patients

Method

A retrospective study was done of patients that underwent total laryngectomy for advanced squamous cell cancers of the larynx at Groote Schuur Hospital. The percentage of laryngectomy patients initially requiring emergency tracheostomy for airway obstruction was compared prior to and during the COVID pandemic

Results

Fifty-six patients met the inclusion criteria. The median age at surgery was 63yrs (IQR, 55-69). There was no statistical difference between the age, T-stage, N-stage or subsite between the pre- and post-COVID cohorts. Thirteen patients (44.8%) required a tracheostomy for upper airway obstruction at first presentation in the pre-COVID group compared to fifteen patients (55.6%) during the COVID era (p=0.593).

Conclusion

Even though not statistically significant, a higher percentage of patients required tracheostomies in the COVID era indicating possible delayed presentation.

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INTEGRATIVE APPROACH BY AN ONCOLOGY NURSE AS PART OF NAVIGATION TEAM IN CANCER PATIENT FOLLOW-UP; A CASE STUDY FROM INTERNATIONAL CANCER INSTITUTE, ELDORET KENYA.

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1. International Cancer Institute

Objective

Late stage cancer presentation and poorer treatment outcomes are the hallmark of cancer state in lower-middle income countries. Due to late presentation, palliative care treatment comprises most of treatment intent which includes use of chemotherapy agents and to a lesser extent use of novel agents. Use of chemotherapy is associated with severe adverse drugs reactions which patients encounter at home away from the hospital set up. Patient follow-up by oncology nurse under patient navigation program has improved adherence to treatment, compliance and better treatment outcomes.

Methods

At the International Cancer Institute (ICI) under the patient navigation program, an oncology nurse makes up a follow-up phone call on all patients who have received chemotherapy at the facility. A toll number is provided for patients to call and consult whenever they experience any complication at any time.

Results

The follow up rate was 100% with none missing clinic appointments. Out of 150 chemotherapy sessions conducted at the clinic, 26% of the sessions were reported to have led to chemotherapy complications. The most common reported complication was fatigue (25%) followed by loss of appetite (18%) .The patients who developed chemotherapy complications were guided appropriately as advised by the oncologists on call and linked to nearby health facilities for supportive care.

Conclusion

Programs providing patient navigation are crucial for patient follow up and treatment adherence therefore improving treatment outcomes. With professional guidance, cancer patients can get supportive treatment for chemotherapy complications at nearby health facilities leading to improved quality of life.

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IMPACT OF COVID-19 ON ACCESS TO CANCER CARE IN KENYA: A PATIENT SURVEY

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OBJECTIVES

In order to assess how COVID-19 has affected cancer patients and those seeking cancer diagnosis in Kenya, the Kenyatta National Hospital, the Kenyan Network of Cancer Organizations, and the American Cancer Society conducted a survey of cancer patients. Specifically, the survey had two objectives:

1.   Identify community- and facility-level barriers to timely access to quality cancer care caused by COVID-19.

2.   Identify the relevant and actionable data for evidence-based and effective mission delivery and continued adequate resources for cancer in Kenya.

METHODS

The study employed a cross-sectional research design. The survey population included adult (18+) cancer patients who were under treatment and those seeking a cancer diagnosis at the time of the study residing in Kenya. The survey employed both online and in-person interview methods to cover wider cancer population in Kenya.

RESULTS

In total, 314 cancer patients participated in the survey that included 68 percent female and 32 percent male respondents. 43 Percent of the survey respondents are 50 years are older.

Preliminary analyses of the survey data suggest that a large number of patients experienced some level of delay in their cancer journey (e.g., diagnosis, treatment, etc.) since the start of COVID-19. Moreover, an overwhelming majority of the respondents reported to have faced financial hardships and significant decrease in their or their families' income due to COVID-19. As a result of financial challenges, their cancer care was affected in one way or the other. Numerous respondents also reported that their options for transportation have become more limited since the start of COVID-19.

CONCLUSIONS

While the survey team is still in process of doing analyses, the evidence suggests that the cancer-care journey of cancer patients has been adversely affected by COVID-19 due to financial hardships and lack or non-availability of transportation including various other factors. Moreover, different groups face varying levels of challenges and barriers to access cancer care depending on where they are in their cancer-care journey.

INNOVATIVE APPROACHES TO CANCER CARE AMID COVID19 PANDEMIC: A CASE OF INTERNATIONAL CANCER INSTITUTE

Were P[1], Kisilu N[1,2], Saina C[1], Chizi K[1], Sekoh E[1], Asirwa C[1]
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Background/Objective
Compared to high income countries, low-middle income countries have fewer reported cancer cases but with worse prognosis. Invariably, most cancers are diagnosed at advanced stages with limited access to care. The COVID-19 outbreak has worsened access to care occasioning closure of hospitals, suspension of oncology clinics and reallocation of resources towards COVID-19 kitty resulting into a record high drug and supplies stock outs, inadequate human resource, and fear amongst patients and healthcare workers attending clinics. Despite the continued Covid-19 outbreak, cancer is claiming lives of many patients who can't access care promptly. Telemedicine leveraged on the gap caused by the pandemic, through provision of virtual online courses, multidisciplinary tumor board discussions, and teleconsultations through phone and video platforms among health care workers. We aimed to highlight the innovative approaches used by International Cancer Institute (ICI) in enhancing access to cancer care amidst covid-19 pandemic in Kenya.,

Methodology
The office of education and trainings in ICI conducted numerous virtual online preceptorship courses, facilitated multidisciplinary tumor board discussions and teleconsultations through telephones and webinars. Also, a revolving fund pharmacy was used to cater for drug stock outs among ICI affiliated facility-based oncology centers that were established through a joint public-private partnership.

Results
Since the outbreak of COVID-19, more than 1000 healthcare providers across all cadres in 13 Sub-Sahara African Countries have been trained on more than 60 clinical and non-clinical virtual preceptorship courses. About 2000 teleconsultations have been facilitated, over 100 virtual tumor boards hosted, with more than 300 cases discussed. Thirteen oncology clinics have been established in joint partnership with the County governments during this period, with a revolving fund pharmacy model established in 4 oncology clinics.

Conclusions
Telemedicine and revolving fund pharmacy have enabled marginalized communities to access cancer care and treatment during the COVID-19 period. These innovative approaches are effective in scaling up care and mitigating the rates of attrition among cancer patients. Continuous mentorship on these innovative approaches among health care providers is pivotal in sustaining quality cancer care.

PILOT VIRTUAL SEMINAR SERIES FOR RADIATION THERAPISTS (VSRT) – AN INTERNATIONAL COLLABORATION TOWARDS CAPACITY BUILDING

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OBJECTIVE
Matching the radiation therapy (RT) workforce in size and competency to the needs of a population is essential for RT capacity planning. COVID19 paused educational plans between Addis Ababa University and the Toronto Addis Ababa Academic Collaboration (TAAAC) while escalating the need to deploy linear accelerator (linac) technology. A pilot VSRT was designed to assist radiation therapists (RTTs) prepare for the transition to linac-based 3D practice.
Our objective is to describe the first evaluation on the VSRT and its impact on future plans

METHODS
The 10-week (90min x 10) curriculum used a disease-based focus to discuss RT principles and practices. The focus of sessions were refined in response to learner questions and discussions. Ten RTTs attended the online sessions. An online survey was used to capture feedback from the learners after each session including 15 items (using a 5 point likert scale; 1 strongly agree; 5 strongly disagree) and two open-ended questions enquiring about best features, and suggestions for improvement.

RESULTS
VSRT was delivered between Oct 2020-Mar 2021. Eight respondents completed 17 evaluations. All respondents strongly agree/agree that the objectives of the session(s) were clear, were fulfilled, learnings will result in a change in practice, felt encouraged to ask questions and would recommend the session(s) to a colleague. Some of the best features were: the interactive design, allowing time to ask questions, knowledge and commitment of the presenters, specific content such as approach/protocols needed to implement new technologies. Suggestions for improvement included increase time (7), inclusion of medical physicists (2), request to continue/expand the series with additional disease sites and treatment techniques (2).

CONCLUSION
VSRT provided an effective forum for RTTs to fulfil their learning needs in implementing 3D linac-based RT. The format was well received by the learners with requests for sustained effort expanding the disease site-based approach.

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TREATMENT OF KAPOSI SARCOMA WITH POMALIDOMIDE

Ramaswami R[1], Polizzotto M[1], Wyvill K[1], Lurain K[1], Widell A[1], Steinberg S[1], Uldrick T[1], **Yarchoan R[1]**
[1]National Cancer Institute

HEPATOBILIARY CANCER Co-Convened by AORTIC and NCI, STREAM 1, November 7, 2021, 6:00 PM - 7:15 PM

Kaposi sarcoma (KS) is a multicentric tumor that is often cutaneous but can also develop in visceral organs. It is caused by Kaposi sarcoma associated herpesvirus (KSHV), also known as human herpesvirus 8 (HHV-8). KS is most common in persons living with HIV (PLWH) but can also develop in HIV-uninfected individuals. The incidence of KS is very high in sub-Saharan Africa (SSA) and it is a common cause of morbidity and mortality. KS cannot be cured, and the goal of therapy is long-term control. Mild HIV-KS often responds to antiretroviral therapy (ART), but in many cases systemic therapy is needed. The most effective agents are paclitaxel and liposomal doxorubicin. However, these have acute and cumulative toxicities and can be challenging to administer in resource-limited settings. Pomalidomide (Pom) is an oral immunomodulatory derivative of thalidomide that was approved in 2013 in the US for multiple myeloma. Our group had previously shown that thalidomide has activity in KS. We initiated a trial of Pom, 5 mg daily for 21 days out of 28 day cycles, in 28 patients with HIV-associated (18 patients) or unassociated (10 patients) KS. Participants with HIV-KS received ART, and all received aspirin 81 mg/day and mitigation strategies to prevent pregnancy. The overall response rate was 71% (95% confidence interval 51-87%), and the median progression-free-survival was 10.2 months. The most common toxicities were hematologic. One patient discontinued for cutaneous vasculitis and two elected to come off for neuropsychiatric effects attributable to therapy, but overall, the regimen was generally well tolerated. Based on this study, Pom was approved by the US Food and Drug Administration for HIV-associated and HIV-negative KS in 2020. As an oral well-tolerated drug, it may be useful for KS in resource-limited settings; the US AIDS Malignancy Consortium has recently initiated a trial of Pom in SSA.

ONCOPLASTIE MAMMAIRE : INDICATIONS ET TECHNIQUES CHIRURGICALES AU BURKINA FASO

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Objectif : décrire les indications et les techniques d'oncoplastie mammaire utilisées à Ouagadougou.
Patients et méthodes : Etude rétrospective et descriptive portant sur les indications et les techniques chirurgicales des oncoplasties réalisées entre 2013 et 2021 à Ouagadougou. Le questionnaire Breast Q a été utilisé pour évaluer la satisfaction des patientes.
Résultats : Nous rapportons 63 cas de chirurgie oncoplastique, soit 6,9% des 917 chirurgies mammaires réalisées pour cancer. Nous avons réalisé 14 round block pour des carcinomes in situ (8 cas) et invasifs (6 cas) des quadrants supérieurs. Huit oncoplasties externes ont été réalisées devant des carcinomes canalaires infiltrants cliniquement classés CT2N1bMo. La technique à pédicule supérieur a été réalisée dans 18 cas. La technique amputation-greffe selon Thorek dans 13 cas devant des carcinomes des quadrants inférieurs sur gigantomastie et ptose majeure. La technique à pédicule supero-postéro-interne dite de Saint Louis a permis d'éviter la nécrose et l'amputation du mamelon dans 7 cas. La réduction du sein controlatéral a été réalisée dans 2 cas. Une technique combinant des oncoplasties à pédicule supérieure et des oncoplasties interne et externe a été réalisée dans un cas de sein ptosé avec une lésion bilatérale des quadrants externes à gauche et internes à droite de petite taille. Le curage axillaire type II de BERG ou la technique du ganglion sentinelle, et la radiothérapie ont été associés à la chirurgie mammaire. Les patientes étaient satisfaites du volume des seins restants et de leur aspect esthétique.
Conclusion : L'oncoplastie mammaire est de plus en plus réalisée au Burkina Faso. elle contribue à l'amélioration de la qualité de vie des patientes. Elle devrait prendre toute sa place avec l'avènement récent de la radiothérapie dans notre pays.
Mots clés : oncoplastie mammaire - round block-Thorek-Ouagadougou

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SAUVER LES ALBINOS DU CANCER DE LA PEAU DANS UN DES PAYS LES PLUS ENSOLEILLÉ DE LA PLANÈTE : LE DÉFI AU BURKINA FASO

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Objectif : Inciter à la mobilisation contre le cancer de la peau des albinos

Méthodes : il s'agit d'une étude synthétique résumant les résultats d'une étude menée sur les connaissances, aptitudes et pratiques des albinos face au cancer de la peau et l'opinion des leaders. Nous avons organisé des consultations dans les différentes régions du pays pour pouvoir interroger les albinos et leurs leaders.

Résultats : Nous dénombrons un millier d'albinos au Burkina Faso, soit 5/100000 habitants. Plusieurs associations de protection des albinos sont connues. En outre tous les albinos de plus de 12 ans savent que les rayons du soleil sont le principal facteur des cancers de la peau. Ils savent également que le port des vêtements protecteurs (51,2%), l'usage des crèmes protectrices (41,5%), l'éviction solaire (84%) constituent des moyens efficaces de prévention primaire. Cependant, les albinos restent mal protégés et 50% présenteront un cancer de la peau, et un tiers en mourra. Le défis est d'abord chirurgical à cause de la multifocalité des lésions malignes et de la coexistence de lésions précancéreuses. Le défi est également socio-économique selon les présidents d'association car les albinos vivent essentiellement des travaux champêtres et devraient donc malgré tous les risques s'exposer aux rayons du soleil. En outre la mauvaise protection est liée à la pauvreté des albinos et l'incapacité des associations de mobiliser suffisamment de fonds pour rendre disponibles des vêtements et des crèmes de protection aux albinos.

Conclusion : Le soleil est le principal facteur de risque des cancers cutanés chez las albinos. Le manque de moyens de protection explique la fréquence des cancers de la peau dans ce groupe. Une mobilisation sociale sans faille soutenant les associations de lutte des albinos pourrait sauver ces êtres sans mélanine contre le cancer de la peau.

Mot clés : albinos-cancer peau-soleil-protection- Burkina Faso

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