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CANCER IN AFRICA – THE NEW REALITY

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Abstracts are listed by ABSTRACT REFERENCE NUMBER. Please note that the ABSTRACT REFERENCE NUMBERS are in numerical order, but not every number has a corresponding abstract, so there are gaps in the numbering.

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SAMPLE PROGRAMME ENTRY FROM AORTIC 2009 CONFERENCE HANDBOOK:

(267) Palliative care in advanced breast cancer
TA Olasinde (Nigeria)

In this sample, (267) refers to the ABSTRACT REFERENCE NUMBER. Abstract 267 can be found in numerical order in this abstract book.

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APPRAISAL AND SCALING UP SEXUAL AND REPRODUCTIVE HEALTH SERVICES AMONG THE GERIATRICS IN IBADAN, NIGERIA

ABSTRACT REFERENCE NUMBER: 1

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BACKGROUND: Most studies on sexual behaviours in Africa especially Nigeria focus on young people and adults with limited attention paid to elderly people. There is dearth of information on geriatric reproductive health challenges and involvement in risky sexual activities. This study determined the need for SRH appraisal among Geriatrics in Nigeria.

METHODOLOGY: The study was descriptive and cross sectional in design. 400-geriatrics aged 65 years and above were selected using a three-stage sampling technique. Validated questionnaire was designed from six Focus Group Discussions (FGDs) findings. The FGDs and questionnaires data were analysed using thematic approach and descriptive/Chi-square statistics respectively.

FINDINGS/RESULTS: The participants’ mean age was 71.8 years. Slightly more than half, (50.5%) were males. A total of 25% of the participants had extramarital sex since they attained 65 years. Among this subgroup, very few (6.8%) used condom. More males (5.3%) than females (1.5%) used condom during the episode (p<0.05). Low condom-use was attributed to the belief that condom is unnecessary (34.5%) and the perception (50%) condom is not for the elderly. Majority (68.8%) was of the view that having sex with virgin could boost their immunity against STI/HIV; which comprised 65.1% males and 34.9% females. Majority of the males (56.4%) and females (66.7%) agreed that engagement in sex has a healing effect on the elderly.

CONCLUSION/POLICY IMPLICATIONS: Appreciable proportion of the elderly was involved in risky sexual activities, while majority’s perceptions about Sexual behaviour were negative. Therefore, there is need for appraisal of elderly sexual needs including scaling-up of SRH services to address the problem.

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MANAGEMENT OF FEBRILE NEUTROPENIA IN PATIENTS RECEIVING CHEMOTHERAPY FOR SOLID TUMORS IN A LOW RESOURCE SETTING: A RETROSPECTIVE STUDY OF TWENTY CASES FROM THE RADIOTHERAPY CENTER, KORLEBU TEACHING HOSPITAL, ACCRA, GHANA

ABSTRACT REFERENCE NUMBER: 3

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PURPOSE: To study the compounding factors, evaluate the use of empiric antimicrobials and outcome of febrile neutropenic patients in Ghana, a low resource country.

PATIENTS AND METHODS: Records of twenty patients with confirmed evidence of febrile neutropenia who were admitted to the inpatient service of our department from February 2005 to February 2008 were retrospectively analyzed. Primary site of cancer, site of infection, temperature on admission, chemotherapy drugs used, number of cycles received prior to fever, antimicrobial/antifungal drug used, duration of neutropenia and fever, use of granulocyte stimulating factors and mortality rate were analyzed.

RESULTS: The male to female ratio was 3:2. Median age was 24 years (Range: 15 – 68 years). The mean temperature was 38.8 degrees C (Range 38.0 – 39.8 degrees C) on admission. The mean absolute neutrophil count (ANC) was 0.2 (range: 0.0 to 0.6.) Fifty five percent (n=11) had head and neck cancer with nasopharyngeal cancer (n=9) in the majority, thirty five percent (n=7) had breast cancer, ten percent (n=2) had anorectal cancer. Sixty five percent (n=13) received Cisplatin, twenty five percent (n=5) received Adriamycin, ten percent (n=2) received Paclitaxel alone or Cyclophosphomide, Methotrexate, 5 Fluorouracil (CMF). Fifty percent (n=10) developed febrile neutropenia with the first cycle of chemotherapy, and thirty percent (n=6) in the second cycle. Twelve patients (60%) had oral infection and four patients had gastroenteritis (20%). There were single episodes of respiratory and urinary tract infections. No site of infection was identified in two patients. Site of infection was determined by history and physical examination as immediate culture and sensitivity laboratory test were either unavailable or unaffordable. Eleven received Ceftriaxone and Gentamycin (55%), five cases; Levofloxacin or ciprofloxacin and Augumentin +/-metronidazole (25%), two cases; Cefazidime and Gentamycin (10%), two cases: Meronem (10%). Twelve patients (60%) had antifungal upfront for oral Candida. One patient received antifungal after five days. Only one patient on ceftriaxone/ gentamycin needed to be switched to meronem. Five patients out of six who received augmentin/ciprofloxacin or levofloxacin had to be switched to another antibiotic. GCSF was given in eight patients (40%) for an average of three days. Two received it upfront, the rest after 5 days of persistent neutropenia. Mean duration of fever was 4.5 days (range 1-10 days) and the mortality rate was 10% (n=2).

CONCLUSION: Febrile neutropenia can be managed in low resource countries with comparable outcomes as developing countries in spite of several limitations. A good history and physical are important components of management and impacts the choice of empiric antimicrobials. Aminoglycosides are an important component of combination empiric antibiotic treatment in our setting. In the near future we need to evaluate the economics of risk of death of this serious complication of anticancer therapy and the cost of GCSF.

KEY WORDS: febrile, neutropenia, empiric, antimicrobial, antifungal, chemotherapy

OUTCOME AND CLINICAL FEATURES OF RETINOBLASTOMA: REPORT OF 36 PEDIATRICS CASES

ABSTRACT REFERENCE NUMBER: 5

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INTRODUCTION: Retinoblastoma (RB) is the most frequent intraocular tumor in the pediatric age group, representing 3% of all childhood neoplasms. It can affect one of both eyes and the disease can be inherited. Altered discoloration of the pupil and strabismus are the usual symptoms that lead to medical attention. The prognosis delay of diagnosis was 7 months (ranges from 1 month to 24 months). Symptoms at diagnosis were leukokonia, strabismus, exophthalmia and reduced visual sharpness. Thirty children presented unilateral RB. Eight patients had bilateral RB. One children had trilateral disease. 22 patients had extra ocular retinoblastoma. Four children have metastasis disease and were given palliative care. 34 patients have been enucleated. 16 patients received neoadjuvant chemotherapy. Four children have intrathecal chemotherapy. Twenty eight eyes received external beam radiotherapy. Median follow-up is 36 months (range from 3 to 93 months). 32 patients were valuables, non toxic death recorded. Four children dead of progressive disease (12 per cent). 91 per cent of patients achieved complete response. 30 per cent relapsed (8 patients had central nervous system dissemination).

CONCLUSION: The mortality in our series is high compared to other publications. These results are explained by the high number of local spread or metastases due to delay in diagnosis. Survival and prognosis can be improved by early diagnosis and multidisciplinary care.

CHARACTERISTICS OF PROSTATE SPECIFIC ANTIGEN AND DIGITAL RECTAL EXAMINATION IN A POPULATION OF SENEGALESE MEN SCREENED FOR PROSTATE CANCER

OBJECTIVES: Screening for prostate cancer is poorly described in African men. We describe characteristics of PSA and DRE in the detection of prostate cancer among a population of unselected Senegalese men.

METHODS: We examined 575 men at the Hôpital General de Grand Yoff (Dakar, Senegal) during a community outreach program. All participants were assessed for prostate related symptoms (voiding dysfunction), underwent DRE, and provided a blood sample for serum PSA testing. In the case of abnormal DRE and/or PSA≥ 4 ng/ml, a prostate biopsy was performed to distinguish prostate cancer (cases) from non cancer (controls). All prostate cancer cases had a PSA≥ 4 ng/ml and/or abnormal DRE.
We used Mann-Whitney and Kruskal-Wallis tests to compare median values of continuous traits and Chi-square tests for categorical variables.

RESULTS: 101 of 575 (18%) men were eligible to undergo prostate biopsies. Of these, 31 were performed by the time of data analysis. The number of participants involved in these analyses was 500 controls and 13 confirmed cases. Median age was 57 years (range: 36-82) for controls and 68 years (range: 52-83) for cases (p<0.001). Prostate-related symptoms increased with age (p<0.001) in controls but not cases. DRE revealed that there were more normal prostates and patients with Benign Prostate Hyperplasia in controls compared to cases (52% vs. 23% and 45% vs. 31%, respectively, p<0.001). In the control group, the percentage of prostates suspicious of cancer at DRE increased in men aged 60 and older compared to younger age groups (p<0.001). Median PSA increased with age among controls with 0.92 ng/ml, 0.98 ng/ml, 1.44 ng/ml and 1.58 ng/ml respectively in the age groups ≤ 49 years, 50-59 years, 60-69 years and ≥70 years (p<0.001). We found no significant difference in Median PSA among the different prostate biopsy outcomes (p=0.36) in controls.

CONCLUSION: In the Senegalese men studied here, we identified an increase in median PSA and an increase in the prevalence of prostate symptoms with age among controls. A high PSA and/or abnormal DRE were found in all of our confirmed prostate cancer cases. Additional prostate biopsies will allow a more complete assessment of PSA and DRE screening in the detection of prostate cancer in African men.

KEY WORDS: Prostate cancer, PSA, early detection

CANCER REGISTRATION IN LOW-RESOURCED SETTINGS: PRACTICE AND RECOMMENDATIONS

ABSTRACT REFERENCE NUMBER: 7

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OBJECTIVE: Discuss the design and implementation of population-based cancer registration in Ghana.

METHODOLOGY: Departmental-based cancer registry was initiated in 2004 at the National Center for Radiotherapy and Nuclear Medicine, Kumasi, using analytic case finding reportability. The registry is now being further extended to cover the geography of the Ashanti Region of Ghana using IARC Canreg4 tools. Datasets needed for cancer registration are as follows: Patient demographics: name, age, birth date, birth place, sex, occupation, ethnicity, place of residence; Tumour data: incident date, basis of diagnosis, topography, morphology, grade, behaviour, stage; Treatment data: radiotherapy, chemotherapy, brachytherapy, immunotherapy, hormonal therapy, surgery, other treatment, date of treatment; Data source: hospital name, address, department or unit, case number; Follow-up data: date of last contact, status at that date, date of death (if dead), autopsy, cause of death, place of death.

RESULTS: The registry in the interim is being used to evaluate treatment and outcomes; and to assist public health and screening intervention programmes; collaboration with other departments to conduct works. The feasibility and gradual implementation of the Registry has compelled us to strategically replicate the design in two additional geographical areas of the country.
CONCLUSION: With standardised and consistent definitions being put in place, data from these registries would be comparable and can be aggregated for an effective central registry which can then act as driver for policy development and program evaluation for the urgent need of a National Cancer Control Program in Ghana.

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SEXUALITY ISSUES IN PALLIATIVE CARE POORLY EXPLORED

ABSTRACT REFERENCE NUMBER: 8

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Sexual needs and problems of patients living with life limiting illnesses receive little attention if any, and coping mechanisms are seldom discussed. A retrospective survey was carried out at the Hospice by reviewing 200 patients’ clinical notes seen between March-December 2008 to assess whether the 8 clinical team members ever explored sexuality issues during patient assessment.

37% of staff attempted to explore sexuality issues in 18 patients when there was an entry point especially when patient or the accompanying spouse initiated the discussion. When cancer is related to reproductive organs, 50% of the staff explored sexuality issues in 41 patients. When a patient is accompanied by a parent, or a child, sexuality issues are never explored. When patient is HIV infected, 34% of the staff interviewed 33 patients. More female patients were concerned of their spouses’ unexpressed and unmet sexuality needs.

Lack of a comprehensive assessment tool, poor communication skills, cultural inhibitions, social stigma in HIV patients are some of the factors that hinder effective exploration of the sexuality issues. There is a strong need to effectively explore and encourage patients to express their fears and concerns, surrounding sexuality. To provide a true holistic care to patients and families, it is imperative that a holistic approach must be adopted. Sexuality issues need to be adequately explored and addressed. Good communication skills, appropriate assessment tool, demystifying cultural connotations and inhibitions will give good impact. This will not only enhance the patients self esteem, but also add quality life into their days.
REDUCING CERVICAL CANCER INCIDENCE IN NIGERIA

ABSTRACT

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BACKGROUND: Cervical cancer is an important women’s reproductive health problem especially in developing countries like Nigeria. It is the third most common cancer worldwide, four out of every five new cases are reported from developing countries including high incidence of mortality. This is because there are little or no facilities for screening programmes to detect precancerous lesions early and treat, especially the preventable ones like breast and cervical cancers, another reason for the high incidence is that there is generally low awareness about the disease in the populace, most women attending public hospitals in Nigeria are not aware that cervical cancer can be prevented by regular screening, this picture is similar to what obtains in most parts of the developing world that bears the burden of cancer, another major problem for screening for cervical premalignant lesions in Nigeria is that there is poor compliance rate with treatment, many patients simply do not come back for treatment and this may be due to economic hardships that many women face daily; cervical premalignant lesions rarely give symptoms thus it is very difficult to convince these women to come for screening.

MATERIALS/METHODS: In order to achieve a high quality visual cancer prevention services in developing countries, the usual screening approaches are employed because it is simple, has the greatest potential of screening and treatment in one visit this reducing follow up failures, it is not a cytological based cervical cancer screening procedure and its least expensive; it involves the application of 3-5% dilute acetic acid to the cervix ad observing for colour changes, a positive reaction is the appearance of a well defined densely opaque acetowhite areas in the transformation zone or close to the external OS, women with high grade precancerous lesions of the cervix are identified and treatment given inform of cryotherapy and electro surgical excision.

RESULTS: Since inception of the unit in 2006 after having a sponsored training in VIA/VILI technique at the Tata Memorial Hospital Mumbai India by International network for cancer training Research (INCTR) Belgium, about three thousand women were screened till date, the positive cases which were about 3% were treated with cryotherapy and electro surgical excision after being further evaluated with colposcopy and a punch biopsy specimen taken. The cryotherapy machine was purchased for the unit by the hospital management having realized the need to screen women early and treat immediately this have contributed immensely in reducing cervical cancer incidence in Nigeria.

CONCLUSION: Visual screening approaches are very effective in solving the challenges of cervical cancer in low resource settings like Nigeria because it is cheap and easily thought and learnt by health workers and it involves a see and treat technique in one single visit.
GONADOTROPIN-RELEASING HORMONE RECEPTORS TYPE I AND TYPE II MEDIATE ANTIPROLIFERATIVE EFFECTS AND UPREGULATE P21 WAF1/CIP1 IN DIFFERENT CELL CONTEXTS

ABSTRACT REFERENCE NUMBER: 11

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OBJECTIVE: To determine the role of the type I and II gonadotropin-releasing hormone receptors (GnRH-RI, GnRH-RII) in growth inhibition, and in induction of P21 WAF1/CIP1

METHODS: MCF-7 breast cancer cells and HEK-293 cells expressing GnRH-RI (MCF-RI and HEK-RI), and GnRH-RII (MCF-RII and HEK-RII), respectively, were studied. Cells were treated with either GnRH-I/GnRH-II, or antagonists 135-18/135-25.

Antiproliferative effects were determined by counting trypan blue-stained cells and by 3H-thymidine incorporation, apoptosis by employing flow-cytometry, and p21 expression was by Western blot and immunocytochemistry, while a luciferase reporter construct was used to determine, whether p21 upregulation was transcriptional.


Apoptosis was detected only in HEK-RI. GnRH agonists induced p21 upregulation in MCF-RI, HEK-RI and HEK-RII but not in MCF-RII and the upregulation was posttranscriptional. p21 was also upregulated in MCF-RI by both antagonists. In MCF-RI and HEK-RI, p21 upregulation was both nuclear and cytoplasmic. However, its basal expression in MCF-RI and MCF-RII was elevated compared to HEK-RI.

CONCLUSION: GnRH-RI and GnRH-RII have direct antiproliferative effects in both cell lines. Furthermore, while agonists and antagonists inhibit proliferation in MCF-RI, only agonists inhibit proliferation in MCF-RII and HEK-RI. p21 may mediate the GnRHR-induced antiproliferative effects and this role may be cell-context dependent. However, the higher basal cytoplasmic p21 expression may contribute to resistance to apoptosis in MCF-RI and MCF-RII. Lastly p21 upregulation may be as a result of inhibition of degradation or increased translation.

PALLIATIVE CARE NEEDS EVALUATION IN UNTREATED PATIENTS WITH HEPATOCELLULAR CARCINOMA IN IBADAN, NIGERIA

ABSTRACT REFERENCE NUMBER: 12

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OBJECTIVE: This study sought to evaluate the physical, psychosocial and spiritual needs of patients with Hepatocellular Carcinoma (HCC) in order to offer effective palliative care and improve their quality of life.

METHODS: One hundred and fifty five patients with HCC completed the NEEDS EVALUATION QUESTIONNAIRE on pain, psychological and spiritual needs. Responses were analysed using simple statistics.

RESULTS: Of 155 patients, 143 (92%) had pains, which was discomforting in 28%, distressing in 32%, horrible in 24% and excruciating in 2%. On psychosocial assessment, pain-related sleep disturbance was observed in 79% while 72% had both sleep and mood disturbances. 58% and 77% needed information on cause and treatment options respectively. While 43% wanted to know the recovery rate, 27% were depressed, 32% frustrated and 40% felt set back. 25% were totally incapacitated, while 63% experienced ineffective coping. 36% and 93% claimed they were unaware of their diagnoses and anyone with similar experiences respectively. While 95% did not have problems communicating with their healthcare providers, 5% cited test-related problems. Few (2.5%) had fears about their sexuality due to change in body image, 6% had low self-esteem, 88% hoped for healing while 66% were afraid of dying. Spiritually, 86% felt God is a “doer” while 14% felt God is a “supporter”. 75% asked the question ‘why me?’ and 93% had religious beliefs that might help. About 28% did not share their feelings, but 76% desired to speak with a therapist or religious leader.

CONCLUSION: Pain control, spiritual support and information are major palliative care needs of patients with HCC.

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A CASE-CONTROL STUDY OF BREAST CANCER IN SUDAN

ABSTRACT REFERENCE NUMBER: 13

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Breast cancer is an emerging disease in the Sudan. The exact extent is unclear due to a number of factors including the lack of a population-based registry. There is, however, a need to conduct basic descriptive studies of cancer. The aim of this study was to assess the importance of known risk factors for female breast cancer in Sudan.

A case-control study was conducted at Institute of Nuclear Medicine Molecular Biology and Oncology (INMO) comprising 100 breast cancer cases and 100 age, gender matched controls. A standardized
questionnaire was administered to all participants and consisted of socio-demographic factors, obstetric and gynecologic histories, anthropometric measurements, and other variables identified as risk factors from the literature. Simple and multiple conditional logistic regression models were included in the analyses.

Findings suggest that the risk factors operative in the development of breast cancer in Sudan are not the same as those identified in more developed nations. Women of lower educational level and early age at menarche were found to be at significantly increased risk of breast cancer. Other risk factors examined but not found to significantly influence risk included parity, marital status and age at first full-term pregnancy, age at menopause, contraceptive use and Body Mass Index (BMI).

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BURKITT LYMPHOMA OF THE BREAST IN EQUATORIAL AFRICA-INCIDENT CASES AND HISTOPATHOLOGY

ABSTRACT REFERENCE NUMBER: 14

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Burkitt lymphoma is a highly aggressive lymphoma often presenting as extra-nodal sites or as acute leukaemia, composed of monomorphic medium-sized B-cells with basophilic cytoplasm and high mitotic activity.

It represents the most common malignancy of childhood in equatorial Africa. Its incidence is correlated with some climatic factors (rainfall, altitude etc.) and coincides with the geographical distribution of endemic malaria. The Epstein Barr Virus is involved in its etiology.

In endemic Burkitt’s lymphoma, the jaws and the other facial bones (orbit) are the site of presentation in about 50% of the cases, but breast, ovaries and other organs may be involved.

Breast involvement, also observed in sporadic Burkitt’s lymphoma, is often bilateral and massive and has been associated with onset during puberty, pregnancy or lactation.

We reviewed the incident cases in Cameroon of Burkitt’s lymphoma of the breast from medical records and the pathology registries. Data on clinical presentation, age and race were collected.

Three percent of malignant tumors of the breast observed in our institution were Burkitt’s lymphoma. The average age of the patients was 19 years. They were all black Africans; most (75%) of these patients had bilateral breast involvement, simultaneous ovary involvement and 5 % were pregnant at the time of diagnosis. The diagnosis is made through Fine Needle Aspiration biopsy cytology.
The prognosis is still poor because usually patient go to traditional practitioners and present to the physician in an advanced stage. Similar findings were made in neighbouring countries.

We conclude that Burkitt’s lymphoma of the breast is a common finding in breast pathology in Equatorial Africa.

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KNOWLEDGE, ATTITUDE, BELIEFS, BEHAVIOUR AND BREAST CANCER SCREENING PRACTICES IN GHANA

ABSTRACT REFERENCE NUMBER: 16

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BACKGROUND: Breast cancer is the most common cancer and the leading cause of cancer related-death among women around the world. Ghanaian women are usually diagnosed with advanced breast cancer leading to poor outcome of the disease.

OBJECTIVE: The main objective of the cross-sectional survey was to assess breast cancer related knowledge, attitudes, beliefs, behaviour and screening practices among Ghanaian women in Accra and Sunyani, Ghana.

METHODOLOGY: The respondents included 520 women, 3 physicians and 2 herbalists. A questionnaire and semi-structured interview were used to the data. Theory of planned behaviour was used as a communication and educational model. Spearman’s rank correlation coefficient, Chi-squared and Mann Whitney U tests were performed. Interview data was analysed by the constant comparison method to generate themes.

RESULTS: High level of knowledge deficit about the disease was noted, as evident from the many misconceptions. Overall, only 48% could mention all the risk factors of the disease correctly. However, a strong correlation was found between the levels of education and the self-reported knowledge about the disease ($r_s=0.316, N= 465, p < 0.001$). Attitudes towards the disease were those of fear, superstitions, fatalism and stigma. There was no significant differences in the knowledge, attitude and screening between respondents in Accra and Sunyani in spite of improved health facilities in Accra.

CONCLUSION: The low level of awareness indicates inadequate and ineffective awareness programme in Ghana. Lack of adequate and affordable cancer care contributes to the poor outcome of the disease.
EFFECTS OF PALLIATIVE CARE ON A TERMINALLY-ILL SOFT TISSUE SARCOMA CANCER PATIENT

ABSTRACT REFERENCE NUMBER: 18

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OBJECTIVE: This study considers the general approach to palliative care by health professionals and response from the patient, family and society. It seeks to reduce client’s pain as much as possible and maximize available resources. It finds out how clients perceive their condition and observe the effects.

METHODOLOGY: A prospective case-series was conducted on the terminally-ill soft tissue sarcoma cancer patient. Both primary and secondary sources of data were used to obtain substantial information for the study through personal observation and interviews.

RESULTS: Nursing interventions reduced the psycho-social and physical pains drastically, as observed from pain score of severe to mild. Client and family got the right information, understood disease, treatment, re-action and how to manage the situation. Family acquired knowledge and skills to care for the patient and themselves. Established nurse-client-relatives confidence promoted good relationship for them to express their feelings and problems in a relaxed atmosphere.

CONCLUSION: Palliative Care is a holistic approach that improves the quality of life of patients and their families facing the problems associated with life threatening illness through prevention and relief of suffering by means of early identification, assessment and treatment of pain and other physical, psychosocial and spiritual problems. Good palliative care is not necessarily dependent upon the existence of specialist palliative care services, but implies the mobilization of services and recognition of priorities within whatever the mainstream healthcare system there is, and also reduce the demand for hospital care. Palliative care service in a local Ghanaian community was very feasible.

MELANOME ANAL: QUELLE CHIRURGIE PROPOSEE?

ABSTRACT REFERENCE NUMBER: 20

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Le mélanome anal est une tumeur rare assez méconnue. Ce cancer représente 1% des tumeurs de la région ano-rectale. Il semblerait qu’il atteint plus fréquemment les femmes que les hommes avec un sex ratio de 1H pour 2 femmes et une majorité des cas retrouvée dans la 6 décade. Alors que le cancer du rectum est régulièrement abordé dans les congrès, symposiums et conférences de consensus des sociétés savantes, le mélanome anal reste peu ou pas étudié. L’incidence peu élevée des cas rapportés, l’aspecificité des symptômes, le pronostic extrêmement sombre à 5 ans caractérisent cette pathologie. Le cas clinique de notre patiente qui présente un mélanome anal pigmenté nous a d’abord interpellé, car sans grande connaissance de cette pathologie et de ses modalités thérapeutiques. Notre cas clinique peut être utile pour évaluer les thérapeutiques actuelles et attirer l’attention des confrères sur cette tumeur rare à laquelle il faut penser devant toutes lésions inhabituelles.

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**CHANGING HORIZONS IN DETECTION OF PROSTATE CANCER IN SUDANESE PATIENTS**

**ABSTRACT REFERENCE NUMBER:** 21

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**PURPOSE:** To study the impact of introducing transrectal ultrasound (TRUS)-guided biopsy in detection of Prostate cancer in Central Sudan.

**METHODS:** Review was done for data of all prostate cancer patients treated in the Institute of Nuclear Medicine and Oncology & Gezira Hospital of Renal Diseases & Surgery (GHRD&S), Wadmedani, Sudan during the years 2000-2007. Comparison was done for data available in both periods of time before and after introduction of TRUS.

**RESULTS:** Prostate cancer cases were stable and contributing for only 8% of all cancers during the time period before TRUS introduction, this is up now and in 2007 the figure of 14% was caught. The leading cancer in male now is the prostate, which is far a head the immediate second ranking cancer. Previously it was ranking number 2-3 in the time period before TRUS. The detection of new cases per year has increased from 18 cases in 2004 to 65 cases in 2007.

**CONCLUSION:** Prostate cancer is common in Sudanese males and it is the most common. TRUS guided biopsy has great contribution in prostate cancer detection in this region. Distribution of this service and training of the staff is important together with establishment of cancer registry.
WILMS’ TUMOUR IN SUDAN – OBSERVATIONS, OBSTACLES AND OPTIONS

ABSTRACT REFERENCE NUMBER: 22

AUTHOR/S: Abuidris, Dafalla (1); Elimam, Mohammed (1); Nugud, Faisal (1); Elgaili, Elgaili (1); Ahmed, Mohamed (1); Arora, Ramandeep (2)

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OBJECTIVE To look at Wilm’s tumour and its treatment outcome in resource limited country like Sudan regarding Wilm’s tumour.

METHOD Records of patients with Wilms’ tumour diagnosed and treated at Institute of Nuclear Medicine, Molecular Biology and Oncology in the University of Gezira from May 1999 to June 2007 were reviewed retrospectively.

RESULTS A total of 37 children were treated. The mean age at presentation was 4.1 years (range 2 months to 13 years) and male to female ratio was 0.9 to 1. Abdominal swelling or mass was the commonest symptom. Staging was done by Ultrasound abdomen and chest X-ray. There was 1 child with Stage I (2.7%), 7 with stage II (18.9%), 25 with Stage III (67.6%) and 4 with Stage IV (10.8%). Following diagnosis 27% of children did not receive further treatment (5.4% died prior to treatment, 5.4% were not able to finance treatment and for the rest 16.2% no cause was identified). More than half of the children did not have a nephrectomy and only 4 (11%) children went on to complete treatment.

CONCLUSIONS The high abandonment rate and poor outlook is related to several factors. Delayed presentation, poor awareness of treatment options, lack of finances, no provision of food, lodging and transport for parents, absence of paediatric trained staff. Empowering parents with information, giving chemotherapy prior to nephrectomy, training staff and establishing links with a tertiary cancer centre in the developed world are some of the options to bring about improvement in compliance and survival.

REGISTRE DES CANCERS AU MALI: ORGANISATION, FONCTIONNEMENT ET RESULTATS

ABSTRACT REFERENCE NUMBER: 23

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INTRODUCTION: Crée en 1986, le Registre des Cancers du Mali est un registre à base populationnelle. Il est basé dans le service d’anatomie pathologique de l’Institut National de Recherche en Santé Publique (INRSP). Il couvre la ville de Bamako et Kati une banlieue située à 15 Km.

ORGANISATION: Le registre est organisé en secteurs d’activité.
-- La collecte des données: Elle est assurée par deux internes auprès des correspondants du registre dans les services cliniques retenus et un technicien pour les données histologiques.
-- La codification et la vérification des données ainsi que la rédaction du rapport annuel sont assurées par les deux maîtres assistants.
-- La saisie et l’analyse des données sont exécutées par un technicien.
-- L’ensemble de ces activités est supervisé par un professeur titulaire.

METHODE DE COLLECTE ET D’ANALYSE: La collecte des données est dite active. Elle consiste à déposer auprès des chefs d’unité des services retenus des fiches avec lesquelles nous avons eu plusieurs réunions pour expliquer les objectifs du registre ainsi que la façon de remplir ces fiches. Les internes passent chaque mois dans ces différents services pour les retirés. L’analyse est réalisée sur le logiciel Canreg.

SOURCES D’INFORMATION: Ces services sont: 3 Hôpitaux nationaux, le CNAM (service de dermatologie), l’IOTA (service d’ophtalmologie), l’INRSP (laboratoire d’anatomie pathologique), laboratoire de cytotologie de la FMPOS, le registre des décès, 3 centres de santé de référence (niveau district sanitaire).

RESULTATS: L’analyse des données de 1996 à 2005 du registre du Mali, nous a permis de constater que:
Les femmes sont les plus touchées par le cancer (51%). 80% des patients proviennent des deux centres hospitalo-universitaires et 52% ont eu une confirmation histologique. Les cinq cancers les plus fréquents (TSA) chez la femme sont les cancers du col utérin (33,5), du sein (23), de l’estomac (19,6), du foie (11,9) et du côlon-rectum (6,1). Chez l’homme nous avons: le foie (26,6), l’estomac (22,3), la prostate (10,7), la vessie (8,6) et le côlon-rectum (5,6).Les cinq cancers qui ont fait le plus de victimes (TSA) chez la femme sont les cancers du col utérin (6,9), du foie (5,9), du sein (5,2), de l’estomac (5,6) et de la vessie (1,4) ; chez l’homme, le foie (14,1), l’estomac (6,2), la prostate (3,8), la vessie (2,4) et le côlon-rectum (1,6).

NOS CONTRAINTES:
-- Le registre est loin des centres hospitalo-universitaires.
-- L’irrégularité dans la collecte des données.
-- Le faible taux de vérification histologique.
-- La non vulgarisation de la maîtrise du logiciel Canreg

CONCLUSION: Le Registre des Cancers du Mali est un registre populationnel il permet de connaître la prévalence et l’incidence des différents cancers au Mali afin de promouvoir les programmes de lutte contre le cancer.

MOTS CLES: Registre, Cancer, Mali

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IN VITRO ANTITUMOR AND ANTIOXIDANT ACTIVITIES OF SIDA CORDIFOLIUM AND VISCUM ALBUM AGAINST HUMAN HEPATOMA CELL LINE (HEPG2)

ABSTRACT REFERENCE NUMBER: 24

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OBJECTIVE: Methanol extracts from de S. cordifolium and V. album were evaluated for their potential antitumor and antioxidant activities against Human Hepatoma Cell Line (HepG2).

METHODS: For the determination of cell viability, cells were seeded into 96-well culture plates at a density of 6000 cells/well in 200 µl aliquots. Cells were treated with extracts at different concentrations (0 – 1000 µg/ml). After 24h a tetrazolium dye colorimetric test, MTT was use to monitor cell growth. The same experience was repeated with the concentration of 250 µg/ml for 24, 48 and 72h. The antioxidant proprieties were assaysed by evaluating the activity of CAT, SOD, Grd, GsT at the same time.

RESULTS: Results showed that the percentage of viability of cells decrease when the concentration of extracts increase. The value of IC50 was 584 µg/ml and 674 µg/ml respectively for the methanol extracts of V. album and S. cordifolium. After 72h of treatment with 250 µg/ml of extract, the viability of cells decreased significantly from 84% (24h) to 40% (72h). The results of antioxidant activity of extracts demonstrated that the activities of increased significantly from 56,65 to 167,08 U/ml (CAT), 37,16 to 41,63 U/ml (SOD) and 30,13 to 34,26 U/ml (Gred) compared with the control for the extract of V. album. No variation was noted on the different enzymes involved in the antioxidant activity with the extract of S. cordifolium. The phytochemical analysis showed that the polyphenol content of S. cordifolium was 3.54 times higher than V. album.

CONCLUSION: Methanol extracts of S. cordifolium and V.album showed antitumor and antioxidant activities. Further research will be done to find the active compounds of the extracts.

AWARENESS, KNOWLEDGE AND UTILISATION OF CERVICAL SCREENING AMONG FEMALE SCHOOL TEACHERS IN IBADAN, NIGERIA

ABSTRACT REFERENCE NUMBER: 25

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OBJECTIVE: Cervical cancer is a form of female reproductive cancer. Majority of world cases are occurring in developing countries. The objective of this study was to find out awareness and knowledge levels as well as utilisation of cervical screening programme among female teachers in Ibadan. Nigeria.

METHODS: Through a cross-sectional survey research design, data were collected from 400 study participants (73.5% secondary school teachers and 26.5% primary school teachers) in Ibadan, Nigeria. Data analysis was done through frequency counts and percentage.

RESULTS: Study participants mean age was 37.8 years and 74.5% were married. Mean age at menarche was 14.7 years and at sexual debut was 22.8 years though 19.6% had sex before age 20. Also mean age at marriage was 26.5 years and mean age at first child delivery was 27.8 years. Only 68.5% were aware of existence of cervical cancer, 74.7% had premarital sex, 23.1% had multiple sex partners within the last five years, 23.5% believed their husbands had other sex partners and 3.5%-13.8% had one form of
sexually transmitted infections or the other. Out of the 400 participants, only 8.3% had uptake cervical cancer screening. Also 89.8% did eat lots of meat, 87.3% drank alcohol, 17.5% smoked and 8.5% currently have multiple sex partners.

**CONCLUSIONS:** Awareness is only 68.5%, uptake of screening was low (8.3%) , there were reported cases of STIs and they also engaged in cervical cancer risky behaviour. There is an urgent need for appropriate intervention [primary and secondary prevention] programmes in the study area.

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**28**

**CANCER OF THE COLON IN ADULTS**

**ABSTRACT REFERENCE NUMBER:** 28

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**METHOD:** we retrospectively studied the files of more than 15-years old patients treated from January 1993 to December 2004 for cancer of the colon.

**RESULTS:** we studied 36 files (25 men and 11 women, sex ratio 2.27). The mean age was 51.39± 15 [18-74] years. Patients between 40-50 years old were more concerned. Clinically 11 patients had occlusion. 8 had rectal bleeding: 2 with cancer located on the right side and 6 with cancer on the left side (p<0.05). Endoscopies were performed in 11 cases. Surgery was exclusively performed. Resection of the colon was performed in 30 cases (83.3%) taking off the tumour. In 27 cases the resection was R1 type (76.7%) and in 3 cases (23.3%), it was R2 type. In 6 cases the tumour was fixed. Histology revealed adenocarcinoma in 33 patients (91.67%). Chemotherapy was not performed for any patients. 5 patients died in post operative period (13.9%).

**CONCLUSION:** rare and occurring around the fifties, the cancer of the colon is usually diagnosed at an advanced stage. Its prognosis should be improved by the creation of a department of cancerology and the introduction of chemotherapy in treatment.

**KEY WORDS:** cancer, colon, tumour, Africa

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**29**

**SEXUAL BEHAVIOUR: HPV AND CERVIX CANCER KNOWLEDGE AMONG CAMEROONIAN STUDENTS**

**ABSTRACT REFERENCE NUMBER:** 29

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OBJECTIVE: There is consensus that the main risk factor for cervical cancer development is persistent infection with high-risk group human Papillomaviruses (HPVs) and reproductive history. HPV infection is one of the most common sexually transmitted infections (STIs) on youth (male and female). Since, sexual behaviour determines exposure to HPVs and the adolescent period may be particularly important in this regard. Since, adolescents are now engaging in sexual activity in their early years, sexual behaviour needs to be explored to prevent contact with HPVs and other sexually transmitted diseases (STDs), including cervical cancer. The purpose of this study was to assess, in Cameroonian students sexual attitudes and knowledge towards HPV/Cervix cancer.

METHODS: The study was conducted in the period of October to December 2007 at Douala University. The data were collected by using a questionnaire with both structured and open-ended questions. The study group consisted of 1166 students of both sexes. The data were analysed by using chi-square test.

RESULTS: Respondents are aged 16-24 years. 40.7 % are male and 59.3 % female; 37.7 % are virgin while 62.3 % has sexual activities; 78.1 % and 80 % has no HPV knowledge respectively for the cohort and sexual active respondents; all respondents didn’t have any knowledge about HPV/cervix cancer correlation. The possibility that this might impact on HPV infection rates, indicates that more attention needs to education for prevention of HPV infection and cervical cancer.

CONCLUSION: These results suggest extended study in order to evaluate the incidence of HPV infection and cervical cancer among youth.

KEYWORDS: HPV, cervix cancer, sexual behaviour, youth

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EVALUATION OF COMBINED PAP SMEAR AND VISUAL INSPECTION WITH ACETIC ACID (VIA) AS CERVICAL SCREENING TOOLS IN KHARTOUM, SUDAN

ABSTRACT REFERENCE NUMBER: 32

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Cancer of the uterine cervix is the most common female cancer in developing countries. Cervical Cancer account for about 16.2% of all cancers in Sudanese women and is the second cause of death after Breast Cancers. 78% of women present with stage III or IV. Effective screening programs needs Trained personnel, infrastructures, systems to communicate results and funding. The present study evaluated the performance of Visual Inspection with Acetic Acid (VIA), and cytology in the detection of cervical cancer precursor lesions in Khartoum, Sudan.

A total of 372 women aged 30 – 64 years had a Pap smear followed by visual inspection of the cervix using 3-5% acetic acid. Detection of well-defined, opaque acetowhite lesions close to the squamocolumnar junction; well-defined, circumorificial acetowhite lesions; or dense aceto-whitening of
ulceroproliferative growth on the cervix constituted a positive VIA. Cytology was considered positive if reported as mild dysplasia or worse lesions.

VIA was positive in 38 (10.2%); while Pap smear were positive in 30 (8.1%). The sensitivity and specificity of VIA was 95%, 63%, and of Pap smear was 75%, 87% respectively. 3 cases reported as Borderline Nuclear changes in Pap smear and considered as negative.

In conclusion, the favorable test parameters of VIA and the advantages of this test in terms of low cost, easy access to supplies, and ease of pattern recognition make VIA a possible screening test for population-based cervical screening in the resource limited countries. However the specificity of Pap smear was higher than that of VIA, and the combination of both tests will increase the overall accuracy of Cervical Cancer Screening.

KEY WORDS: visual inspection with acetic acid, Pap Smear, Cervical Cancer

CHRONIC LEAD EXPOSURE: A CAUSE OF THE CURRENT BREAST CANCER EPIDEMIC NIGERIAN WOMEN?

ABSTRACT REFERENCE NUMBER: 34

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OBJECTIVE: Breast cancer is the most common cancer in Nigeria women. The continuing rise of the breast cancer incidence in Nigerian women suggested contaminations of the soil and water supplies by industrial metals as a major contributing cause. Within this context, lead (Pb) is of particular concern, as it is one of the chief environmental pollutants in Nigeria and is known to promote tumorigenesis by abolishing the cancer-protecting effects of selenium (Se). We assess the possible effect of lead on the occurrence of breast cancer in Nigerian patients.

PATIENTS AND METHODS: Twelve consenting patients with breast cancer seen at Obafemi Awolowo University were recruited into the study. The hair and fasting blood samples were taken for analysis using ICP-MS method. Samples from twelve age-matched controls were also analyzed.

RESULTS: Consistent with this hypothesis, high and occasionally excessive levels of Pb were detected in blood and scalp hair of Nigerian women with and without breast cancer. These levels were sufficient to overwhelm the anti-carcinogenic effects of Se.

CONCLUSIONS: In the clinical setting, multi-element hair analysis provides a non-invasive means of assessing toxic metal exposures, cancer risk and disease progression. Any program of reducing breast cancer risk in Nigerian women thus must include effective measures to reduce the toxic metal burden of the population.
36

PROSTATE CANCER IN ZARIA: A TEN YEAR HISTOPATHOLOGICAL REVIEW

ABSTRACT REFERENCE NUMBER: 36

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BACKGROUND/OBJECTIVE: Prostate cancer is a major health problem of middle aged men. African Blacks and men of African descent are at greater risk. The aim of this analysis is to characterize and determine the distribution pattern of this tumour in our environment.

MATERIALS AND METHODS: A ten year retrospective histopathological review of all diagnosed prostate neoplasm between January 1991 and December 2000. Haematoxylin & Eosin (H&E) stained histology slides were retrieved and studied. Lesions were categorized based on procedure and diagnosis classified according to WHO Classification of Prostatic Tumours. Histological grading of the adenocarcinoma was done using the Gleason system. Information such as age, hospital and laboratory number of individual Patients’ was extracted from the department of Pathology register.

RESULTS: There were one hundred and fifty-one (151) cases of prostate cancer. The age range was 30-75 years and mean age was 67.5 years. Two cases of relatively young patients aged 30 and 32 years were observed. The surgical procedural samples include; Trucut needle biopsies 68 (45%), Transurethral resection 10 (6.6%), wedge biopsies 5 (3.3%), frozen section 1 (0.7%) and open prostatectomy 67 (43%). Incidental prostate cancer constituted 53 (35.1%), Seventy-eight (51.6%) of the cases analysed were poorly differentiated adenocarcinoma, while Seventy-three (48.4%) were moderately differentiated; no well differentiated adenocarcinoma was seen.

CONCLUSION: Adenocarcinoma is the commonest histological type of prostate cancer in Zaria and affected men in the seventh-decade.

38

ROLE OF A STOMATHERAPY NURSE IN PALLIATIVE CARE MULTIDISCIPLINARY TEAM

ABSTRACT REFERENCE NUMBER: 38

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INTRODUCTION AND OBJECTIVE: The key to successful stoma surgery lies both in impeccable surgical technique and in the provision of adequate emotional and practical support for patients and their families. All patients undergoing stoma construction, either as an elective or emergency procedure, require a stomatherapy nurse as part of the multidisciplinary team. His/her role includes provision of pre-operative counselling and orientation, stomal siting, post-operative practical management and education, discharge planning and ongoing community and outpatient clinic care. The purpose of this study was to find out how the stomatherapy nurse can improve the patient’s quality of life in relation to the patient /family psychological adaptation to stoma. Practically at the Hospice, through assessment of patients, I have found that most of the cancer patients with stomas referred for palliative care is inadequately informed on the nature of the operation, availability and cost of appliances to be used. Their questions and concerns regarding sexuality, diet, prognosis and lifestyle are not openly discussed. This causes more distress, loss of self-esteem, embarrassment, and stigmatization/isolation hence poor quality of life as some are forced to use uncondusive polythene bags due to lack of money to buy ostomy pouches. Lack of informed stomatherapy nurses in most hospitals contributes to this.

CONCLUSION: Patients come from a wide range of social, cultural and religious backgrounds and each requires an individualized approach. A well-matched rehabilitated ostomate with a similar stoma, condition and social background will be of great help to the newly stoma patient. Patients accept and cope well when they are given adequate information on their intestinal diversions including simplistic pouching, skin care and the knowledge that ongoing practical care and support will be available. I recommend more nurses to develop interest and be trained on this specialty to provide optimal care to the needy patients.

KEY WORDS: Stomatherapy or stoma care nurse, palliative care, multidisciplinary team

40

MORTALITE ET MORBIDITE DES HEPATECTOMIES: A PROPOS D’UNE SERIE DE 207 CAS

ABSTRACT REFERENCE NUMBER: 40

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Si la chirurgie d’exérèse hépatique est actuellement une chirurgie sure avec une mortalité inférieure à 5 % en Occident, le profil de nos patients et les conditions péri opératoires dans notre pays ne nous permettent pas encore d’atteindre ces objectifs. Au cours des 15 dernières années, nous avons réalisé 207 hépatectomies chez 153 femmes et 54 hommes. L’âge moyen était de 54,5ans (extrêmes 21-78ans). Parmi ces patients, 20 ont eu une chimiothérapie préopératoire et 25 (12%) présentaient un ictère. Les 2 étiologies dominantes sont les cancers des voies biliaires extra-hépatiques et les métastases hépatiques (cancer colorectaux essentiellement). En ce qui concerne les gestes réalisés, on relève 68 cas (33%) d’hépatectomie mineure isolée, 81cas (39%) d’hépatectomie mineure associée à une exérèse viscérale ,34 cas (16,5%) d’hépatectomie majeure isolée et enfin 24 cas (11,5%) d’hépatectomie majeures associée à une exérèse viscérale . La durée moyenne d’intervention était de 7 heures (extrêmes 6 et 14heures).Les gestes associés les plus souvent réalisés ont été la lymphadénectomie extensive, la
résection de la voie biliaire principale et les résections de partie du tube digestif (colon, estomac, duodénum). La morbidité et la mortalité, particulièrement lourdes étaient respectivement de 44,5% (92 cas) 20% (42 cas). Une réintervention a été nécessaire chez 25 patients (12%). La mortalité est proportionnelle à la lourdeur du geste puisque elle est 13,8% (14/102) pour les hépatectomies isolées et elle est multipliée par 2 pour celles qui sont associées à un geste 26,5% (58/105). La situation à grand risque dans notre expérience est représentée par l’ictère rétentionnel puisque la mortalité est de 44,5% chez les patients ictériques et de 18% chez ceux qui n’en ont pas.

CONCLUSION: nos résultats montrent la nécessité de redoubler d’efforts et de s’entourer de moyens humains et matériels afin de les améliorer. L’ictère obstructif et les envahissements par la complexité de la chirurgie qu’ils engendrent sont les 2 situations à risque pour lesquelles des solutions adéquates sont à rechercher.

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THE CONTRIBUTION OF UICC TO THE MANAGEMENT OF PATIENTS WITH MUSCULOSKELETAL TUMOURS IN A SPECIALIST HOSPITAL IN NIGERIA

ABSTRACT REFERENCE NUMBER: 43

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OBJECTIVE: To evaluate the UICC project at the National Orthopaedic Hospital Lagos, Nigeria.

BACKGROUND: Without a histopathologist in 1999 our hospital experienced difficulty confirming clinical suspicions of malignancy in musculoskeletal tumour patients with ensuing morbidity and mortality data loss. From 1998 - 2005, three clinicians from the hospital received international technology transfer fellowships for training in diagnosis and surgical management of musculoskeletal tumours

METHODS: We reviewed the records of the Orthopaedic Oncology Unit, taking note of patient name, sex, age, diagnosis, tumour type, type of surgery, blood transfusions and cost of investigations and analysed the data using SPSS computer software.

RESULTS: 150 patients were seen from 2001-2007 compared with 54 in the preceding five years. Of these, 95 were from Lagos, 35 from the SW Zone of Nigeria and 20 outside the zone. The project resulted in 6 publications in peer reviewed journals, presentations in scientific conferences and spurred interest in orthopaedic oncology with one fellowship diploma dissertation and a post fellowship resident training in the UK in surgical oncology. Challenges encountered in managing these patients included inadequate facilities and support for limb salvage surgery and chemotherapy in malignant cases and lack of ancillary techniques for proper histogenetic characterisation of tumours and limitation of tumour imaging to plain radiographs.

CONCLUSION: Our experience shows that although technology transfer fellowships can have an impact in advancing scientific knowledge and the diagnosis and treatment of patients with musculoskeletal tumours, greater international collaboration and support is needed to overcome these challenges.
**45**

**ASSESSMENT OF CIGARETTE SMOKING PATTERN AND SOURCES OF NEGATIVE INFLUENCE THAT DRIVE IT AMONG STUDENTS OF THE UNIVERSITY OF ABUJA, NIGERIA**

**ABSTRACT REFERENCE NUMBER: 45**

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**OBJECTIVES:** Our aim was to determine the pattern of cigarette smoking among undergraduate students of the University of Abuja, Nigeria and the exposure factors that negatively affect their decision regarding smoking.

**METHODS:** Pre-tested, self-administered questionnaire was used to collect data on sociodemographic features, sources of information about health issues and the media houses that the youths favour by multistage sampling technique. Assessment of exposure to cigarette advertisement was also made. Data was analyzed using SPSS computer software programme.

**RESULTS:** The study revealed that the students were exposed to negative influences that encourage smoking, thus it is not surprising that one-third of them are smokers and had little or no exposure to smoking prevention interventions such as lectures, 33% had never had any form of lecture against smoking. Thus only 21% believed they are at any risk of developing cancer as a result of smoking. The influences they had were through radio, television, billboards, movies (Nollywood), and very importantly the university staff and fellow students that smoke in the presence of the students.

**CONCLUSION:** One-third of the students smoke cigarettes. There is constant exposure of the youths to cigarette advertisement in the media, at home, school and on the streets. Unless these negative influences are removed or reduced, very little could be achieved in the campaign against smoking and cancer prevention efforts in the university campus.

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**48**

**SUPPORTIVE AND EDUCATIVE SELF CARE NEEDS OF NIGERIAN CANCER PATIENTS DURING CHEMOTHERAPY: LESSONS FROM FOCUS GROUP DISCUSSIONS WITH WOMEN WITH BREAST CANCER**

**ABSTRACT REFERENCE NUMBER: 48**

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Breast cancer patients are known to experience physical and psychosocial distress following diagnosis and treatment of the disease. While such distress may not be unique to any particular group, the responses to this distress and the information and support needed for them to cope with the demands of the disease and its treatment may be influenced by local cultures and situations. Understanding these experiences and how patients cope with them is fundamental to any effort to address the patients’ needs.

This qualitative study used focus group discussions to explore the experiences of Nigerian breast cancer women on out-patient chemotherapy. Twenty women participated in five FGDs held at surgical oncology clinics of two tertiary health care institutions in south eastern Nigeria.

All the women were Christians, mostly married and educated and within age range of 36 years to 66 years. They were all on, have completed or about to commence cyclophosphamide, doxorubicin and fluorouracil (CAF) combination chemotherapy. Each one of them had distress from symptoms/side effects of the chemotherapy which interfered with their wellbeing and desire to adhere to treatment. Information/education received from healthcare professionals were inadequate and often non-pre-emptive to enable patients cope. Hope from supportive environment and faith in God were the mediating factors to continuing the chemotherapy courses.

These findings support capacity building for health care professionals in oncology and interventions to determine culturally acceptable strategies that can impact positively on patient outcomes as quality of life, symptom distress, adherence to treatment and adjustment to cancer chemotherapy in Nigeria.

**KEY WORDS:** Breast cancer, chemotherapy, side-effects, supportive-educative needs, self-care

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**51**

**CERVICAL CANCER: DOES OUR MESSAGE PROMOTE SCREENING? A PILOT STUDY**

**ABSTRACT REFERENCE NUMBER:** 51

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**OBJECTIVES:** The objectives of the study were to determine if presenting information on cervical cancer in a non-stigmatizing manner, with the focus on self protection, had the potential to promote cervical screening in women living in Soshanguve, Tshwane.

**METHODS:** An exploratory quantitative door-to-door survey was conducted. Two approaches on how to prevent cervical cancer were explored. Approach A, which according to literature could be seen as stigmatizing, was obtained from the website of a specific organisation in South Africa. This approach focussed on what women should know about cervical cancer. Approach B was designed in collaboration with female medical practitioners responsible for cervical screening and focussed on how a woman could protect her against cervical cancer. The sampling method was convenient. The sample size totalled 105
(n=105). Self-reported data were collected by means of a structured interview. The data collection instrument was a questionnaire containing both open-ended and closed-ended question. The data gathered were analysed by means of content analyses and descriptive statistics.

**RESULTS:** The majority (67.6%; n=105) of the sample chose approach B. The motivation of 27.6% was that approach B explained to them how to get “tested” to know their “status”. The only reason for preferring approach A (15.2%) was that it was easier to understand. The majority of women (64.8%) did not consider approach A to be stigmatizing and 80% indicated that they would not be embarrassed if they were diagnosed with cervical cancer.

**CONCLUSIONS:** The study provided evidence that women living in Soshaguve did not perceive information about cervical cancer as stigmatizing. Focussing on self protection had the potential to promote cervical screening.

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**52**

**NO CONDOM NO SEX: EASY TO SAY BUT WHAT IS THE REALITY FOR BLACK WOMEN LIVING IN TSWHANE, SOUTH AFRICA?**

**ABSTRACT REFERENCE NUMBER:** 52

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**OBJECTIVES:** The objectives of the study were to investigate Black women living in Tshwane’s lived experience of self protection in their sexual relationship to determine if they were able to protect them against HPV and cervical cancer by insisting on condom use.

**METHODS:** An exploratory, qualitative phenomenological study was conducted using snowball sampling. Data were saturated after 20 interviews (n=20) and analyzed using open coding and Tesche’s approach.

**RESULTS:** Not one of the respondents mentioned the HPV or cervical cancer as disease that can be transmitted sexually. Fifteen of the participants (n=20) feared being infected with a sexual transmitted infection, most commonly HIV. Half of the participants (n=20) did not trust their partners and 14 asked their partners to use a condom. Twelve participants (n=20) reported that their sex partners refused using a condom, three were physical abused because they asked and three were accused of infidelity. Domestic violence leading to fear and stifling the voices of participants, was a reality for nine (n=20). Alcohol abuse which also influenced sexual behaviour, was mentioned by eight (n=20). Emotions regarding their situation varied, however feelings of helplessness, one of the characteristics of an abusive relationship, were experienced by eight (n=20).

**CONCLUSIONS:** The study provided evidence that women could not protect them in their sexual relationships. Therefore they were, against their will, at risk of being infected with HPV leading to cervical cancer. Poverty, physical abuse, helplessness and fear prevented women from insisting on the use of condoms even if their partner’s unfaithfulness was known.
BLADDER CANCER MANAGEMENT IN SENEGAL

ABSTRACT REFERENCE NUMBER: 53

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Bladder cancer is a frequent condition in Senegal. Its treatment is often ineffective in our regions because it often occurs in poor populations.

OBJECTIVE: The goal of this study was determine epidemiological and clinical aspects and to evaluate the management of this disease.

PATIENTS ET METHODS: We undertook a retrospective and descriptive study from January 2005 to November 2008 and we reviewed the medical records of all patients presenting a bladder cancer at the Department of Urology of Hôpital Général de Grand Yoff de Dakar.

RESULTS: One hundred sixty nine patients were included of whom 98 men (58%) and 71 women (42%). Mean age was 52 years (range: 15 and 90 years). Main risk factors were schistosomiasis and smoking. The majority of patients consulted for hematuria (69,8%) and bladder irritative symptoms (20,7%). Ultrasound imaging was carried out in 65 cases (38,5%). All our patients underwent a cystoscopy. The majority of tumors were located at the trigone (43,8%) and at the cupola of the bladder (24,19%). The tumor was unic in 89,9% of cases and multiple in 10,1% of cases, it was burgeoning in 59,2 % of cases. Trans uretral resection of the bladder was performed in 64 cases (37,9%). The major pathologic feature was squamous cell carcinoma (48,3% of cases), transitional cell carcinoma accounted for 37,9% of cases. The tumor was superficial in 34,5% of cases. Only 3 patients underwent a complementary immunotherapy based on BCG. We found an infiltrating tumor in 65,5% of cases. TDM was performed in 45 cases (26,7%) and found a metastasis in 33,3% of cases. Open surgery was performed as follow: 13 cases of radical cystectomy, 1 partial cystectomy and 2 cases of palliative surgery.

CONCLUSION: Bladder cancer is frequent in Senegal. The major pathologic feature is squamous cell carcinoma which occurs mainly in poor populations explaining in part the delay in diagnosis. The management is often ineffective.

NAUSEA AND VOMITING IN PALLIATIVE PATIENTS

ABSTRACT REFERENCE NUMBER: 55

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OBJECTIVE: To share my experience and challenges as a practising palliative nurse.

Nausea is an unpleasant feeling of the need to vomit. Vomiting is the forceful expulsion of gastric contents through the mouth. Nausea and vomiting occur in 50-70% of patients with advanced cancer. Nausea and vomiting cause patients and their families’ deep distress and is profoundly debilitating when prolonged. The causes of vomiting are multiple and it is important to analyze the likely causes. Kenyatta National Hospital is Kenya’s tertiary referral hospital. It is also the only hospital with a cancer treatment center and with a radiotherapy machine. In 2007 3616 patients with cancer were seen at the hospital, these were all age classes. Cancer of the cervix was the 2nd cause of cancer morbidity. Cancer of the cervix is staged at stage 1-4, most of the patients with this cancer present to the hospital when it is stage 3. They present with nausea, vomiting, confusion and severe pain. The nausea and vomiting does not respond to anti-emetics, watching them retch over 2-3 weeks is devastating, the quality of life is compromised. These patients are markedly dehydrated. Investigations done reveal high ureas and creatines and hydronephrosis on ultrasonography. Pain is under treated.

HYDRONEPHROSIS: This is distension of the kidney with urine, caused by a backward pressure on the kidney when the flow of urine is obstructed. This can be relieved by nephrostomy tube insertion. The challenges are overwhelming.

CHALLENGES:
-- Long waiting periods as very few personnel are trained. In our hospital, only one radiologist is trained and the waiting period is between 2-3 weeks.
-- Resources are limited.
-- Patients are predisposed to repeated infections which are expensive to treat.
-- Kidney failure.
-- Trauma of the adjacent areas during the procedure.
-- Inadequate pain control before nephrostomy.
-- Delayed active or palliative cancer treatment.
-- Slipping out of the nephrostomy tubes.

QUESTIONS ASKED: What is the quality of life of these patients before and after nephrostomy? Is nephrostomy the only option? Should ureteric stetting be done and at what stage?

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POLYMORPHISMS IN STK15 AND TP53 GENES PREDICT RISK OF DEVELOPING HEPATOCELULAR CARCINOMA IN A WEST AFRICAN POPULATION

ABSTRACT REFERENCE NUMBER: 56

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BACKGROUND: STK15/Aurora A is a serine/threonine kinase essential for chromosome segregation and cytokinesis, and is considered to be a cancer susceptibility gene in mice and humans. A direct link between STK15 and p53 has been identified. STK15 phosphorylates p53 at serine 315 thus activating an Mdm2-dependent p53 degradation and increased expression of STK15 results in decreased levels of p53. We hypothesize that individuals with polymorphisms in either gene are more likely to develop advanced liver disease.

METHODS: This is a case-control study, cases being incident cases of HCC (n=165) or cirrhosis (n=69) and controls without HCC or cirrhosis (n=235) in The Gambia. Multiplex Genotyping assay was performed on archived DNA samples according to the manufacturer's protocol. Briefly, 37 ng of each sample DNA was fragmented by boiling at 99 degrees C for 10 minutes and allowed to dehydrate. Using custom multiplex pools (currently up to 48-plex) designed, synthesized, and formulated by the manufacturer, the manufacturer's specifications were followed through Phosphorylation, Oligonucleotide Ligation, Exonuclease Clean-up, PCR, and Hybridization steps.

RESULTS: A total of 29 single nucleotide polymorphisms (SNPs), 19 in STK16 and 10 in TP53 genes, were genotyped. Tests for association between liver disease (HCC, cirrhosis or control) and genotype were carried out for each of the 10 p53 and 19 STK15 SNPs using Fisher’s exact tests. It was found that the p53 Gly/Ala genotype was significantly associated with increased risk of hepatocellular carcinoma occurrence (odds ratio (OR) 3.4; 95% confidence interval (95% CI) (2.1-5.612) compared with the Gly/Gly genotype. The increase in risk was irrespective of smoking status, although smokers had a slightly increased risk compared to non smokers. Also, individuals with at least one variant allele at the following STK15 gene loci tended to be at an increased risk of either cirrhosis or hepatocellular carcinoma: rs16979865 (A/C), p=0.05, rs6024840 (A/G), p=0.03 and rs6099120 (C/T), p=0.009. In order to determine if we could use the combined information in these SNPs to predict who will get liver disease, a discriminant function test was performed. Overall the test was highly significant with p<0.001 and showed that about 70% of both controls and cases would be predicted correctly.

CONCLUSION: These SNPs might as well be associated with liver disease and these would be good candidates to look at in any future studies. However there is still the need to confirm these results in a larger sample.

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CD4 AND CD8 PROFILE IN HIV POSITIVE PATIENTS PRESENTING WITH KAPOSI SARCOMA

ABSTRACT REFERENCE NUMBER: 57

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INTRODUCTION: Described in 1872 and caused by HHV8, Kaposi’s disease is the first cancer observed in AIDS patients.

OBJECTIVES: Find out the impact of HIV infection on CD4 and CD8 counts. Establish a relationship between CD4 counts and clinical presentation of epidemic Kaposi’s sarcoma lesions.

MATERIALS AND METHODS: The study was carried out at Yaounde within the period of March and August 2008. 48 patients distributed into 2 groups were recruited: 18 cases (SK 01-SK 18) and 30 controls (SI 01-SI 30). 10 ml of blood were collected into EDTA and dried tubes after clinical examination and a counselling for CD4 count and HIV screening. Sera were tested using DETERMINE HIV1/2 and HEXAGON HIV. Whole blood samples were analysed by an automated Flow Cytometry technique (BD FACSCOUNT).

RESULTS: 46 samples were HIV positive. 66.7% cases had a CD4 count >200/mm$^3$. There was no significant difference between the means of cases and controls (P=0.97). 100% cases had a CD8 < 1500/mm$^3$. There was no significant difference between the means of cases and controls (P= 0.15). 17/18 (94.4%) of the lesions are of bad prognosis, with CD4 counts <50/mm$^3$ in visceral and patches lesions.

CONCLUSION: The HIV infection damage cannot be estimated through CD4 and CD8 counts; however, it will be of a great interest to measure others infectious markers (CD 19, CD 30, and CD 95) for a better understanding of disease’s immunopathology. CD4 counts seem to be independent of the treatment but, visceral and patches lesions appear as a result of severe immunosuppression.

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DISTINCT CLINICAL AND PROGNOSTIC FEATURES OF INFILTRATING LOBULAR CARCINOMA (ILC) OF THE BREAST: COMBINED RESULTS OF 15 INTERNATIONAL BREAST CANCER STUDY GROUP (IBCSG) CLINICAL TRIALS

ABSTRACT REFERENCE NUMBER: 58


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OBJECTIVE: TO DETERMINE DIFFERENCES IN PATIENT AND TUMOUR FACTORS, LOCAL TREATMENT, RECURRENCE AND SURVIVAL IN ILC AND INFILTRATING DUCTAL CARCINOMA (IDC) CASES IN 15 IBCSG TRIALS.

METHODS: DATA FROM 13220 EARLY BREAST CANCER PATIENTS WAS ANALYSED. PATIENTS WERE CATEGORIZED AS HAVING ILC, IDC OR OTHER/MIXED/UNKNOWN TYPES. FURTHER ANALYSIS COMPARED THE ILC AND IDC CASES. BASELINE FACTORS INCLUDED IN MULTIPLE REGRESSION ANALYSES WERE NODAL STATUS, VESSEL INVASION, TUMOUR SIZE, TUMOUR GRADE, ER STATUS, MENOPAUSAL STATUS, AGE AND ADJUVANT TREATMENT.

RESULTS: 6.2% WERE ILC, 70.5% IDC AND 23.2% OTHER AFTER EXCLUSION OF 7.6% UNKNOWN HISTOLOGICAL TYPES. MEDIAN FOLLOW-UP WAS 13 YEARS. ILC WAS ASSOCIATED WITH OLDER AGE,
Larger T size, better differentiation and greater likelihood of ER positivity. There was a significant (P<0.01) early advantage in DFS and OS for ILC and a significant (P<0.01) late advantage for the IDC cohort after 6 years (for DFS) and 10 years (for OS). In ILC patients there were more bone but less regional and lung relapses as first site of relapse (all P<0.01).

**CONCLUSION:** The diagnosis of ILC carries distinct prognostic and biologic implications.

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**DETECTION DE LA SUREXPRESSION DE L’ONCOGENE HER-2/neu (c-erb-B2) DANS LES CANCERS MAMMAIRES CHEZ LES FEMMES CONGOLAISES DE KINSHASA**

**ABSTRACT REFERENCE NUMBER:** 62

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A princeps prospective and transversal study of the breast cancer in the Congolese women has been performed with regard to the overexpression of the HER-2/neu as determined by immunohistochemistry, aiming to profile this oncogene and its frequency.

The study includes all the breast cancers (n=50) diagnosed and followed up from April 2004 to July 2006 in the Department of Obstetrics and Gynecology of Kinshasa Academic Hospital and Saint Joseph Hospital. The overexpression of HER-2/neu has been semi-quantitatively determined (score) by immunohistochemistry using the monoclonal antibody c.erb 1/ 50 Novocastra and the antibody “Dako cytomation Envision + R Labelled Polymer antimouse”. The overexpression of the oncogene has been analysed to the anatomoclinical and molecular parameters as age, tumor stage, size and grade, hormone receptors, and invasion of lymph nodes.

Most of the breast cancers in this study proved to be HER-2/neu negative. Most of those occurred in older women (48,08 ± 12,10 years ), measured > 5cm, were of Grade II and have roughly 5 invaded lymph nodes. Furthermore, 80 % of the HER-2 /neu negative tumors proved to be hormonodependant in 89% of cases.

The HER-2/neu profile observed in those cancers of the Congolese women provide a rationale for a better choice of the therapeutic scheme for the prognosis and for the follow up of the breast cancer in the Congolese.

**KEY WORDS:** HER-2/neu, Cancer, Breast, DR Congo
EDUCATION AND TRAINING

ABSTRACT REFERENCE NUMBER: 63

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Training is the acquisition of skills, knowledge, and change of attitude and the use of available resources. Education and professional development is an area with potential for utilizing the contribution of information and communication technologies. The article describes the development of diploma in higher education palliative care at the Nairobi Hospice in collaboration with Oxford Brookes University UK. Nairobi Hospice has excelled in imparting knowledge, skills and creating awareness in Diploma Higher Education palliative care since the year 2001 and four cohorts of students have graduated. Also included would be the challenges, the impact and the way forward as far as training in palliative care is concerned.

The relief of suffering when cure is impossible (palliation) has always been at the heart of all medical practice, even before it was called palliative care. It was and surely still is what every patient with life limiting illness hopes for.

One of the pioneering services of Nairobi Hospice is training the health care professionals in certificate and at diploma levels. The Higher Education in Palliative care is presented as a distance learning programme with three face to face teaching sessions during the course. The Nairobi Hospice recognizes the urgent need to assist the health care professionals in developing skills and knowledge required to care for an over increasing population of patients and their families who are faced with terminal illness and the physical, emotional, psychosocial and spiritual distress associated with end of life issues. In education and training the aim is to enable them to acquire knowledge, skills and change of attitude so as to improve service delivery in their relevant fields. Since 1990 a number of health care providers have undertaken the diploma in palliative care at the Nairobi Hospice. Palliative care recognizes the skilled inputs of specialist from many disciplines and training will increasingly influence the way patients, their families and the health care

BONE CEMENT IN THE MANAGEMENT OF CYSTIC TUMOUR DEFECT OF BONE AT THE NATIONAL ORTHOPAEDIC HOSPITAL LAGOS, NIGERIA

ABSTRACT REFERENCE NUMBER: 64

AUTHOR/S: Eyesan SU, Ugwoegbulam OA, Obalum DC, Nnodu OE, Abdulkareem FB
Cystic bony defects are characteristic of some bone tumours especially benign ones. Some metastatic tumours also produce cystic lesions. Even with benign tumours, late presentation is the rule in our environment. These patients present with significant cystic cavities in the metaphyseal regions of the long bones that autogenous cancellous bone grafting alone after curettage is most often inadequate. The cost and availability of prosthetic implants to replace these defects most times precludes resection.

We present a 7 years prospective study conducted in patients presenting with large cystic bony defects from bone tumours at the oncology unit of National Orthopaedic Hospital Igbobi, Lagos, Nigeria.

Data such as age, sex, presenting complaints, anatomy locations of lesions, histological type of tumour, X-ray findings, operation performed with number of packs of bone cement used to fill the reluctant bony defects were retrieved from prepared proforma.

14 patients were studied. The age range of patients was from 10 – 85 years with a male to female ratio of 1.8:1. Giant cell tumour (GCT) was the most common – histological diagnosis (78.6%). The proximal Tibia was the most common location (42.9%), distal femur 28.6%, proximal humans, femoral neck and femoral shaft 7.1% each. 57.1% of the patients presented with campanachi grade II and 42.9% with grade III lesions. All patients with campanachi grade III lesions had adjuvant chemoradiation therapy. A recurrence rate of 35.7% was recorded. Mortality was 14% - seen in 2 patients with recurrence of malignant GCT. The number of 25gm packets of methyl-metacrylate cement used to fill the bone defects ranged from 4 - 15 packets depending on the size of the defect (Average 6.6). The average follow up was 36.4 months.

Large cystic bony defects from tumours after curettage can be filled with bone cement and augmented with plate and screws for stability. Additional adjuvant chemoradiotherapy may also be useful in reducing the local recurrence rate especially in the type III campanachi grade lesions.

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PROGNOSTIC SIGNIFICANCE OF PLASMA FIBRINOGEN AND D-DIMMER IN AFRICAN PATIENTS WITH OSTEOSARCOMA: AS SEEN AT THE NATIONAL ORTHOPAEDIC HOSPITAL IGBOBI, LAGOS, NIGERIA

ABSTRACT REFERENCE NUMBER: 67

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Neoplastic diseases and their treatment can significantly alter the haemostatic system some haemostatic markers have been noted to have predictive values in solid tumours. However, the
predictive relevance of these markers is yet to be completely elucidated in bone tumours. The aim of this study was therefore to investigate some haemostatic parameters in patients with osteosarcoma and their clinical relevance. 22 newly diagnosed cases of osteosarcoma and 20 healthy control subjects were studied. Blood samples were obtained and analysed for haemoglobin concentration (Hb), platelet count (PC), prothrombin time (PT), Activated partial thromboplastin time (APPT), plasma fibrinogen concentration (PTC), and D-Dimer (DD) levels, using standard techniques. Result were analysed using student’s t-test and probability values less than 0.05 were significant. There were statistically significant increases in PFC and D-Dimer levels respectively in these patients, compared to controls (P<0.05). PFC and D-Dimer levels were significantly higher in patients with advanced diseases, compared to those with early disease (P<0.05) Elevated levels of fibrinogen and D-Dimner may be associated with increased tumour load and therefore suggestive of poor prognosis.

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PLASMA FIBRINOGEN AND D-DIMER IN NIGERIAN PATIENTS WITH MULTIPLE MYELOMA AS SEEN AT THE NATIONAL ORTHOPAEDIC HOSPITAL, LAGOS NIGERIA

ABSTRACT REFERENCE NUMBER: 68

AUTHOR/S: Abegunde SO, Eyesan SU

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Thrombosis and Haemorrhage constitutes some of the most serious complications in multiple myeloma (MM). Conflicting reports on haemostasis have been noted to have predictive values among Caucasian patients with multiple myeloma. Plasma fibrinogen and D-dimer levels in solid tumours. However, there is paucity of literature on its predictive relevance in plasma cell tumours. We therefore investigated some haemostatic variables in our multiple myeloma patients, with the aim of determining their clinical predictive relevance.

A total of 40 MM patients and 20 healthy individuals, age and sex matched as control were studied. Blood samples were obtained and analysed immediately for haemogram (Hb), platelet count (PC), prothrombin time (PT), Activated partial thromboplastin time (APTT) plasma fibrinogen (PF), and D-dimer (D-D) using student’s t-test – and probability values < 0.05 were significant. There were statistically significant increases in PFC and D – Dimer levels respectively, in these patients compared to controls (P<0.05).

PFC and D – dimmer levels also correlated significantly with the clinical stages of the disease (P<0.05). Hyper – fibrinogenaemia and elevated D – dimmer seems to be associated with increase tumour cell burden and may therefore be of predictive relevance with respect to staging of the disease.
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EXTREMITY LIPOSARCOMA AS SEEN AT THE NATIONAL ORTHOPAEDIC HOSPITAL IGBOBI, LAGOS, NIGERIA

ABSTRACT REFERENCE NUMBER: 69

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Liposarcoma is a tumour derived from premitive cells that undergo adipose differentiation. The objective of this study is to report and add to the body of literature our experience with this tumour. This is a 6years prospective study in patients presenting with histologically confirmed extremity liposarcoma at the oncology unit of the National Orthopaedic Hospital Igbobi, Lagos, Nigeria. Liposarcoma accounted for 6(27.3%) out of 22 cases of soft tissue sarcoma see within the study period. All 6 were males. The age range was 36years – 59years. The thigh was the commonest location seen in 5/6 [83.3%]. The most common histological type was myxoid seen in 3/6 (50%). All presented at stages T.2b No Mo. 5 had limb salvage surgery with adjuvant radiotherapy while I had ablative surgery. Survival rate and recurrent rate could not be determined as all patients were lost to follow – up soon after surgery. Liposarcoma is the commonest extremity soft tissue sarcoma seen in our centre; the myxoid type being the commonest histological type.

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INDICATION FOR ABLATIVE SURGERY IN EXTREMITY MUSCULOSKELETAL TUMORS AS SEEN AT NATIONAL ORTHOPAEDIC HOSPITAL IGBOBI, LAGOS, NIGERIA

ABSTRACT REFERENCE NUMBER: 70

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Ablative surgery is a form of surgical treatment for advanced extremity musculoskeletal tumor when limb salvage surgery is not feasible. The objectives of this study are to evaluate the indication for ablative surgery in extremity musculoskeletal tumors, its patterns and outcome.

We present a 6yrs prospective study in patients presenting with extremity musculoskeletal tumors at the oncology unit of the National Orthopaedic Hospital Igbobi Lagos Nigeria. A total of 19 patients had ablative surgery as a mode of treatment. 11 were males while 8 were females with a M:F ratio of 1:3:1. The age range was 3yrs – 69yrs. 7 patients (6males and 1female) refused ablative surgery and voluntarily discontinue treatment with us. Most tumors were located in the legs and all patients presented with at
least stage III disease. Osteogenic sarcoma has the highest percentage of ablative surgery (21.05%). Transfemoral amputation constituted the most common type of ablative procedures (55%). Adjuvant therapy was prescribed for all the patients. The recurrence rate and survival rates could not be determined for each tumours as the patients were lost to follow up soon after surgery.

Late presentation with local advanced disease remain and indication for ablative surgery in extremity musculoskeletal tumours.

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**COLORECTAL CARCINOMA IN LAGOS AND SAGAMU, SOUTHWEST NIGERIA: A HISTOPATHOLOGICAL REVIEW**

**ABSTRACT REFERENCE NUMBER:** 72

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**OBJECTIVE:** To study the frequency, gender and age distribution as well as pathological characteristics of colorectal carcinoma in Lagos and Sagamu in SW Nigeria.

**METHODS:** This is a retrospective pathological review of histologically diagnosed CRC from 5 laboratories in Lagos & Sagamu. The clinical data such as the age, sex and clinical summary were extracted from demographic information. Cases of anal cancer were excluded from this study.

**RESULTS:** There were 420 cases (237 males and 183 females) of CRC. It peaked in the 60-69yrs age group (mean-50.7; SD-16.2), M: F ratio 1.3:1 and 23% occurred below 40yrs. The majority was well to moderately differentiated adenocarcinoma 321 (76.4%), mucinous carcinoma 45 (10.7%) and signet ring carcinoma 5(1.2%) were more common in patients under 40yrs compared to well differentiated tumours. The recto-sigmoid colon was the commonest site (58.6%). About 51% and 34% of cases presented at TNM stages II and III respectively.

**CONCLUSION:** CRC is the commonest malignant GIT tumour most commonly located in the recto-sigmoid region. The age and sex prevalence and histopathological features concur with reports from other parts of the world. Collaborative studies are on-going with the Dept of Histopathology & Molecular Pathology, St. James University Hospital, Leeds, United Kingdom to identify the molecular subtypes in order to ascertain the specific pathogenetic and prognostic features.
CLINICO-PATHOLOGICAL REVIEW OF MALIGNANT GASTRIC TUMOURS IN LAGOS, NIGERIA

ABSTRACT REFERENCE NUMBER: 73

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OBJECTIVE: To describe the clinico-pathological features of gastric cancer diagnosed in Lagos and determine the prevalence of H.pylori infection in gastric adenocarcinoma.

METHOD: This was a retrospective study of all histologically proven gastric cancer recorded between 1995 and 2007 in Morbid Anatomy dept of Lagos University Teaching Hospital and two other private histopathology laboratories in Lagos (2002-2007). The patients' biodata and clinical details (particularly ‘alarm features’) were extracted from demographic records. The H & E and modified Giemsa stained slides were reviewed to type, grade the tumour, and also to demonstrate presence of gastritis and H.pylori. Immunohistochemistry was carried out for 8 cases of mesenchymal tumours at the Histopathology dept, Leeds General Infirmary, UK for definitive diagnosis.

RESULTS: There were 105 cases of gastric cancer representing 14% of all GIT tumours (M:F=2:1, mean age-55.3years), 81% of which occurred above 45yrs. There were 95 cases (90%) of adenocarcinomas, 8 (7.6%) mesenchymal tumours with one case each of small cell non-Hodgkin’s lymphoma and carcinoid tumour. H.pylori was detected in 15.5% of 45 cases of adenocarcinoma with 36% showing evidence of gastritis in adjacent non-cancerous tissue. All patients with clinical data had one or more alarm features; most recurring being abdominal fullness, recurrent vomiting, anorexia and weight loss.

CONCLUSION: This study suggests that gastric malignancies are not uncommon in Lagos and often manifest with alarm features which should raise suspicion particularly in our setting with poor diagnostic endoscopic facilities.

PATTERN OF MALIGNANT GASTROINTESTINAL TUMOURS IN LAGOS AND SAGAMU; SOUTH WEST NIGERIA-HISTOPATHOLOGIC REVIEW OF 713 CASES

ABSTRACT REFERENCE NUMBER: 74

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**OBJECTIVE:** To document the pattern, age and sex distribution as well as histopathological characteristics of malignant tumours of the gastro-intestinal system in Lagos and Sagamu in South West Nigeria.

**METHODS:** The paraffin embedded blocks and slides as well as pathology reports of malignant tumours of the gastrointestinal organs(GIT) collected from 5 laboratories (Morbid Anatomy Departments of the Lagos University Teaching Hospital and Olabisi Onabanjo University Teaching Hospital in Sagamu, Ogun State as well as the three private histopathology laboratories in Lagos State) were reviewed. The clinical data such as the age, sex, and clinical summary were extracted from the request forms.

**RESULTS:** Over 80% of all the 713 cases of malignant GIT tumours are epithelial; sarcomas, carcinoid and non-Hodgkin’s lymphoma being less common. The ages ranged from 4-96yrs (mean of 48.9years) with the peak in 60-69yr age group. The male:female ratio was 1.35:1. Colorectal tumours top the list with 402 cases (56%), followed by liver (14.7%), stomach (12%) and omental metastases (9.4%). The oesophagus, pancreas, small intestine and gall bladder represented 2.4%, 2.2%, 1.7, 1.1% respectively. Colorectal cancers peaked in 60-69yrs age group while that of liver and stomach cancer occurred between 50-59yrs. Over half of the colorectal adenocarcinoma were located in the ano-rectum with 23% occurring below 40yrs.

**CONCLUSION:** Colorectal cancer remains the commonest GIT tumour. Molecular studies are imperative to identify the common subtype in order to ascertain the specific pathogenetic and prognostic features.

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**EVALUATION OF FIRST YEAR HOSPICE PALLIATIVE CARE SERVICE AT IBADAN, NIGERIA**

**ABSTRACT REFERENCE NUMBER:** 75

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**OBJECTIVE:** The concept of Palliative Care is a new field of Medicine in Nigeria. The objective of this study is to evaluate the services provided during the first year of a Hospice Palliative Care Group in Ibadan, Nigeria.

**METHODS:** Records of all patients referred to the Day Care Hospice Centre of the University College Hospital, Ibadan between February 2008 and January 2009 were reviewed. Data collected and analyzed included demographics, presenting complaints, diagnosis and palliative care services provided.
RESULTS: One hundred and eleven patients were seen; 73 females (65.77%), 38 males (34.23%). Their mean ages were 50.8 ± 23.3 years and 45.1 ± 18.4 years for female and male patients respectively. 11 (9.91%) were children. Most, 109 (98.19%) had cancer. The three most common diagnoses in females were advanced breast carcinoma (32.88%), advanced cervical cancer (17.80%) and colorectal carcinoma (8.22%); in the males, prostate cancer, 12 (31.58%), renal carcinoma, 4 (10.53%) and pancreatic cancer, 3 (7.89%). Pain was reported by 108 patients (97.29%). Services offered included pain and symptom control, counselling, home visitation, psychological, family and bereavement supports. Pain medications included non-opioid analgesics and oral morphine. Forty patients died, 10 were lost to follow-up and 61 (55.0%) reported adequate pain and symptom control. Patients and relations expressed marked improvement in symptom and pain control which resulted in improved quality of life.

CONCLUSION: The impact of palliative care services to patients with life limiting illnesses in our institution is encouraging and as awareness improves palliative care will be considered a basic need for all such patients.

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KNOWLEDGE, ATTITUDES AND BEHAVIOURS OF TEACHERS TOWARDS THE PREVENTION OF CANCER OF THE CERVIX IN ODEDA LOCAL GOVERNMENT AREA OF OGIN STATE, NIGERIA

ABSTRACT REFERENCE NUMBER: 76

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OBJECTIVE: Cancer of the cervix is the second commonest cancer among women in Nigeria. The study explored knowledge, attitude and behaviour regarding the prevention of cancer of the cervix among teachers in the primary and secondary schools in Ogun-state.

METHODOLOGY: These teachers were selected by cluster random sampling of 20 schools out of the schools in Ogun State. They were given questionnaire on socio demographic variables, knowledge, attitudes and behaviours related to cancer of the cervix and its preventions. Data was analysed by descriptive statistics and t-test

RESULTS: Fifty-six (56 making up 57.7%) of the respondents have not heard about cancer of the cervix while 41 (42.3%) have heard of it. The main sources of their information are through the radio and television. Twenty-five (25 or 23.5%) of the teachers are aware of Pap smear test while 98 (96.9%) have never gone for Pap smear test before. Ninety (91.8%) are unwilling to go for Pap smear test. Their attitude towards cancer and cancer prevention is positive as 85 (90.4%) agreed that the person suffering from cancer should not be avoided nor stigmatized. Age of respondents have significant influence on the attitude of female teachers (p<0.05).

CONCLUSION: Knowledge of cancer of the cervix and its preventive measures is low. The study strongly recommends dissemination of information on cancer of the cervix and its prevention to this category of population by health care workers. This will be evidence in the number of women that will be going for Pap smear test.
DISTINCT ONCOGENIC MECHANISMS IN THE TWO AGE GROUPS OF TUNISIAN NASOPHARYNGEAL CARCINOMAS

ABSTRACT REFERENCE NUMBER: 77

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OBJECTIVE: EBV-associated nasopharyngeal carcinomas (NPCs) from Southeast Asia and North Africa have many common clinical and biological characteristics. However, they differ with regard to their age distribution. In Asia, NPC mainly affects patients in the 4th or 5th decade of their life, whereas in North Africa an additional peak of incidence is found between the ages of 10 and 20. Determine the level and prognostic significance of p53, bcl2, LMP1 and c-kit expression in the two age groups of Tunisian NPCs.

METHODS: Immunohistochemical Staining for p53, bcl2, LMP1 and c-kit was performed on Tunisian NPC specimens, The $\chi^2$ test with the Yates correction was used to evaluate differences in p53 and Bcl2 staining, which were analyzed as qualitative variables. The Student’s t test was used to assess the variations of the LMP1 and c-kit staining scores according to various clinical parameters.

RESULTS: We have shown that p53 and bcl2 are more abundantly expressed in the adult forms whereas c-kit and LMP1 were more frequently detected in the juvenile form. In contrast, we found no relationships with various clinical parameters. There is a significant association between LMP1 and c-kit expression and between p53 and bcl-2.

CONCLUSION: The contrasted levels of these proteins expression in the two age groups strengthen the hypothesis that these clinical forms result from distinct oncogenic mechanisms. The high amount of LMP1 recorded in tumors from young patients confirms that the juvenile form of NPC has specific features regarding not only cellular but also viral gene expression.

CANCER DU COL UTERIN ET INFECTION A PAPILLOMAVIRUS HUMAIN EN ALGERIE

ABSTRACT REFERENCE NUMBER: 78

AUTHOR/S: D Hammouda (1), S Franceschi (2), X Bosch (3), A Bouhadef (1), G Clifford (2), G Ayyach (4), A Boudrich (4)

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Les cancers gynécologiques représentent près de 49% des cancers féminins en Algérie. Avec plus de 1800 nouveaux cas par an, Le cancer du col de l’utérus est le deuxième cancer féminin après celui du sein. Son incidence annuelle standardisée est de 15 nouveaux cas pour 100,000 femmes (elle est de 13 pour 100000 femmes au niveau de l’Afrique du nord). L’âge moyen pour ce cancer est de 51 ans et l’âge médian de 55 ans. Sa répartition par tranche d’âges montre deux pics d’incidence: le premier à 59 ans et le second à 74 ans. Une étude cas-témoin, publiée en 2004, nous a permis de savoir que les papillomavirus (HPV) 16 et 18 sont associés à 97.7% des cancers du col; l’Odds ratio conféré par cette association est de 635. HPV 16 est, à lui seul, associé à 62.3% des cancers du col, suivi d’HPV 18 (15.6%). Les autres types de papillomavirus oncogènes ne sont responsables que de 7.2% des cancers du col. Parmi les femmes du groupe témoin, 12.6% sont porteuses d’une infection à papillomavirus oncogène. Une étude sur les tendances séculaires de l’infection HPV associée au cancer du col, que nous avons réalisée en 2006 avec l’Institut Catalan d’Oncologie de Barcelone, nous a montré qu’ aussi loin que nous avons pu remonter (1967), le cancer du col en Algérie était associé à HPV 16 dans 63% des cas, suivi de HPV 18 (11%). HPV 16 et 18 ont donc été de tous temps associés au cancer du col dans plus de 70% des cas. Une dernière étude sur la prévalence de l’infection à HPV dans un échantillon de 1200 femmes de 15 à 65 ans tirées au sort dans la population générale, réalisée en collaboration avec le Centre International de Recherche sur le Cancer de Lyon, est en cours d’analyse et sera terminée en juin 2009. Toutes les femmes de l’étude ont répondu à un questionnaire et fourni un échantillon de leur sang à des fins d’analyse. Huit cent d’entre elles ont accepté de fournir un échantillon de cellules cervico-vaginales à des fins de recherche et de typage du papillomavirus humain. Les premiers résultats de cette étude montrent qu’une infection HPV, avec ou sans lésion épithéliale, est présente chez près de 27% d’entre elles. Avant 25 ans, 4.3% des femmes sont porteuse d’infection HPV; elles sont 10.4% avant 30 ans et 29.2% avant 35 ans.

Le typage virologique, en cours de réalisation, nous permettra de savoir:
La proportion de femmes HPV positives; La proportion de HPV oncogènes présents chez les femmes infectées par le HPV; La répartition de ces types HPV par tranches d’âges

Les données recueillies par ces trois études nous permettrons de discuter l’introduction de la vaccination anti HPV et de proposer un modèle d’introduction de la vaccination anti HPV 16 et 18 dans le programme actuel de prise en charge du cancer du col de l’utérus.

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GYNAECOLOGICAL DEATHS IN A TERTIARY HOSPITAL IN LAGOS: A 6 YEAR REVIEW

ABSTRACT REFERENCE NUMBER: 79

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BACKGROUND: Cancer is one of the leading causes of death in the world, particularly in developing countries.

OBJECTIVE: This was a retrospective study carried out at the Lagos University Teaching Hospital, Lagos (LUTH). The aim was to determine the causes of death in the gynaecological wards in a teaching hospital in Lagos, Nigeria.

METHOD: A structured form was used to extract relevant information on all women who died in the Gynaecological wards of the Lagos University Teaching Hospital during the period of 1st January, 2002 to 31st December, 2007.

RESULTS: There was 2,220 of admissions into the wards during the period and 94 (4.2%) died. Most of the patients (28.7%) were between the ages of 41-50 years, the mean age was 48.5 ± 15.6 years (range 16 to 90 years). The causes of death were cervical cancer (44.7%), ovarian cancer (29.8%), endometrial cancer (6.4%) and choriocarcinoma (4.3%). Majority of them (75.5%) presented after 1-12 months following the onset of symptoms. Only 60.6% received palliative care. Almost a quarter (24.5%) died within a week of hospital admission.

CONCLUSION: Genital cancers are the common cause of gynaecological deaths with cervical cancer being the most common. Cancer must be accorded the same priority as HIV, malaria and maternal deaths.

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THE RISK OF BREAST CANCER AMONG WOMEN WHO START SMOKING AS TEENAGERS

ABSTRACT REFERENCE NUMBER: 80

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GOALS: To examine the effect of smoking on breast cancer risk in a large population-based cohort of women, many of whom started smoking as teenagers.

METHODS: We followed 102,098 women, ages 30 to 50 years, completing a mailed questionnaire at recruitment to the Nigerian–Kenyan Cohort Study in 1995/1996, through December 2004. We used Cox proportional hazard regression models to estimate relative risk (RR) of breast cancer associated with different measures of smoking initiation, duration, and intensity adjusting for confounding variables. We conducted analyses on the entire study population, among women who had smoked for at least 20 years, among non drinkers, and separately for each country.

RESULTS: Altogether, 1,240 women were diagnosed with incident, invasive breast cancer. Compared with never smokers, women who smoked for at least 20 years and who smoked 10 cigarettes or more daily had a RR of 1.34 (95 CI, 1.06–1.70). Likewise, those who initiated smoking prior to their first birth (1.27, 1.00–1.62), before menarche (1.39, 1.03–1.87), or before age 15 (1.48, 1.03–2.13) had an increased risk. In contrast, women who had smoked for at least 20 years, but started after their first birth, did not experience an increased breast cancer risk. The increased RR associated with smoking was observed among nondrinkers of alcohol, women with and without a family history of breast cancer, premenopausal and postmenopausal women, and in both countries.
CONCLUSION: Our results support the notion that women who start smoking as teenagers and continue to smoke for at least 20 years may increase their breast cancer risk.

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BREAST CANCER IN SFAX, TUNISIA: STUDY OF 309 CASES

ABSTRACT REFERENCE NUMBER: 81

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BACKGROUND: Breast cancer is the most common malignant tumor in the world and the leading cause of death in women. The increasing incidence and significant breast cancer mortality highlight the need for a routine screening and new therapeutic development.

OBJECTIVE: To study the epidemiological profile of female breast cancer in Sfax

PATIENTS AND METHODS: In a retrospective study we report 309 confirmed cases of breast cancer (305 women and 4 men) identified in the governorate of Sfax between 2000 and 2002. We evaluated the epidemiological, clinical and pathological profiles of breast cancer in Sfax.

RESULTS: Breast cancer accounted for 31% of all cancers in women (skin carcinomas excluded) with an incidence of 25.2/100,000 women. The mean age of patients at the discovery of the disease was 52.9 years old. 23 (7.4%) patients were less than 35 years old. The mean diameter of the tumor was 4.5 cm. The most common subtype was ductal carcinoma (86.7%). The tumors were diagnosed at an advanced stage (T3 or T4) in 44% of cases. Lymph node involvement was detectable in 65% of cases and visceral metastases were found in 18% of cases.

CONCLUSIONS: The data of our registry showed that 7.4% of patients are under 35 years of age. These tumors are often diagnosed at an advanced stage (T3 or T4 in 44% of cases). These results suggest that breast cancer in Sfax may have some biological features that need to be explored and highlight the need for a screening program.

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IMPACT OF AN EXERCISE PROGRAM ON POSTOPERATIVE COMPLICATIONS FOLLOWING LUNG CANCER RESECTION

ABSTRACT REFERENCE NUMBER: 85

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**STUDY OBJECTIVES:** To develop and implement an exercise program for patients undergoing lung resection as well as to assess the impact of this exercise program on postoperative pulmonary complication following lung resection.

**PATIENTS AND METHODS:** 59 patients underlying lung resection were included in the study. Patients were randomly assigned to two groups. 35 as controls and 24 as intervention group. All patients had preoperative assessment (including history taking, general laboratory tests, arterial blood gases (ABG), pulmonary function tests, 12-lead surface ECG and color Doppler echocardiography as well as postoperative pulmonary function (3 months postoperative) and hospital stay. Postoperative pulmonary complications were noted according to a precise definition. The intervention group was subjected to pre-postoperative and exercise program. The risk of postoperative pulmonary complications (PPCs) associated with selected factors was evaluated.

**RESULTS:** Fifty-nine patients were studied. There were no difference between the 2 groups regarding age, sex, BMI, pulmonary function tests, and lab investigations. PPCs occurred in 12 cases of 35 patients (34.3%) in the control group and 2 patients in intervention group (8.3%), a difference that was highly statistically significant (p<0.001). The hospital stay was significantly shorter in the intervention group compared to controls (p<0.001). There was no significant difference between patients with and without postoperative pulmonary complications.

**CONCLUSION:** Exercise program evaluated in this study can decrease PPCs and postoperative hospital stay. In addition preoperative pulmonary function tests do not appear to contribute to the identification of high-risk patients.

**KEY WORDS:** Pulmonary complications; pulmonary function tests; Cardiac function tests; Risk factors; Lung Resection

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**USE OF CANCER REGISTRY DATA FOR RESEARCH IN EGYPT: NURSES’ PERSPECTIVE**

**ABSTRACT REFERENCE NUMBER:** 86

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The main objective of this qualitative study was to explore awareness of oncology nurses of the existence of a cancer registry and reasons for not using its data.

**SUBJECTS AND METHODS:** Sixty nine oncology female nurses working in Mansoura University completed a self administered questionnaire Results were discussed and description of the current
registry and its results were explained. A second questionnaire was administered asking about their evaluation of the importance of this registry, and if they are willing to use the existent data and if they feel more data items should be included and how to maximize benefit from the registry.

RESULTS AND DISCUSSION: The preliminary analysis showed that the frequency of nurses who were aware of existence of a cancer registry was less than 5%; all of them were staff in the faculty of nursing in Mansoura. Those who were aware of existence of the registry did not receive the published results and were unaware of type of data collected by the registry. One nurse only stated using incidence data in one of her presentations. After getting information about the registry, all nurses expressed their conviction of importance of cancer registration. Nonetheless, the main interest was clinical nursing and assessment of quality of life of patients.

CONCLUSION: This preliminary analysis showed lack of nurses' awareness about cancer registration. The majority doesn't know how data could help them. The theoretical background for use of registry data by nurses was highly deficient, emphasizing the need for training in cancer research using registry data.

KEY WORDS: Cancer registry, Oncology nurses, awareness

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HEALTH HAZARDS AMONG ONCOLOGY NURSES HANDLING CHEMOTHERAPY DRUGS

ABSTRACT REFERENCE NUMBER: 87

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AIMS: 1) Determine the health hazards among nurses exposed to chemotherapy drugs. 2) Identify potential risk factors that may predispose nurses to chemotherapy hazards. And 3) Evaluate available protective measures used in clinical work practice

SUBJECTS AND METHODS: An analytic cross sectional study carried out during February 2005 to November 2005 at Mansoura University hospitals. Two groups of nurses were studied. The study group included 35 Oncology female nurses handling chemotherapy drugs, the control group consisted of 29 nurses, matched for age and sex of the study group and involved in patient care without being exposed to chemotherapy drugs. A questionnaire sheet (2) Observation checklist and (3) Ames the test were used for data collection.

RESULT: Mutagenic strain was positive for TA 98 and TA 102 (28.6 %-11.4 %) for the study group compared to (6.9 %-3.4 %) for the control group. 1. The frequency of abortion, inflammation of hands and soft tissues, infertility and sub-fertility, fetal loss as well as congenital malformation, and menstrual changes were: 31.4%, 14.3%, 14.3%, 11.4% and 11.4%, in nurses after exposure compared to: 10.3%, 0.0%, 3.4%, 3.4% and 6.9% in non-exposed nurses consequently.
CONCLUSION: Unsafe practice, Lack of standardization of written policy, Lack of Clinical pharmacy, lack of training programs, and improper place for preparing and handling CDs may predispose nurses to the risk of exposure.

RECOMMENDATIONS: 1. Establish, and compliance with protocols for safe exposure to chemotherapy drugs, training programs, medical attention, and Clinical pharmacy should be established.

KEY WORDS: Health Hazards, Oncology Nurses, Chemotherapy Drugs

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CERVICAL CANCER VACCINE READINESS IN ETHIOPIA AND MALI: A CONTEXTUAL ASSESSMENT

ABSTRACT REFERENCE NUMBER: 88

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OBJECTIVE: Cervical cancer (CC) is common in Africa and vaccines that prevent human papilloma virus (HPV) can reduce burden of CC dramatically if implemented effectively. This assessment examines country readiness for deployment of HPV vaccine (HPV-V) programs.

METHODS: Thirty-one stakeholder interviews were conducted in Ethiopia and Mali about existing vaccine programs and attitudes toward HPV-related issues. Site observations were recorded to assess capacity. The study was IRB-approved.

RESULTS: CC/HPV-V awareness was high among clinicians, often labeling CC/HPV an “epidemic.” Both countries successfully deployed national immunization (“EPI”) programs and had experience with program logistics. Political-will around CC/HPV-V was weak, for several reasons including lack of awareness outside clinical practice, low priority of cancer, and dominance of other infectious diseases. Stakeholders reported discomfort discussing HPV-V and the relationship of HPV with sexual exposure, identifying that linkage as a barrier for communities.

CONCLUSIONS: Mali’s and Ethiopia’s successful history deploying EPI programs, along with school-based public health interventions targeting the same-age population as HPV-V, provide useful planning proxies. High awareness of CC/HPV-V among clinicians could facilitate political will among decision-makers. Promoting HPV-V is challenged by competing priorities, resource constraints, variable cancer awareness, and reluctance around sexually-oriented conversations. HPV-V programs can build upon existing clinical support for the vaccine to raise awareness through effective information/education/communication (IEC), especially if HPV-V programs are designed/implemented in meaningful yet appropriate ways. Information gaps surround HPV-V decision-making, though CC often uniquely provides a mechanism for larger national dialogue on cancer control.
OSTEOSARCOME EXTRA OSSEUX THORACIQUE CHEZ UNE ENFANT DE 13 ANS

ABSTRACT REFERENCE NUMBER: 89

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RESUME: L’ostéosarcome extra osseux est un cancer peu connu des tissus mous. Il affecte surtout les hommes au delà de 40 ans. Les localisations préférentielles sont les membres (cuisse), les ceintures (hanches, épaules, pelvis), le rétro péritone et le médiastin.

OBJECTIFS: Nous rapportons l’observation d’un ostéosarcome extra osseux thoracique en vue de soulever les problèmes du diagnostic positif et discuter les diagnostics différentiels.

OBSERVATION: Il s’est agi de Mlle Z M, 13 ans ayant présenté à l’âge de 10 ans une douleur thoracique droite, spontanée, non traumatique, d’intensité modérée et intermittente, calmée par les antalgiques. Avec le développement des seins la douleur était plus vive et s’accompagnait d’une augmentation progressive et plus importante du sein gauche. Au plan de l’imagerie médicale, il s’agissait d’un processus expansif développé dans le muscle pectoral, exerçant un effet de masse sur le sein gauche, sans atteinte des côtes. Les examens histologiques des biopsies avaient conclu à un ostéosarcome extra osseux thoracique.

RESULTAT: La malade avait bénéficié d’une résection chirurgicale de la tumeur et d’une chimiothérapie associant METHOTREXATE et VP16 / IFOSFAMIDE. L’évolution était bonne après 15 mois.


MOTS CLES: Ostéosarcome, extra osseux, tissu mou, thorax

HELICOBACTER PYLORI (HP) ET CANCER GASTRIQUE: EXPERIENCE RD CONGOLAISE

ABSTRACT REFERENCE NUMBER: 90

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OBJECTIFS: Cette étude vise à déterminer la fréquence de l’Hp dans une population du RD Congo consultant pour épigastralgies comme plainte majeure, ainsi que celle de la gastrite, de l’ulcère peptique et du cancer gastrique telles qu’observées à travers le diagnostic histopathologique.

MATERIEL ET METHODES: Le Centre Hospitalier Nganda, durant ces 31 derniers mois, a reçu 1507 analyses dont 372 biopsies et exérèses gastriques d’origines diverses furent examinées et 367 retenues. Les spécimens gastriques ont été colorés à l’Hématoxyline-Eosine et au Giemsa modifié. Age, sexe, lésions histopathologiques, présence d’Hp ont été analysés. Le diagnostic de la gastrite a été posé selon le Système de Sydney re-adapté.

RESULTATS: Les biopsies et exérèses ont représenté 372 des 1507 analyses anatomopathologiques de la période, soit 24.68%. Sur les 367 examens cytohistopathologiques “réussis”, on a dénombré 157 hommes (42.77%) et 196 femmes (53.40%), tandis que le sexe n’était pas indiqué dans 14 cas (3.81%). L’âge des patients allait de 14 à 81 ans (m=43.67 ans +/-15.02). Sur les 367 prélèvements et exérèses, 202 ont montré des Hp (55.04%). Les lésions histopathologiques furent: gastrite(100%) dont 55.04% Hp+, 14 cancers Hp+ à 50% (13 adénocarcinomes et 1 carcinoïde), 13 ulcères (3.54%) dont 53.8% Hp+ et 1 métaplasie intestinale (0.27%) Hp-.

CONCLUSIONS: Cette infection est courante chez les épigastralgiques et comprend gastrite, cancer, ulcère et métaplasie intestinale. Elle requiert une étude multicentrique combinant urino- et séroimmunologie avec anatomopathologie.

MOTS CLE: Hp, gastrite, ulcère, cancer, RD Congo
treatment. After 12 months, 19 patients were died, 7 patients were lost touch, and 7 patients were alive.

**CONCLUSION:** These tumors are preoccupation of many teams, best results could be found after concertation before treatment.

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**DETECTION OF EPSTEIN-BARR VIRUS IN AGGRESSIVE LYMPHOMAS IN DEMOCRATIC REPUBLIC OF CONGO**

**ABSTRACT REFERENCE NUMBER:** 94

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We reviewed 88 lymphoma biopsies from three Kinshasa laboratories between 95-2005 to detect Epstein-Barr virus (EBV). Selected 62 aggressive lymphomas were analysed using immunohistochemical technics and in situ hybridisation to demonstrate Latency Membrane Protein type 1 for revaluate (LMP1) or Epstein-Barr Virus Encoded Ribonucleic acid type 1 (EBER1). The recently WHO (2001) lymphoma/Leukaemia classification was used to distinguee our lymphomas. Ours findings show that EBV positives Diffuse Large B-Cell Lymphomas (DLBCL) (42%) were the most frequent aggressive lymphomas, followed by EBV positive BURKITT Lymphoma (39%). EBV positive BURKITT Lymphoma (96,2%) expressed Mib1 more than EBV positive Diffuse Large B-Cell Lymphomas (54,3%). Men were the most affected with sex ratio: 1.7/1 and patients less than 10 years were more affected by EBV positive BURKITT Lymphoma, while those between 31 and 40 years were more affected by EBV positive Diffuse Large B-Cell Lymphomas.

**KEY WORDS:** Aggressive lymphomas, Epstein-Barr Virus, Democratic Republic of Congo

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**PROFIL EPIDEMIOLOGIQUE ET ANATOMOCLINIQUE DES CANCERS SOLIDES CHEZ L’ENFANT CONGOLAIS (RDC)**

**ABSTRACT REFERENCE NUMBER:** 95

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INTRODUCTION: La présente étude a pour objectifs (a) de décrire les différents types histologiques des cancers solides de l’enfant congolais de 0-14 ans et (b) d’établir le profil épidémiologique de ces cancers en RD Congo depuis 50 ans.


RESULTATS: Cette étude montre que 10,25% des tous les cancers diagnostiqués durant cette période ont intéressé les enfants de moins de 14 ans avec une courbe bimodale dont un premier pic entre 0 et 4 ans, période au cours de laquelle l’on a noté essentiellement des tumeurs embryonnaires (Lymphome de Burkitt, Rétinoblastome, Néphroblastome, Rhabdomyosarcome embryonnaire et Neuroblastome). Un deuxième pic a été observé entre 10-14 ans dominé par des cancers de types adultes. La distribution géographique révèle que la grande majorité des patients sont venus de la Ville Province de Kinshasa et de ses environs (68%), suivie de l’Est du pays (ancien Kivu avec 10%) et les autres provinces avec des pourcentages plus bas. La distribution par rapport au sexe montre que les garçons étaient plus affectés (59%) que les filles (41%) avec un sex-ratio de 1,4/1. Suivant les localisations ou sites anatomiques et les types histologiques, notre étude montre un profil anatomoclinique différent du celui décrit chez l’enfant caucasien.

CONCLUSION & PERSPECTIVES: A ce stade, notre étude permet de ressortir une distribution géographique du cancer de l’enfant congolais avec une nette prédominance de la Ville Province de Kinshasa et de ses environs (biais lié à la proximité avec les Cliniques Universitaires de Kinshasa). Elle permet également de connaître les types histologiques les plus fréquents des cancers de l’enfant Congolais avec les tranches d’âge les plus frappées. Il faudrait étendre cette étude à l’échelle nationale avec plusieurs pôles (étude multicentrique) afin de dresser une cartographie intéressant l’ensemble du territoire national pour ainsi monter des stratégies pouvant aboutir à une meilleure prise en charge aussi bien diagnostique (techniques modernes notamment l’IHC et analyses biomoléculaires) que thérapeutique (des nouveaux protocoles déjà opérationnels dans d’autres pays).

MOTS-CLES: Tumeurs malignes solides, Enfant, RD Congo

HISTOPATHOLOGICAL REVIEW OF GASTRIC CANCER IN ILORIN, NORTH CENTRAL NIGERIA

ABSTRACT REFERENCE NUMBER: 96

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OBJECTIVE: The objective of the study was to review the histopathological findings of gastric cancer in Ilorin and determine the prognostic implications of the histologic types.

METHODS: All histopathologically diagnosed gastric cancer cases seen in the Department of Pathology, University of Ilorin between 1996 and 2008 were reviewed. The histopathology request cards and the slides were retrieved, and classification was in accordance with WHO Classification of gastric neoplasms.

RESULTS: Out of the 1726 cancer cases seen during the study period, 31 (1.8%) was gastric cancer. There were 23 males and 8 females giving a ratio of 2.9:1 with a mean age of 54.5 ± 13.6 years. Seventy-four percent of the cases were within 40 – 69 years age range. Eight of the cases were partial gastrectomy specimens while the rest were incisional biopsies. The commonest clinical presentations were upper abdominal pains (67.7%), early satiety (45.2%) and abdominal mass (35.5%). Adenocarcinoma was the commonest histological type accounting for 84.4% followed by high grade non-Hodgkins lymphoma (9.4%) and leiomyosarcoma (3.1%). Of the adenocarcinoma, 6 cases (19.4%) were poorly differentiated comprising of signet ring variant and undifferentiated adenocarcinoma while the remaining 21 cases which were well to moderately-differentiated types were mostly tubular variant.

CONCLUSION: Relative frequency of gastric cancer is low in Ilorin with adenocarcinoma being the commonest histological variant. In addition to 19.4% of the cases which were poorly-differentiated adenocarcinoma, more than half presented at advanced stage when the surgery as well as the histologic type could minimally impact on prognosis.

KEY WORDS: Gastric cancer, gastrectomy, adenocarcinoma, Ilorin

DEVELOPMENT OF AN INSTRUCTIONAL SCHEME FOR MASTECTOMIZED PATIENTS ON THE PREVENTION OF ARM LYMPHEDEMA

ABSTRACT REFERENCE NUMBER: 98

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BACKGROUND: Breast cancer is the most common type and the third most frequent type of cancer among women in the world. Despite the high breast cancer incidence will continue to make lymphedema a significant consequence of breast cancer treatment. Lymphedema can adversely affect a person's quality of life by affecting functional mobility, causing discomfort, infections and thickening of tissues and skin changes, and making it impossible to wear normal clothes. Prevention is the best tool against arm lymphedema incorporate these guide lines into patient everyday life.

OBJECTIVE: To Identify the impact of implementing an instructional scheme for mastectomized patients on the prevention of arm Lymphedema.

MATERIALS AND METHODS: The study used a quasi- experimental research design conducted on 54 mastectomized women at oncology unit in Port Said city. Data were collected using 3 tools. Tool 1:
Lymphedema assessment interview schedules, Tool 2: Observational exercises checklist and Tool 3: an instructional scheme which implemented three times, pre and after 3 and 6 months of developing an instructional scheme in twelve session each teaching session was taken about 1 hour daily once time weekly in groups of 7-9 patients through using structured interview schedule, to assess patient's knowledge, total comprehensive care, physical signs and symptoms of Lymphedema and observational checklist for exercises. Data were analyzed using statistical package for social sciences. The P-value < 0.01 was used as the cut off value for statistical significance and the statistical measures as Numbers and percentage, Arithmetic Mean, standard Deviation, Chi square, Fisher exact test probability and T-test were used.

**RESULTS:** Revealed highly significant improvement of patient's knowledge related to radiotherapy, chemotherapy, lymphedema, and compliance of comprehensive total care toward skin and nails, arm and hand, foot care, household activity, Actions in sudden daily problems faced and practicing preventable arm exercises in both 3 & 6 months post instructional scheme phases comparing with pre-instructional scheme phase.

**CONCLUSION:** The study emphasizes the use of an educational program for instructed mastectomized patients about Arm Lymphedema prevention and recommended educational program about preventive measures guidelines including cancer treatment side effects, arm exercises and early detection for post mastectomy arm lymphedema. Also, it should be simply presented by nurses and available to all mastectomized patients.

**KEY WORDS:** instructional scheme, mastectomy, Arm lymphedema, prevention

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**OUT OF AFRICA THROUGH THE TRANSATLANTIC SLAVE TRADE: DOES PROSTATE CANCER LINK BLACK MEN OF WEST AFRICAN ANCESTRY?**

**ABSTRACT REFERENCE NUMBER:** 99

**AUTHOR/S:** Folakemi T Odedina (1), Titilola O Akinremi (2), Frank Chinegwundoh (3), Robin Roberts (4), R Renee Reams (5), Nagi Kumar (1)

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**OBJECTIVE.** Given the prostate cancer (CaP) disparities in the United States, the growing literature on the burden of CaP among Black men in West Africa, the Caribbean Islands, and United Kingdom may be because these populations share ancestral genetic factors. To better understand the burden of CaP among Black men, we conducted a comprehensive review of the literature summarizing the body of evidence on CaP morbidity and mortality in the countries connected by the Transatlantic Slave Trade (TAS).

**METHODS.** The study countries for our review were West African TAS populations (Benin, Nigeria, Ghana, Gambia, and Senegal), the United Kingdom and Caribbean Islands (Barbados, Cuba, Haiti, Dominican Republic, Netherlands Antilles, Trinidad and Tobago, Jamaica, and Brazil). A systematic
search of the computerized database, MEDLINE, was conducted for each country from the originating date of MEDLINE to July 2008.

**RESULTS.** Several published studies indicate high CaP burden in Nigeria and Ghana. There was no published literature for the countries, Benin, Gambia, and Senegal, that met our review criteria. CaP morbidity and/or mortality data from the Caribbean Islands and the United Kingdom also provided comparable or worse CaP burden to that of US Blacks.

**CONCLUSION.** The growing literature on the disproportionate burden of CaP among other Black men of West African ancestry follows the path of the Transatlantic Slave Trade. To better understand and address the global CaP disparities seen in Black men of West African ancestry, future studies should explore the genetic and environmental risk factors for CaP among this group.

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**CULTURAL BELIEFS AND VALUES AMONG BLACK MEN OF WEST AFRICAN ANCESTRY: POTENTIAL IMPACT ON PROSTATE CANCER PREVENTION AND EARLY DETECTION**

**ABSTRACT REFERENCE NUMBER:** 100

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**OBJECTIVE.** Currently, there is no published study that has explored the role of Black men’s cultural worldview on prostate cancer (CaP) prevention and detection behavior. This study compared CaP fatalism, religious coping, temporal orientation and acculturation relative to CaP screening and prevention among African American men (AAM), Nigerian men resident in the US (USNM), and indigenous Nigerian men (INM).

**METHODS.** The study design was a cross-sectional survey of 121 USNM living in the United States (Houston), 81 AAM living in Orlando and 128 INM men in Nigeria between age 35 and 79. The study variables were measured using a pre-validated instrument. Demographic variables such as age, marital status, education, income, ethnicity, and residency status were also assessed on a categorical scale.

**RESULTS.** A total of 330 men participated in this study. Most of the participants were between 40 and 59 years, were married, had full time employment, and resided in urban location. The results of the comparisons of the men’s cultural beliefs and values were statistically significant. AAM were the most acculturated, most future-oriented, had the highest cancer fatalism and the least religious coping compared to USNM and INM.

**CONCLUSION.** Nigerian men, both migrant to the US and indigenous, are less likely to hold fatalistic beliefs about cancer, more likely to possess religious coping skills, more present oriented, and less acculturated compared to AAM. To our knowledge, this study is the first to compare cultural beliefs and values among AAM, INM and USNM in an attempt to uncover the cultural components likely to affect CaP disparity.
APPLICATION OF RADIOTRACERS IN THE ASSESSMENT OF PROPHYLACTIC ROLE OF ZINC IN EXPERIMENTAL MODEL OF COLON CARCINOGENESIS

ABSTRACT REFERENCE NUMBER: 101

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OBJECTIVE: The present study elucidated the modulatory effects of zinc in 1,2 dimethylhydrazine (DMH) induced colon carcinogenesis using radiotracer techniques.

METHODOLOGY: Rats were segregated into four groups viz., untreated control, DMH treated, zinc treated, DMH+zinc treated. Colon carcinogenesis was induced through weekly subcutaneous injections of DMH (30mg/Kg body weight) for 16 weeks. Zinc was supplemented to rats at a dose level of 227mg/L in drinking water, ad libitum. The prophylactic role of zinc was assessed by following radiotracer techniques viz: whole body biological half life of $^{65}$Zn and $^{65}$Zn biodistribution, subcellular distribution, uptake of $^3$H-Thymidine to assess rate of DNA synthesis, radiorespirometric determination of $^{14}$C-D-Glucose metabolism and in-vitro uptake of labeled aminoacids. The statistical significance of the data has been determined by using one way analysis of variance (ANOVA) followed by multiple post-hoc test.

RESULTS: The carcinogenic state in the animals was confirmed by histopathological examination, whereby, well-differentiated signs of dysplasia were evident in colonic tissue sections of DMH treated rats. The biokinetics study of zinc revealed a significant decrease in the biological half life of $^{65}$Zn. Also, DMH treatment caused a significant increase in the percent uptake values of $^{65}$Zn in the colon, small intestine, kidney and blood, whereas a significant decrease was observed in the liver. The uptake rates of amino acids viz: $^{14}$C-glycine, $^{14}$C-alanine and $^{14}$C-lysine were significantly higher in the DMH treated colons. Moreover, a significant increase in the uptake and turnover of $^{14}$C-D-Glucose was also observed after DMH treatment. A significant increase in the $[^3]$H-thymidine uptake was observed following 16 weeks DMH treatment. However, supplementation of zinc significantly reversed the proliferative effect of DMH as evidenced by ameliorating the altered parameters.

CONCLUSION: Radiotracer techniques play an important role in assessing positive beneficial effect of zinc against chemically induced colonic preneoplastic progression.
CANCERS FÉMININS: CONNAISSANCES, ATTITUDES ET PRATIQUES DES FEMMES GABONAISES EMPLOYÉES DANS LE SECTEUR PRIVÉ

ABSTRACT REFERENCE NUMBER: 102

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CONTEXTE: Le cancer est parmi les maladies non transmissibles, la deuxième cause de mortalité dans le monde. Les connaissances, attitudes et pratiques des femmes gabonaises en matière de cancers féminins sont peu documentées.


RÉSULTATS: Au total 988 femmes choisies au hasard ont été interrogées, 912 ont accepté de répondre au questionnaire (92,3%). Sur les 912 femmes, l’âge moyen était de 34,1 ± 7 ans (extrêmes: 18- 65 ans); 59 % vivaient en couple et 50% d’entre elles avaient plus de 3 enfants. La répartition en fonction de l’occupation principale montrait que 41% travaillaient dans l’administration, 21% dans les services, 15% dans l’enseignement et 12% dans la santé. Près de la moitié des femmes interrogées avaient un niveau universitaire (45,5%). Plus des trois quart des femmes ayant participé à notre étude ont affirmé que les cancers féminins sont des maladies graves et fatales. Leurs connaissances sur les symptômes, les méthodes et le rôle du dépistage ont été faibles (19,3%). Environ 15% d’entre elles ont affirmé discuter et s’informer sur ces pathologies. La majorité n’avait jamais pratiqué d’autopalpation des seins (85,9%), ni de mammographie (91,4 %), encore moins de frottis cervico-vaginal (72,9 %). Plus de 80% d’entre elles ignoraient le rôle de HPV* dans la survenue du cancer col utérin, n’avaient jamais entendu parler de la vaccination contre HPV et pensaient ne pas être à risque de développer un cancer. L’utilisation des méthodes de dépistage était significativement associée aux professions (p< 0,001) et au niveau scolaire (p<0,001).

CONCLUSION: Les connaissances des employées du secteur privé sur les cancers féminins sont faibles. L’IEC au sein des entreprises regroupées en coalition permettrait de sensibiliser tous les travailleurs sur ces cancers et les maladies chroniques.

* HPV: Human Papilloma Virus

MOTS CLÉS: Connaissances, attitudes, pratiques, Cancers féminins, Secteur Privé, Employées
KNOWLEDGE, ATTITUDE AND PRACTICE OF PREVENTIVE HEALTH STRATEGIES AGAINST FEMALE REPRODUCTIVE CANCERS IN SOUTH EAST OF NIGERIA

ABSTRACT REFERENCE NUMBER: 105

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While developed Countries report reducing incidence in female reproductive organ cancers (the Commonest among females) through cost effective preventive measures at both primary and secondary levels, reverse is the case in developing countries like Nigeria. No doubt culture and religion are major determinants of health behaviours, yet the perspectives of women of Igbo ethnicity, predominantly Christians, about female organ cancers is unknown. By objectives, the study investigated the women’s knowledge about female organ cancers, their protective and risk factors, attitude to cancers, its treatment, screening practices and hindrances. The method adopted is survey design. Subjects were consenting convenient sample of 758 women attending faith-based annual conference. Questionnaire, with structured and open-ended questions, were used for data collection. Statistically Package Social Science (SPSS) Software was used for data analysis for proportions, percentages and Chi-square used for test of significance of relationship between variables. Results show that most respondents have heard and seen persons suffering from only breast cancer. Most have positive view about early detection and treatment. But almost a cross section still believe that cancers are caused by witches and believe God for cancer cure. Most do not know preventive factors nor practice preventive strategies. We conclude that respondents generally lack knowledge about female organ cancers, causes and prevention. These might account for the very late stage cancer patients’ presentation. We recommend capacity building for self advocacy at grassroots levels for cancer prevention. The research will promote mobilization of increase resources for cancer prevention at all community levels.

CHARACTERISTICS OF HOSPITAL-BASED CANCER STATISTICS, IN AFRICA, ASIA, AND LATIN AMERICA, IN PRESENCE OF LOW CRUDE INCIDENCE RATES

ABSTRACT REFERENCE NUMBER: 106

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**OBJECTIVE:** Many Countries of Globocan 2002 (Cancer Statistics of 172 Countries, IARC), with low CR, as Congo (Kinshasa), India, Iran, Mali, Morocco, Mozambique, Senegal, Tanzania, Tunisia, Uganda, Zambia, Zimbabwe, shared controversies, found in the Egyptian statistics, from 2000-2004, which were Hospital-based. Are there clear-cut Characteristics of Hospital-based Cancer Statistics, in presence of low CR (CHBCS-LCR)?

**METHODS:** 168 Histograms, of CR, ASR, and Percentage of Cancers were drawn for thirteen High Human Development Index (HHDI) Countries, and 31 Countries with low CR, and studied. The CHBCS-LCR were elicited, and applied to 172 Countries (Globocan 2002).

**RESULTS:** The Criteria are: 1). Low male, and female CR. 2). Low CR in nearly all Cancers. 3). Crude Rate may equal Zero. 4). Crude Rate higher, than the highest among HHDI Countries, of the same Cancer. 5). Crude Rate, ASR, Percent of Cancer Cervix is lower, than the lowest among HHDI Countries. 6). Percent of a Cancer equals Zero, except Kaposi sarcoma in Non-African Countries. 7). Percent of a Cancer in Male or Female, is higher than the highest Percent in all Cancers among HHDI Countries. 8). One at least of the above Characteristics must be present, in presence of low CR. Egyptian statistics from 2000-2004, showed all of the above criteria.

**CONCLUSION:** There are clear-cut Characteristics of Hospital-based Cancer Statistics, in presence of low CR. Sixty-two Countries were found, who submitted CHBCS, to Globocan 2002, included 30 Countries in Africa, 27 in Asia, 5 in Latin America, and 7 Countries of these have Population-based Registries (IARC).

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**WHEN A GOVERNORATE POPULATION-BASED CANCER REGISTRY IS APPLIED AS A NATIONAL POPULATION-BASED CANCER STUDY IS A MAJOR CONTROVERSIAL ISSUE: GHARBIAH, EGYPT CASE**

**ABSTRACT REFERENCE NUMBER:** 107

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**OBJECTIVE:** Gharbiah Governorate is located in Lower Egypt. Controversies in Gharbiah Population-based Cancer Registry 1999 Report (GPCR-1999), suggested that it has Hospital-based Characteristics, and has lost its accuracy and credibility. Can Gharbiah Governorate represent Egypt?

**METHODS:** GPCR-1999, 1999-2001, 1999-2002, Statistics, and Globocan 2002, were studied. 168 Histograms were drawn for CR, ASR, and Percent, for 13 Countries with High Human Development Index (HHDI), and 31, with low CR. The same was done for 172 Countries in Globocan 2002.

**RESULTS:** GPCR-1999, and Statistics showed: 1). Low male and female CR, and in nearly all cancers. 2). Zero CR, ASR, Percent, of Kaposi sarcoma in male and female, in 1999-2001, and in female in 1999-2002. 3) CR, Percent of Breast Cancer to total female, and to Total cases, was the highest among HHDI countries. 4). CR, ASR, Percent, of Cancer Cervix, was lower than the lowest values among HHDI Countries. 5). A very low CR, ASR, Percent of Corpus uteri, and Prostate. 6). CR, ASR, Percent, of Corpus
uteri, in GPCR-1999, was doubled in 1999-2001. 7). The Percent of DCO cases was 10.5% of total cases.
8). GPCR-1999, was the only Annual Report published, in 10 years. 9). GPCR-1999, Changed the Liver
ranking in Female, and omitted Leukaemia, contradicting the Tables of registered cases provided.
CONCLUSIONS: GPCR-1999, proved to has Hospital-based Characteristics, and it has lost accuracy and
credibility. Gharbiah Governorate cannot represent Egypt, because: 1). Population Pyramids of
Governorates differ. 2). Demographic Variations, between Governorates. 3). It represents only 5.5% of
the Egyptian population.

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REPORT ON THE FINDINGS OF A SURVEY TO IDENTIFY KEY NEEDS OF SOCIAL WORKERS IN A
PALLIATIVE CARE SETTING FOR THE DEVELOPMENT OF A STRUCTURED ORIENTATION PROGRAMME

ABSTRACT REFERENCE NUMBER: 108

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OBJECTIVE: Psychosocial care, mainly provided by social workers within the hospice context, is
commonly recognised as being crucial to the provision of palliative care to patients and families.
However, with the increasing scarcity of social workers, and those with palliative experience, the
provision of holistic care is under threat. Inexperienced social workers are particularly vulnerable and
often leave the organisation within the first year of service. Lack of professional support and mentoring
and unrealistic expectations have been identified as key factors in aggravating their exit. The aim of this
study is to identify the key orientation needs of social workers in a palliative setting for the development
of a structured orientation programme.

METHOD: A structured questionnaire will be developed and include:
-- The social worker’s experience of the orientation to the organisation;
-- The social worker’s experience of the orientation to her/his professional role and the structures in
place to facilitate this.
The questionnaire will be circulated to social workers in hospices across the regions for their input,
based on their experiences of their own orientation, and capture their recommendations.
RESULTS: The findings of the results will identify trends in the orientation programme that are lacking;
these will be highlighted and addressed.
CONCLUSIONS: It is anticipated that a structured orientation programme will positively impact on social
workers’ adjustment to a palliative setting, and their retention; and therefore to the overall sustainment
psychosocial palliative care.
CATCHING THEM YOUNG: COMMUNICATION STRATEGY FOR TOBACCO ADVOCACY IN WESTERN KENYA

ABSTRACT REFERENCE NUMBER: 109

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BACKGROUND AND OBJECTIVES: Tobacco is a single major contributor of morbidity and mortality worldwide among the youth and adults causing many deaths each year. Tobacco usage is the single most preventive cause of death and chronic diseases like cancer in the society. Kenya like other developing countries has not been spared by this hazard. Several regulatory measures have been introduced in Kenya to discourage people from tobacco usage; however, its impact in the community is yet to be realized due to the perception or in adequate information. It is therefore essential to sensitize the population especially the youth, more effectively on the harmful effects of tobacco usage to protect the future generation. To achieve this, media and communication play a key role in delivering health messages and influencing health policies.

METHODS: To discourage the youths from tobacco smoking as a strategy for health promotion and disease control among youth in Kenya, letters were sent to heads of ten randomly selected schools in Eldoret. Three schools responded, arranged talk days. This group was considered important since most people start smoking in their adolescence, making this more vulnerable. To address this,

-- Public education using local radio stations in a program entitled ‘Health tips’
-- Making and distribution of car stickers and handbills highlighting the harmful effects of tobacco use and the benefits of not smoking.

RESULTS: Through the school programs, many students and teachers have appreciated the presentations and are requesting for more programs and reporting change of attitude.

CONCLUSION: The communication strategy has proved and effective way to reach out to the youth. There are several challenges to be overcome given the potential impacts of the modern technologies; the power of ICT cannot be ignored. Kenya urgently need program of action for developing its public health promotion targeting the youth as the continent risk loss of future manpower.
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THYROID CANCER IN MARRAKECH: EPIDEMIOLOGICAL STUDY IN ONCOLOGY DEPARTMENT OF MOHAMMED VI UNIVERSITY HOSPITAL

ABSTRACT REFERENCE NUMBER: 110

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OBJECTIVE: Thyroid cancer is a malignant tumor of thyroid gland which presents most of the time as a nodul. It represents 1% of all malignancies. The aim of our study is to investigate the features of this cancer in our area and to compare our therapeutic procedures with data in literature.

MATERIALS AND METHODS: Records were reviewed retrospectively between January 2003 and December 2007 in Mohamed VI university hospital of Marrakech.

RESULTS: Fifty six patients with thyroid cancer were included in the study. The mean age was 46,87 years (±15,57) with a feminine predominance accounting for 82,1%. A history of goitre was found within 48,1 % of patients. The clinical examination has found a single nodule or a multinodular goitre in respectively 37,6% and 53,1% of the cases. Nine patients had metastasis revealing the thyroid cancer. All of our patients underwent ultrasound screening of the thyroid. Fine-needle aspiration was performed in only 8,92 % of the cases. The principal surgery was total thyroidectomy without lymphadenectomy. Hisopathological examination has found 35 papillary carcinoma, 13 follicular carcinoma, 3 anaplastic carcinoma, 3 insular carcinoma, 1 medullary carcinoma and 1 leiomyosarcoma. The average length of the follow-up period was 47,5 months with a loss along the way of 35,7%. The mean evolutive complications were recurrence and distant metastasis.

CONCLUSION: Most thyroid cancers remain slow-growing and have an excellent prognosis after appropriate treatment.

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THE EPIDEMIOLOGY AND CLINICAL FINDINGS OF THE LARYNGEAL CANCERS IN MARRAKECH

ABSTRACT REFERENCE NUMBER: 111

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OBJECTIVE: Laryngeal carcinoma is one of the most frequent cancers of the upper aero-digestive tract. The chronic tobacco consumption constitutes the most important risk factor, often associated with
other addictive behaviors, in particular alcoholism. This cancer occurs in males aged between 40 and 59 years old in more than 90% of the cases. The squamous cell carcinoma is the most common histological type.

**PATIENTS AND METHODS:** we report 90 cases of laryngeal cancers treated in the service of oncology of the university hospital of Marrakech between October 2002 and December 2007.

**RESULTS:** The mean age was 56 years, 91% of the patients were males. Tobacco consumption was found in 86% of the cases and alcoholism in 40%. The most common representing symptoms were dysphagia in 94% of cases, dysphonia in 62% and a dyspnea in 84% of the patients. Squamous cell carcinoma was the histological type found in all cases, well differentiated in 74%. 82% of patients have a locally advanced cancer (classified T3-T4); whereas only 6% were localized and 1% have a metastatic disease. A surgery was performed in 25% of the patients which consisted on a total laryngectomy with cervical adenectomy, followed by a post-operative radiotherapy in all cases; 43% of the patients received an exclusive chemo-radiotherapy. Among the patients whose files were assessable, 63% were in complete remission after 22 months of follow up.

**CONCLUSION:** the early diagnosis improves the survival of laryngeal cancer. The reduction of tobacco and alcohol consumption is the greatest way to prevent this cancer.

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**THE EPIDEMIOLOGY OF DIGESTIVE CANCERS IN MARRAKECH**

**ABSTRACT REFERENCE NUMBER:** 112

**AUTHOR/S:** H Rida, Y Elkholti, N Derhem, A Elomrani, M Khouchani, A Tahri

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**OBJECTIVE:** digestive cancers are frequents, they constitute a public health care problem. The epidemiology of these cancers is characterized by great geographical and demographic variations. The purpose of our study is to describe the epidemiology of these cancers in Marrakech.

**MATERIALS AND METHODS:** All cases of digestive cancers histologically proven admitted in the oncology radiotherapy service of Marrakech, during the period between 2003 and 2007 were retrospectively studied, except lymphomas and digestive metastasis.

**RESULTS:** 440 cases of digestive cancers were included, it represent 12.62% of all cancers. Colorectal cancer was the most frequent cancer occurring in 35.68% of cases. Stomach cancer is second with 33.86% of cases, followed by cancer of biliary ducts (8.86%), oesophagus (8.18%), anal canal (5%), pancreas (3.64%) liver (4.64%) and small bowel (1.14%).

The mean age was 55.64 years (extremes: 16 and 84) with a predominance of patients aged over 60 years (40.68%). These cancers are more frequent in males (sex ratio: 1.36). Most of cancers were diagnosed at a late stage: 58% were locally advanced and 37% metastatic at diagnosis.

**CONCLUSION:** The incidence of digestive cancers is changing all around the world, our study suggests a higher incidence of gastric cancer, cancers of the pancreas and biliary ducts are under diagnosed.
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**ADENOCARCINOME PAPILLAIRE AU SEIN DES LEIOMYOMES UTERINS. ADENOCARCINOME PAPILLAIRE DE L'ENDOMETRE OU DE L'OVAIRE?**

**ABSTRACT REFERENCE NUMBER:** 114

**AUTHOR/S:** Kabongo MJM, Kambere SR, Lebwaze MB, Kisile MO

**AFFILIATION/S:** Université de Kinshasa, Département de Biologie Médicale, Service d'Anatomie Pathologique

**CORRESPONDENCE:** Kabongo MJM: mpolkabongo@yahoo.fr

Nous rapportons le cas d'une malade de 60 ans, ménopausée ayant consulté pour pesanteur hypogastrique et métrorragies depuis 2 ans. Après hystérectomie radicale le 07/07/2004 pour diagnostic clinique d'utérus polyliomyomateux, l'analyse histologique de la pièce chirurgicale reçue a révélé la présence des noyaux léiomyomateux infiltrés par des structures papillaires et glandulaires par foyers associées à du stroma vraisemblablement endométrial avec calcosphérites. Au niveau de l'ovaire les auteurs ont noté la présence du même processus. Cet aspect histologique à conduit au diagnostic d'adénocarcinome papillaire très probablement de l'endomètre sur adénomyose mais l'hypothèse d'une métastase d'un cystadénocarcinome papillaire de l'ovaire a été aussi considérée. La malade a été soumise à la chimiothérapie (cisplatine, adriamycine et cyclophosphamide). Elle a présenté une métastase hypogastrique, une détérioration rapide de l'état général ayant conduit à la mort.

**MOTS CLÉS:** Léiomyomes utérins, adénocarcinome papillaire, endomètre, ovaire

115

**PROFIL IMMUNOHISTOCHIMIQUE DE LA MALADIE DE HODGKIN EN RÉPUBLIQUE DÉMOCRATIQUE DU CONGO**

**ABSTRACT REFERENCE NUMBER:** 115

**AUTHOR/S:** Kabongo MJM (1), Salmon I (2), Kalengayi R MM (1), Dehou MF (2), Remmelink M (2)

**AFFILIATION/S:** (1) Service d'Anatomie Pathologique, Cliniques Universitaires, Université de Kinshasa, RDC, (2) Service d’Anatomie Pathologique, Hôpital Erasme

**CORRESPONDENCE:** JM Kabongo: mpolkabongo@yahoo.fr

**INTRODUCTION:** La Maladie de Hodgkin est un type particulier parmi les lymphomes. L'historique de ce cancer remonte au 19e siècle. Il a été l'objet de plusieurs études à travers le monde depuis les travaux de Thomas HODGKIN en 1832, de plusieurs classifications dont celle de RYE, la Classification REAL et celle de l'OMS.

**OBJECTIF:** Nous avons entrepris le présent travail dans le but de dresser le profil immunohistochimique de la Maladie de Hodgkin en RDC.

**MATERIEL ET METHODES:** Nous avons revu 54 cas de Maladie de Hodgkin (MH) diagnostiqués entre 1981 et 1993 dans 4 Laboratoires d'Anatomie Pathologique de Kinshasa. Par la suite, nous avons réexaminé 12 cas de MH provenant de ces 4 Laboratoires (1993-2002) en vue d'étudier le profil immunohistochimique des marqueurs classiques ainsi que celui des galectines 1 et 3. Nous avons recouru à la Classification REAL.

**RESULTATS:** Concernant l’immunotypage classique les antigènes CD15 et CD30 ont été identifiés dans 75 % de cas de la MH. Quant aux galectines 1 et 3, elles ont été exprimées dans la Maladie de Hodgkin (MH) et l'expression de la galectine 1 s'est avérée plus marquée que celle de la galectine 3.

**CONCLUSIONS:** Le présent travail a permis de constater que:
-- dans la MH les antigènes CD15 et CD30 ont été identifiés dans 75 %.
-- les galectines 1 et 3 sont exprimées dans la MH et l'expression de la galectine 1 s'avère plus marquée que celle de la galectine 3

**MOTS CLÉS:** Maladie de Hodgkin, Profil Anatomoclinique et Immunohistochimique

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**116**

**CARACTÉRISTIQUES DU CANCER DU SEIN DE LA FEMME DE MOINS DE 40 ANS À LIBREVILLE**

**ABSTRACT REFERENCE NUMBER:** 116

**AUTHOR/S:** James Laurianne (1), Mayi-Tsonga Sosthène (2), Mengué Marcelle (1), Mabika Mabika Barthélémy (3), Bélembaogo Ernest (1)

**AFFILIATION/S:** (1) Service de cancérologie, (2) Service de gynécologie obstétrique, (3) Service d'histopathologie Centre Hospitalier de Libreville

**CORRESPONDENCE:** James Laurianne: lauriannejames@yahoo.fr

**OBJECTIFS:** Décrire le profil épidémiologique de ce cancer chez les femmes gabonaises de moins de 40 ans.

**PATIENTES ET METHODES:** Il s’agit d’une étude descriptive, transversale et rétrospective conduite au Centre Hospitalier de Libreville sur une période de sept ans, du 1er Janvier 2000 au 31 Décembre 2006. Nous avons colligé les dossiers des 54 patientes prises en charge dans les services de cancérologie, de gynécologie et de chirurgie générale.

**RESULTATS:** La prévalence était de 23%. Ces femmes avaient un âge moyen de 33,8 +/- 5,2 années. L’âge moyen de survenue des ménarches était de 13,7 +/- 1,4 an. Les multipares (53,7%) ont constitué la proportion la plus élevée. L’âge de survenue de la première grossesse menée à terme était de 17 +/- 2,9 ans. Trente huit patientes (70,4%) n’avaient aucun antécédent personnel de mastopathie et 4 femmes (7,4%) avaient une récidive homolatérale d’un cancer du sein traité antérieurement. Seules 17 patientes
(31,5%) avaient utilisé une contraception orale. Les patientes au stade IV (58%) étaient les plus nombreuses.

**CONCLUSION:** La prévalence est élevée. Les facteurs favorisant la survenue de ce cancer chez les femmes occidentales jeunes n’ont pas été retrouvés dans cette étude.

**MOTS CLÉS:** Cancer du sein, femme jeune, Libreville

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**117**

**EFFICACY OF NEOADJUVANT CHEMOTHERAPY IN LOCALLY ADVANCED BREAST CANCER**

**ABSTRACT REFERENCE NUMBER:** 117

**AUTHOR/S:** A Tahri, M Kouchani, M Elomrani, Y Elkholti

**AFFILIATION/S:** Oncology department, Mohamed VI University Hospital

**CORRESPONDENCE:** oncoradmarrakech@yahoo.fr

**OBJECTIVE:** The breast cancer is a public health problem in Morocco. The locally advanced forms, inflammatory and the neglected breast cancer presented the first place. The aim of this work is to try to make clear the epidemiologic, therapeutic and evolutionary characteristics; and especially the effect of neoadjuvant chemotherapy in the locally advanced and not inflammatory breast cancer

**METHODS:** Prospective survey of 25 cases, from April first 2007 to April first 2008, in the oncology department of CHU Mohammed VI Marrakech.

**RESULTS:** The locally advanced breast cancer represented throughout the survey’s period 35,66% (51 cases) of the breast cancer diagnosed. The initial mean tumoral size was 6,76 cm. A neoadjuvant chemotherapy on basis of Anthracyclines was administered to 24 patients (96%) through different protocols: 48% FAC60 protocol, 40% FEC100 protocol, 8% AT protocol. The Remaining 4% (one patient) was administered a chemotherapy based on CMF protocol. With meanly 4 cures per patient, the objective clinical response was 48% including 24% of complete clinical response. the histological complete response was 4% (one patient). Twenty two patients (88%) were treated by surgery: a mammectomy of Patey. two patients (8%) have presented a metastatic tumoral progression. One patient was lost to follow-up after 4 cures of neoadjuvant chemotherapy. The follow up duration of our patients lay between 8 and 20 months with a medium of 14 months. Twenty two patients were in complete clinical remission, two patients had a metastatic evolution during chemotherapy and a palliative treatment was instituted.

**CONCLUSION:** this study show efficacy and low toxicity of neo-adjuvant chemotherapy in locally advanced breast cancer
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THE PREVALENCE OF SQUAMOUS INTRAEPITHELIAL LESION AND ITS ASSOCIATION WITH CD4 COUNT AMONG WOMEN INFECTED WITH HUMAN IMMUNODEFICIENCY VIRUS IN ILORIN, NIGERIA

ABSTRACT REFERENCE NUMBER: 121

AUTHOR/S: Saidu R (1), Jimoh AAG (1), Abdul IF (1), Olatinwo AWO (1), Ibrahim OOK (2), Aderibigbe SA (3)

AFFILIATION/S: (1) Departments of Obstetrics and Gynaecology, (2) Pathology and (3) Community Medicine, College of Medicine, University of Ilorin

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OBJECTIVE: To study the prevalence of Squamous Intraepithelial Lesions (SILs) among HIV infected women in Nigeria and its association with CD4+ve count. This study was carried out because there is paucity of data on this subject in Nigeria where both HIV infection and cervical cancer are major public health issues.

METHODS: Participants were newly diagnosed HIV positive and HIV negative women, matched for age. Papanicolaou smear and blood sample for CD4+ve count was collected from all the women.

RESULTS: There were 160 interpretable Papanicolaou smear samples, 80 each from HIV+ve & HIV-ve women. Prevalence of SIL was significantly higher in HIV+ve women than HIV–ve women, 23.8% and 11.3% respectively (p=0.04, odds ratio = 2.5, CI: 0.95 – 6.73). High grade SIL tended to be higher in HIV+ve (6.3%) than HIV–ve (1.3%), but was not statistically significant (p = 0.1). CD4+ve count of less than 200/µl was found in 55% of HIV+ve women and none of the HIV-ve women. Women with SIL had a mean CD4+ve count of 399/µl which was significantly lower than those women without SIL 563/µl (p = 0.02).

CONCLUSION: SILs were related with HIV sero-positivity and may be more common among those with lower CD4 cell counts. This suggests the need for all HIV +ve women irrespective of their clinical conditions to have regular cervical cancer screening with appropriate follow up for an abnormal smear. This study is a preliminary study, which is currently being followed up by a larger community based study.

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PROGRAMMED CELL DEATH 1 EXPRESSION ON LATENT MEMBRANE PROTEIN 1-SPECIFIC CD8 T CELLS IS ASSOCIATED WITH MALARIA CO-INFECTIONS

ABSTRACT REFERENCE NUMBER: 122

AUTHOR/S: Ann M Moormann (1), Pratip K Chattopadhyay (2), Kiprotich Chelimo (3), Paula B Embury (1), Mario Roederer (2), David A Price (2, 4)
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**CORRESPONDENCE:** Ann M Moormann, ann.moormann@umassmed.edu

**OBJECTIVE:** Plasmodium falciparum (Pf) malaria and Epstein Barr Virus (EBV) co-infections early in life are risk factors for Burkitt lymphoma (BL), the most prevalent pediatric cancer in equatorial Africa. Malaria has been associated with impaired T cell immunity to EBV. However, the mechanisms leading to immune dysregulation permissive for this malignancy are unknown. To elucidate this gap in our knowledge, we examined the expression of programmed cell death 1 (PD-1) surface receptor on various T cell subsets. PD-1 plays a key role in down regulating activated T cells during infection and also indicates T cell exhaustion and degree of disease severity.

**METHODS:** We used 16-parameter flow cytometry to examine the phenotypic characteristics of CD8 T cell populations (CD45RO, CCR7, CD27, C57, CD127, PD-1) specific for an HLA-A2 tetramer panel of EBV-derived lytic (BMLF1, BRLF1) and latent (LMP1, LMP2, EBNA3C) peptides in malaria exposed and unexposed individuals.

**RESULTS:** LMP1-specific CD8 T cells in malaria-exposed individuals were more likely to express PD-1 and display a less differentiated memory phenotype (CCR7lo, CD45ROlo, CD27hi, CD57lo, CD127hi) in contrast to malaria-unexposed individuals who had a central memory phenotype (CCR7lo, CD45ROhi, CD27hi, CD57lo, CD127hi). Taken together with the relatively low frequency of LMP1-specific CD8 T cells in adults compared to children, this suggests a deletion of this T cell specificity in the long-term memory pool in those exposed to malaria.

**CONCLUSIONS:** LMP1 is critical for EBV-induced B-cell transformation and is expressed during viral replication. How malaria induces PD-1 expression on LMP1-specific T cells warrants further investigation.

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**124**

**MÉTASTASES DE SITE PRIMITIF INCONNU DANS LES SERVICES DE MÉDECINE INTERNE ET D’HÉMATOLOGIE ONCOLOGIE MÉDICALE DU CHU DU POINT G BAMAKO, MALI**

**ABSTRACT REFERENCE NUMBER:** 124

**AUTHOR/S:** Assétou Soukho-Kaya (1), M Dembele (1), AK Dembele (2), B Diallo (2), K Dao (1), AA Doumbia (1), AT Sidibe (1), D Diallo (2), HA Traore (1)

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**CORRESPONDENCE:** C Bougadari: cheickbtraore@yahoo.fr

Les métastases de site primitif inconnu (MSPI) sont une entité fréquente au même titre que les autres cancers. Malgré les moyens déployés pour parvenir à une meilleure connaissance de la pathologie, celle-ci continue de poser de nombreux problèmes diagnostiques et thérapeutiques aux équipes travaillant sur le sujet. Nous nous étions fixé pour objectif l’étude des métastases de site primitif inconnu dans nos
services. De façon plus spécifique sur le plan épidémiologique, clinique, anatomopathologie et/ou cytologique, d’en faire ressortir les difficultés rencontrées dans l’exploration des patients et de déterminer des éléments pronostiques. Notre étude était rétrospective sur une période de 5 ans allant du 1er Janvier 2003 au 31 Décembre 2007 dans les services de Médecine Interne et d’Hématologie Oncologie et a porté sur un échantillon de 20 patients, sur 422 patients atteints de cancer chez 1896 malades hospitalisés durant la période. Les MSPI représentaient 4,7% des cancers. Le sexe ratio de 1,85 était en faveur des hommes et la moyenne d’âge était de 52 ans. Sur le plan clinique, le foie était la localisation la plus fréquente et très souvent un seul site métastatique était présent. Le carcinome indifférencié a prédominé probablement par manque de prélèvement adéquats ou de techniques d’examen de pointe telle que l’immunohistochimie. L’exploration des patients est restée décevante et des facteurs pronostiques n’ont pu être dégagés du fait de l’absence d’un nombre suffisant de patients ayant bénéficié d’un suivi à long terme.

MOTS CLÉS: Carcinomes, Métañstases, Site primitif inconnu

126

RISK FACTORS OF ESOPHAGEAL CANCER IN SUDANESE POPULATION

ABSTRACT REFERENCE NUMBER: 126

AUTHOR/S: Elmakki, Hussam Mohamed

CORRESPONDENCE: Elmakki, Hussam Mohamed: coolu15@hotmail.com

Oesophageal cancer ranks as the most common gastrointestinal cancer in The Sudan, accounting for >50% and has a prevalence rate of 5.6% amongst all cancers seen in the Radio Isotope Centre in Khartoum RICK. This high incidence is not matched in any neighbouring African country apart from South Africa.

OBJECTIVES: to determine some dietary and habitual risk and protective factors of oesophageal cancer among Sudanese patients.

METHODOLOGY: This is an analytical hospital based case control study conducted in Khartoum Teaching Hospital and RICK from January 2006 to November 2006. Patients included those diagnosed as esophageal cancer by histopathology. The controls were patients who matched the cases in the socio-demographic data and seen in the outpatient for other mild medical conditions.

RESULTS: The followings were found to be significantly associated with esophageal cancer:
A) Tobacco consumption in the form of smoking and smokeless tobacco (snuffing) with an odds ratio of 4.15 (confidence interval=1.393-12.371) and 1.37 (confidence interval=0.556-3.3779) respectively.
B) Gastro esophageal reflux disease with an odd ratio of 2.51 (CI=0.7206-8.7124)
C) Sorghum, Millet and hot pepper intake daily was found to be a risk factor with an odd ratio of 0.46 (CI=0.2-1.01), 1.29 (CI=0.574-2.910), 1.27 (CI=0.5817-2.751) respectively.
D) None of the patients showed a positive family history of the disease.

CONCLUSION: The present association of the disease with these habits needs to be extended in larger field studies in areas with high incidence of the disease like eastern Sudan tribes. This needs to be coupled with studies in environmental and genetic factors.
MEASURE OF TOTAL PROSTATE SPECIFIC ANTIGEN (PSA) AMONG SENEGALESE MEN WITH IMMUNOENZYMATIC METHOD FOR EARLY DETECTION OF PROSTATE CANCER

ABSTRACT REFERENCE NUMBER: 128

AUTHOR/S: Maguette Sylla Niang (1, 2), Ndiabou Drame (1, 2), Mohamed Jalloh (1, 2), Issa Labou (2), Lamine Niang (1, 2), Gisèle Woto Gaye( 1), Alioune Dieye (1), Serigne Maguèye Gueye (1, 2)

AFFILIATION/S: (1) Université Cheikh Anta DIOP, (2) Hôpital Général de Grand-Yoff

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Prostate cancer has become since some years the most frequent male cancer after 50 years of age. Prostate Specific Antigen (PSA) is the biological marker of this disease.

OBJECTIVES: The objective of this study was to study the distribution of PSA value in an unselected population of Senegalese men of more than 40 years old and to establish reference values of PSA.

METHODS: Six hundred and eighteen sera resulting from male subjects of age included between 40 and 93 years were tested. Mean age was 58.67 years. PSA was measured by an immunoenzymatic sandwich technique with a final detection in fluorescence.

RESULTS: Approximately 82% of the studied population presented normal values of PSA and a high PSA was found in 18.24% of cases. PSA value increases with the age: mean PSA was 0.99 ng/ml; 1.21ng/ml; 1.64ng/ml; 1.74ng/ml; 1.56ng/ml and 3.61ng/ml respectively in the age groups 40-49 years, 50-59 years, 60-69 years, 70-79 years, 80-89 years, 90 and above. Mean age of diagnosis of prostate cancer is 65.5 years in our study population and mean PSA among the prostate cancer group was 125.7 ng / ml.

CONCLUSIONS: PSA, the specific marker of prostatic tissue, is a good marker of solid tumor.

CHANGING PATTERN OF THYROID CARCINOMA IN IBADAN, NIGERIA

ABSTRACT REFERENCE NUMBER: 129

AUTHOR/S: AO Afolabi, AO Arowolo, OO Akute

AFFILIATION/S: Department of Surgery, College of Medicine, University of Ibadan & University College Hospital

CORRESPONDENCE: AO Afolabi: adefemiafolabi@gmail.com

OBJECTIVE: Follicular carcinoma was documented to be the commonest thyroid malignancy in Nigeria up to the late sixties. A more recent study from our institution showed only a marginal preponderance of papillary carcinoma. However, the changing trend over the decades has not been documented. This
study was therefore conducted to review the pattern of thyroid carcinoma over a fifteen year period and compare it with that of the previous decade and the global trend.

**METHODS:** A retrospective analysis of the histological types of thyroid cancers in patients who had thyroidectomy in the first 10 years and second 15 years of the period 1980 - 2004 was performed. The data were analyzed using descriptive statistics and the Z test.

**RESULTS:** One hundred and sixty-five patients had thyroidectomy for thyroid cancer between 1980 and 1989. Some 28% of these patients had papillary carcinoma with 26.7% of these occurring within the age of 21-30 years while 35.8% had follicular carcinoma with 27.1% of these occurring within the age of 31-40 years. A total of 157 patients were seen between 1990 and 2004. Some 36% of the patients had papillary carcinoma and 37.5% of these were within the 21-30 years age groups. About 25% had follicular carcinoma with 30.8% of these occurring within the 31-40 years age group.

**CONCLUSIONS:** Papillary carcinoma is now commoner than follicular carcinoma. This is probably due to a transition from an iodine-deficient to an iodine-sufficient status and also a stricter pathological classification of these tumours.

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**133**

**SUPPORTING IMPROVED CERVICAL CANCER PREVENTION WORLDWIDE A GLOBAL ADVOCACY EFFORT**

**ABSTRACT REFERENCE NUMBER:** 133

**AUTHOR/S:** Kay, VI

**AFFILIATION/S:** the UICC Cervical Cancer Initiative Advisory Task Force and the Cervical Cancer Action (CCA) Coalition

**CORRESPONDENCE:** Kay, VI: kay@uicc.org

**GOAL:** To improve cervical cancer prevention worldwide by encouraging comprehensive and locally appropriate programmes including improved screening and treatment, vaccination as well as public and professional education

**MAIN OBJECTIVES:**
-- Generate evidence of support for improved cervical cancer prevention for women throughout the world, and especially in the developing world which suffers the highest incidence and mortality
-- Compile a comprehensive electronic dossier

**METHOD:**
-- UICC, PATH and Cervical Cancer Action collected evidence of support
-- The evidence was compiled in this electronic dossier which may be freely shared for educational and non-commercial purposes

**RESULTS:**
-- Over 370 letters and articles from all the world regions
-- The dossier includes the names of over 1,200 individuals, representing nearly 700 organizations, who signed the online Global Call to Stop Cervical Cancer in 2007 and 2008
-- The dossier was used to show the weight of evidence of support for improved cervical cancer prevention at the GAVI Board of Directors and the WHO Strategic Advisory Group of Experts on Immunization (SAGE) meetings
-- The UICC also produced a “special edition” of the dossier of support focusing on letters from UICC members (available in English, French and Spanish).

**CONCLUSION:** The dossier is an important and flexible tool which can:
-- be adapted for regional needs
-- assist in shaping local messages
-- stimulate media and public interest
-- be used to raise awareness with policy-makers for the need for HPV vaccination and cervical cancer screening in specific countries or regions

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**134**

**NATIONAL CANCER CONTROL PLANNING (NCCP) AND CERVICAL CANCER IN AFRICA**

**ABSTRACT REFERENCE NUMBER:** 134

**AUTHOR/S:** Kay, VI

**AFFILIATION/S:** UICC Cervical Cancer Initiative Advisory Task Force

**CORRESPONDENCE:** Kay, VI: kay@uicc.org

**BACKGROUND:** Planning integrated, evidence-based and cost-effective interventions throughout the cancer continuum is the most effective way of tackling the cancer problem and reduce the suffering caused to patients and their families. Civil society can play a critical role in developing effective partnerships to take on the responsibility of cancer planning.

**MAIN OBJECTIVES:**
-- Promote and support effective NCCP in Africa
-- Strengthen collaborations with partners
-- Build local capacity and provide professional education opportunities
-- Support improved cervical cancer prevention and control in Africa by inscribing it in efficient NCCP

**METHOD:**
-- Use collaborative workshops and dedicated materials
-- Generate a current situation-analysis of NCCP in Africa
-- Advocate for implementation of those plans
-- Encourage sharing best-practice with countries starting their planning process

**RESULTS:**
-- Creation of dedicated and collaborative materials for NCCP and cervical cancer
-- To evaluate and monitor the needs and gaps in participating countries, two questionnaires will be sent to participants, one ahead and one following the ACS, AFRO and UICC NCCP workshop at AORTIC 2009:
  a) Questionnaire prior to the workshop (pre-registration process): survey of those countries with existing plans and plans in development
  b) Questionnaire after the workshop: evaluation of the lessons learned and assessment of the motivation to continue/begin plan.

Results of Questionnaire a) will be available for AORTIC 2009

**CONCLUSION:** The momentum is there to use opportunities such as cervical cancer prevention technologies to support the introduction of effective national cancer control plans in African countries.
Le registre des cancers est un recueil continu et exhaustif des nouveaux cas de cancer dans une population géographiquement définie à des fins épidémiologiques et de santé publique. Les données recueillies permettent de mesurer l’incidence des cancers dans cette population et son évolution dans le temps. Un registre hospitalier s’intéresse aux cas de cancer pris en charge dans un établissement.

OBJECTIFS: Enregistrer les cas de cancer diagnostiqués à l’Hôpital Principal de Dakar et étudier leurs caractères épidémiologiques.


RESULTATS: Nous avons recueilli 2430 cas de cancers sur 8 ans, avec une moyenne de 303 cas par an [269-334]. Le sex ratio était de 1,40, l’âge moyen de 47 ans [1-100 ans]. Il y avait 837 cancers digestifs (34,5 %): colon et rectum = 248 (29,6 %), foie = 216 (25,8 %), estomac = 192 (23 %); 311 cancers ORL (13 %): larynx: 51 (16,5 %), thyroïde: 42 (13,50 %), hypopharynx: 38 (12 %); 297 cancers gynécologiques (12 %): utérus: 118 (39,5%), sein: 118 (39,5 %), ovaires: 61 (21 %); 137 cancers broncho-pulmonaires (5,6 %); 113 cancers de la prostate (4,5 %); 223 hémopathies malignes (9 %): lymphomes non Hodgkiniens: 107 (48 %), maladie de Hodgkin: 28 (12,5 %), myélomes: 34 (15,8 %). Il y avait 104 cas chez les enfants (4%): 32 hémopathies (30,5 %), 22 rétinoblastomes (21 %), 10 néphroblastomes (9,5 %).


MOTS CLES: Registre des cancers, Sénégal
EVALUATION DE LA PRISE EN CHARGE DE LA DOULEUR CHEZ LES CANCÉREUX À L’HÔPITAL NATIONAL DE NIAMEY

ABSTRACT REFERENCE NUMBER: 137

AUTHOR/S: Seydou Alassane, Eric Adehossi, Mahamadou Cheffou, Bade Abdou, Nouhou Hassane

AFFILIATION/S: Département de Médecine, Hôpital National de Niamey

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OBJECTIFS: La douleur chez le cancéreux constitue un problème majeur dans nos hôpitaux pour plusieurs raisons. L’optimisation de sa prise en charge passe par l’évaluation des pratiques actuelles. Pour ce faire nous nous sommes assignés les objectifs suivants:

OBJECTIF GÉNÉRAL: Evaluer la prise en charge de la douleur cancéreuse à l’hôpital national de Niamey.

OBJECTIFS SPÉCIFIQUES:
-- identifier les problèmes que pose la douleur dans la pathologie cancéreuse
-- analyser les échelles d’évaluation de la douleur utilisées
-- analyser l’impact des thérapies

MÉTHODOLOGIE: C’est une étude prospective, qualitative et quantitative sur un échantillon de 61 patients atteints de cancer douloureux hospitalisés à l'Hôpital National de Niamey du 1er février au 1er mai 2008. Un questionnaire et des échelles d’évaluation de la douleur validées ont été utilisés (EVA, QLQC30, DN4). Les qualificatifs de la douleur ont été traduits en langues nationales. Les données ont été analysées et traitées avec le logiciel EPI INFO 6 Version française. Le test Khi² est utilisé pour les variables qualitatives; le test de Student est utilisé pour les variables quantitatives avec P significatif inférieur à 0,05. Les valeurs numériques sont mesurées en: moyenne, écart type, médiane, fréquence.

RÉSULTATS: L’échantillon est composé de 61 patients dont 31 femmes et 30 hommes. Durant l’étude 29 (47,54%) sont décédés. Nos patients ont un âge compris entre 8 et 80 ans avec un âge médian de 47 ans. Deux classes d’âge sont plus affectées, 40-49 ans avec 29,5% et 60-69 ans avec 24,6%.
Les cancers du sein, du foie, de la prostate et de la vessie représentent plus de 55% des cancers enregistrés. Dans 32,8% des cas on retrouve des métastases. Seuls 22% des cas ont une confirmation anatomopathologique. La durée moyenne du début de la douleur est de 15 mois dans notre étude. Dans 77% des cas la douleur est due à l’évolution du cancer et dans 23% aux gestes thérapeutiques. Les autres signes associés sont l’asthénie, l’anorexie et l’altération de l’état général dans 61,40% des cas. Aucune échelle d’évaluation n’est utilisée dans les services. 55 patients ont été sous antalgiques dont 67% paliers II et 20% paliers III. Dans 88,7% des cas il y a diminution de la douleur. 60% des patients présentent des douleurs neuropathiques. Le QLQC30 retrouve une altération de l’état général marqué par l’asthénie dans 98,3%.

CONCLUSION: L’absence d’utilisation des échelles d’évaluation de la douleur entraîne une prise en charge inadéquate. Les antalgiques paliers II sont les plus usités, les antalgiques paliers III ne sont pas disponibles dans les formes orales.
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PSYCHOLOGICAL DISTRESS AND QUALITY OF LIFE OF OSHIWAMBO-SPEAKING NAMIBIAN WOMEN DIAGNOSED WITH BREAST OR CERVICAL CANCER

ABSTRACT REFERENCE NUMBER: 138

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OBJECTIVE: The aim of this research was to determine the prevalence of psychological distress among Oshiwambo-speaking Namibian women diagnosed with breast or cervical cancer. The study further aimed at investigating the relationship between quality of life and psychological distress among these cancer patients.

METHODS: The sample consisted of 103 adult women diagnosed with either breast- or cervical cancer. The Distress Thermometer (DT) and the Hospital Anxiety and Depression Scale (HADS) were used to determine the prevalence of potential distress, anxiety and depression. The feasibility of the use of the DT and HADS as screening tools within this context was also explored. The 26-item World Health Organization Quality of Life questionnaire (WHOQOL-Bref) was used to assess quality of life.

RESULTS: Using the HADS, approximately 28% of the subjects were identified as distress, whereas 32% and 18% were identified as experiencing anxiety and depression respectively. Using the DT, nearly 43% were identified as distressed. Significant negative correlations were found between nearly all WHOQOL-Bref subscales and psychological distress, anxiety and depression.

CONCLUSIONS: The study supports international research regarding the prevalence of psychological distress, anxiety and depression among cancer patients. It also highlights the potential impact of these aspects on the quality of life of cancer patients. The DT and HADS could be useful screening tools in busy and under-staffed oncology settings, and further research is called for within Namibian oncology settings.

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REASONS FOR PATIENTS NOT RECEIVING FULL COURSE CHEMOSENSITISATION DURING RADICAL TREATMENT WITH CERVICAL CARCINOMA

ABSTRACT REFERENCE NUMBER: 139

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OBJECTIVE: This study reviews the reasons patients did not manage to receive or complete four or more cycles of platinum based chemosensitisation during radiotherapy for locally advanced cervix carcinoma. All patients undergoing radical treatment at the Tygerberg Hospital, South Africa are planned to receive platinum chemosensitisation based on the GOG 123 and Keys trials.

METHODS: This is a retrospective study of patients with Stage IBi - III B cervical cancer who were referred for radiation treatment during an 18 month period. A sample population of 147 patients was identified with the intention to treat with radical chemoradiation. Demographics, histology and treatment regimens were defined.

RESULTS: In this audit 40% (n=59/147) of all patients being treated radically failed to complete four or more cycles of chemotherapy. The main reason for stopping chemotherapy was renal dysfunction. Other causes included neutropenia and a low CD 4 count in HIV positive patients.

CONCLUSIONS: The main determinant for not completing chemotherapy was a falling creatinine clearance which was calculated weekly before platinum administration. The causes for failure to administer platinum by the attending physicians are addressed in this poster.

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SCREENING OF NATURAL PRODUCTS AND ALKYLATING AGENTS FOR ANTINEOPLASTIC ACTIVITY

ABSTRACT REFERENCE NUMBER: 140

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OBJECTIVE: To screen leaves of Rhus laevigata, a South African indigenous plant for the presence of pro-apoptotic and anti-proliferative natural compounds and also to screen newly synthesised platinum and palladium based complexes for their antineoplastic activities against a panel of cell lines.

METHODS: Leaves of Rhus laevigata were collected from the nature reserve of the University of the Western Cape and were identified by a botanist. The leaves were washed, dried and crude extracts of organic and aqueous extracts were prepared. Bioassays for each extract were performed. Further, palladium and platinum complexes were synthesized following the procedures described by Darkwa et al., (2002) with minor changes. All commercial chemicals and other reagents, other than those described by Darkwa et al., (2002), were used as received and manipulations of air and/or moisture sensitive compounds were performed under dry, deoxygenated nitrogen atmosphere, using Schlenk techniques. The synthesized complexes were assigned numbers 15 (a palladium based complex), 57 (a palladium based complex) and 58 (a platinum based complex).

RESULTS: The results showed that methanol extracts from Rhus laevigata were most sensitive against Jurkat cells and very resistant against Caski. On the other hand the platinum based complex was more active than the parent cisplatin and more active than the palladium based complexes against various cancer cells.
CONCLUSION: The leaves of Rhus laevigata contain active compounds which needs to be further assessed for development of anticancer agents. The dichloro-bis (pyrazole) platinum (II) compounds have the potential to be developed into effective anti-cancer agents.

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HPV VACCINE ACCEPTABILITY BY HOSPITAL ATTENDING WOMEN IN ABUJA NIGERIA

ABSTRACT REFERENCE NUMBER: 143

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OBJECTIVE: The objective of the study was to assess the acceptability of HPV vaccine by a population of women attending a tertiary health care facility in Abuja, FCT Nigeria.

METHOD: This was a structured questionnaire survey of 313 consecutive patients reporting for care at the department of obstetrics and gynaecology. The women were required to mark the appropriate response to each question as it was read out and explained to them. The information we collected included the patients’ knowledge of cervical cancer, HPV, and their cervical screen status. We also collected information on routine immunization history of previous children.

RESULT: The results showed that 94% of women would accept to give the vaccination to their female children, 6% would not. The mean age of respondents was 32 years. 51% of the women had never heard of cervical cancer, while 88% had never been screened. Only 16% reported knowledge of HPV. 81% of our patients had received education up to university level. We found no statistically significant association between levels of educational nor religion and HPV vaccine acceptability. Of the women who would not accept HPV vaccine for their children, 53% had given the routine childhood immunization.

CONCLUSION: Evidence from this study suggests that HPV vaccine for the prevention of cervical cancer in Nigeria is an acceptable intervention in prevention of cervical cancer. A community based study is required to validate the results of our hospital based study.

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A SITUATIONAL ANALYSIS TO DETERMINE SUPPORT OF A COMMUNITY-BASED HEALTH PROMOTION PROGRAM FOR BREAST AND CERVICAL CANCER CONTROL AND PREVENTION IN DAR ES SALAAM, TANZANIA

ABSTRACT REFERENCE NUMBER: 144

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Objectives: 1). Conduct interviews and a focus group discussion with key leaders concerning existing health services and the capacity for breast and cervical cancer early detection and treatment. 2). Examine the support for implementation of a community-based health education program to promote early detection screenings for breast and cervical cancer. 3). Develop relations with interagency partnerships for future cancer prevention and control programs.

Methods: Data for this cross-sectional qualitative study were collected using the rapid appraisal method. Fifteen key leaders from the health and political system and related supporting infrastructures completed semi-structured face-to-face interviews to discuss components needed for development of a cancer education program. Additionally the Community Health Management Team of Kinondoni District participated in a focus group discussion concerning program development.

Results: Political will exists and is very supportive of the development of a community-based health education program to promote preventive screenings for cervical cancer and skills-building for breast cancer including education related to self-breast exams. Leaders expressed a need to focus efforts on cervical cancer prevention due to the high disease burden and the existing treatment capacity. Data also reflected the need to increase capacity building to accommodate increases in demand for breast and cervical cancer early detection and treatment services.

Conclusions: There is strong support for an inter-institutional partnership to develop a community-based pilot program for breast and cervical cancer prevention and control. Next steps will include formative research to develop the initial program protocol.
BACKGROUND: Tanzania is seeing a rapid increase in cancer incidence. Women with cancer suffer poor outcomes due to lack of knowledge about early symptoms, under-utilization of the health care system, a poor referral system, social and cultural norms and stigma surrounding the disease.

METHOD: Data for this study were collected using a written survey completed by women attending a Christian women’s conference at the Lighthouse Christian Center in Dar es Salaam, Tanzania. The survey assessed breast and cervical cancer knowledge, cancer screening practices and interest in learning about cancer.

RESULTS: One hundred and eight women between the ages of 16 and 60 completed the survey. Less than half the women knew that a painless lump may be a sign of breast cancer while only 26% knew that bleeding after sex may be a sign of cervical cancer. Only 13% of the women had ever been screened for cervical cancer. Over 93% of the women were interested in learning about breast and cervical cancer. Only 72% of the women talk to their friends about health problems but almost 100% of the women indicated they would like to be trained to educate their friends and family members about breast and cervical cancer.

CONCLUSIONS: Women in Tanzania have a lack of knowledge concerning breast and cervical cancer symptoms and do not participate in early detection screening. They are interested in learning about breast and cervical cancer and would like to learn how to educate their friends and family members about the disease.

 WHY BREAST CANCER PATIENTS DEFAULT ON FOLLOW UP VISIT IN THE RADIOTherapy DEPARTMENT OF UNIVERSITY COLLEGE HOSPITAL, IBADAN, NIGERIA

ABSTRACT REFERENCE NUMBER: 147

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OBJECTIVE: This study was done to find out why female breasts Cancer patients default on follow up visit.

METHOD: Questionnaires were administered by the investigators to breast cancer patients who defaulted twice on their follow-up visit on completion of Oncology treatment. Patients with stages I-III disease were selected. All the patients were counselled before commencement of treatment. Information gathered also included, age, stage of disease, reason for default on follow up, educational qualifications, occupation and monthly income. Those with metastatic disease on palliative care were excluded from the study.

RESULT: A total number of 40 patients, aged between 30 and 70 years were interviewed. Lack of finance was responsible for default of 14(35.0%) Twelve (30.0%) complained of long distance to the clinic while seven (17.5%) resorted to alternative treatment. Four (10.0%) expressed loss of hope while withdrawal of family support affected 3(7.5%) as their husbands abandoned them. Fourteen respondents (35.0%) have no formal education, 5 (12.5%) had primary education, 11 (27.5%) had secondary while 10(25.0%) had post secondary education. Sixteen (40.0%) respondents were petty traders, eighteen (45.0%) were
unemployed while 6 (15.0%) were employed with the monthly income between 20,000 Nigeria naira (120 USD) and 50,000 Nigeria naira (280 USD).

CONCLUSION: From above findings lack of finance and long distance from treatment centers are the main reasons why these patients default. Efforts to subsidize cancer treatment and establishment of more cancer centers can help solve the problem. Intensification of counselling can also encourage better follow up visit.

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EPIDEMIOLOGIE DES CANCERS DIGESTIFS: EXTRAIT DU REGISTRE DES CANCERS DE L'HÔPITAL PRINCIPAL DE DAKAR

ABSTRACT REFERENCE NUMBER: 148

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Le registre des cancers est un recueil continu et exhaustif des nouveaux cas de cancers dans une population géographiquement définie, permettant de mesurer l’incidence des cancers et son évolution dans le temps. Un registre hospitalier s’intéresse aux cas diagnostiqués et pris en charge dans un établissement. Nos objectifs étaient de recueillir les de cancers digestifs diagnostiqués à l’Hôpital Principal de Dakar et étudier leurs caractères épidémiologiques.

MALADES ET MÉTHODES: C’est une étude rétrospective de janvier 2001 à décembre 2006, ayant pour cadre l’Hôpital Principal de Dakar. Tous les cas de cancers diagnostiqués, hospitalisés et externes ont été inclus. Les sources des données étaient les registres d’hospitalisation des services cliniques, les registres du laboratoire d’anatomie pathologique et des myélogrammes, les données du PMSI. Le diagnostic de cancer était fait sur des données histologiques, cytologiques, biologiques (marqueurs tumoraux) et morphologiques. Pour chaque cas, l’âge, le sexe, la topographie et les données permettant le diagnostic de cancer étaient recueillis.

RÉSULTATS: Nous avons recueillis 1732 cas de cancers, avec une moyenne de 288 cas par an. Il y avait 611 cancers digestifs, soit 35,27 % des cas. Ils étaient constitués de: 186 cancers colorectaux (30,5 %) avec un âge moyen de 46,5 ans et un sex ratio de 1,5, dont 95 cas de localisation colique et 91 cas de localisation rectale; 127 cancers gastriques (20,7 %) avec un âge moyen de 52,6 ans et un sex ratio de 2; 118 cancers du foie (19,3 %) avec un âge moyen de 50 ans et un sex ratio de 2,2; 71 cancers de l’œsophage (11,6 %) avec un âge moyen de 50 ans et un sex ratio de 1; 56 cancers du pancréas (9 %) avec un âge moyen de 51,5 ans et un sex ratio de 1,5.

CONCLUSION: Les cancers digestifs sont les cancers les plus fréquents diagnostiqués à l’Hôpital Principal de Dakar, dominés par les cancers colorectaux, de l’estomac et du foie. Ils atteignent l’adulte âgé entre 45 et 50 ans avec une discrète prédominance masculine. Le cancer du foie étant le premier cancer au
14 years old boy presented with sign and symptoms of acute abdomen in Adama hospital, where operated and found to have colorectal malignancy. Colorectal cancer is thought to be a disease of an old people but with lesser incidence and with the same sign & symptom can be occurring in youngster.

INTRODUCTION: Colorectal cancer (CRC) is a disease primarily affecting an old population [1]. The incidence of CRC in young patients has been raising worldwide. The number of predisposing condition and factors for colorectal cancer has been identified. Familial polyposis, chronic ulcerative colitis and family cancer syndrome are among the common one even thought the hereditary colorectal cancer seems common in youngster [2, 3].

CASE REPORT: A 14 years old boy from Mojo presented in Adama Hospital with 3 days history of abdominal pain, nausea, vomiting ingested materials, and unable to pass flatus. He gave history of long standing abdominal pain, altered bowel habits, anorexia, weight loss, constipation and weakness. No history of similar illness in the family. In Adama hospital with impression of acute abdomen laparatomy was done and intra-operatively found colonic mass of 8 x 6 cm with sign of obstruction and omental deposit. Excision of the colonic, and omental mass with colostomy was done on Sep 15 2007. A month later he referred to oncology center with biopsy result which confirmed poorly differentiated mucinous adenocarcinoma with omental deposit. On physical examination he was in good performance statues, stable vital sign, and healed post-operative scar, colostomy well functioning and normal per-rectal examination. Metastatic workup doesn’t show any sign of metastasis. CEA was 0.43 ng/ml, and histopathology review confirmed mucin type of adenocarcinoma. Afterward started on palliative chemotherapy (fluorouracil and leucovorin) but while he was on chemotherapy developed seeding on surgical scar which proven to be secondary deposit. Subsequently he did receive local radiotherapy and continued chemotherapy, and after seven months presented with sign of progressive diseases and died.

DISCUSSION: Colorectal cancer in young patients (age, 21 years or younger) is rare and has a well-recognized aggressive, often fatal course, but the genetic origin and developmental biology of this disease are poorly understood [3]. Initial signs and symptoms of CRC are similar in pediatric and adult patients [4]. Our patient was presented in different time in nearby clinic before developing sign of acute abdomen. The strikingly higher frequency of mucinous histology suggests that the biology of CRC differs in pediatric and adult patients and may contribute to poor outcomes [4]. As the history we know that our patient didn’t have similar history in the family. A study shows’ the majority of young patients had sporadic colorectal cancer [5,6]. Therefore, most patients had no clinical features suggestive of hereditary colorectal cancer other than a young age at onset. Sporadic colon cancer in young patients is
an aggressive disease whose morphology and natural history differ from those of familial adenomatous polyposis, hereditary nonpolyposis colorectal cancer, and adult colon cancer. The tumors appear to develop by means of either of two pathways: one involving a tumor suppressor or loss of heterozygosity and the other involving a mutation. However, it is likely that other genetic or developmental factors account for the aggressive course and poor prognosis of this disease [5]. A study done USA California confirms, in an ethnically diverse young population, that CRC tends to be advanced stage, aggressive, and frequently non-operable at the time of diagnosis. It is important for physicians to recognize the poor outcome of CRC in a younger population and consider an aggressive approach to diagnosis and early treatment [7]. In this particular study Forty-four per cent of the lesions were right-sided in the young group compared with 21 per cent in the older group (P = 0.004). Advanced tumor stage (T3 and T4) was noted in 87.8 per cent of the young and 63 per cent of the older patients (P = 0.002; OR, 4.08). Poorly differentiated tumor grade was more common in young patients (P = 0.003) as well as mucinous/ signet ring characteristics (P = 0.005). Young patients had an increased likelihood of a family history (P = 0.0001). Operative intervention and survival were similar for the two groups.

CONCLUSION: CRC is very rare in youngsters’, but has similar clinical presentation and clinical finding. When we put side by side CRC of adults or youngster patients with hereditary CRC, most of the time CRC in younger are sporadic, mucinous histology and have poor prognoses’.

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SEXUALITY NEEDS AND COPING STRATEGIES FOR TERMINALLY ILL CANCER PATIENTS: A CASE OF HOSPICE AFRICA UGANDA

ABSTRACT REFERENCE NUMBER: 150

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OBJECTIVE: Despite being central to human life and impacting on people’s quality of life, the sexuality needs of patients suffering with cancer are largely neglected in sub-Saharan Africa, while addressing physical, psychosocial and spiritual domains. This study investigated the sexuality needs and coping strategies for terminally ill cancer patients in Uganda.

METHODS: Qualitative methods were used among twenty cancer patients purposively recruited from Hospice Africa Uganda who were being cared for in diverse care settings, and nineteen staff key informants (nurses and doctors).

RESULTS: Terminally ill cancer patients have unmet sexuality needs. The need for love, acceptance and counselling from health professionals were pronounced, while abandonment, the breakup of relationships and psychological pain were most distressing problems. For most patients, sexuality needs could not be met without having sex. Coping strategies such as turning to God and focusing on other priorities of life were reported. Prioritization of medical over psychosocial issues and the inability of health professionals to address sexuality issues are major barriers to sexual expression.

CONCLUSION: Sexuality continues to be an important aspect of life for many cancer patients and should be integrated into holistic care. Unmet sexuality needs result in unnecessary suffering for cancer
patients. Health professionals are a barrier to sexual expression as a result of their inability to intervene appropriately.

**KEY WORDS:** Cancer, sexuality, terminally ill, needs and coping strategies

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**NON HAEMATOPOIETIC TOXICITY OF ANTHRACYCLINES IS MORE FAVOURABLE THAN THAT OF TAXANES: EXPERIENCE FROM NAIROBI**

**ABSTRACT REFERENCE NUMBER:** 151

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**BACKGROUND:** The isolation and clinical use of anthracyclines and taxanes were major breakthroughs in cancer chemotherapy. Their use has lead to cures and palliation of patients with diverse cancer types, notably breast cancer, malignant lymphomas, ovarian cancer, acute leukaemias. More recently there have been efforts to exclude anthacyclines from breast cancer protocols because of cardiotoxicity.

**METHODS:** Records of 212 patients treated in private facilities in Nairobi with anthracycline or taxane containing protocols were reviewed. Some of the patients were treated with more than one protocol, bringing the number of treatments to 225. Forty-six (21.7%) were in males and 179 (78.3%) in females. The age range was 8 to 85 years, median 46 years. One hundred and thirty one patients (61.8%) had breast carcinoma and 35 (16.5%) non-Hodgkin’s lymphomas. Doxorubicin was used in 131 (58.2%) of the protocols, paclitaxel in 17 (7.6%) and docetaxel in 25 (11.1%). Cardiac toxicity occurred in 6 protocols containing doxorubicin (4.58%), none with paclitaxel and 3 (12%) with docetaxel. Neurotoxicity occurred in 2 (1.52%) with doxorubicin/vincristine, 5 (29.4%) with paclitaxel and 4 (16%) with docetaxel. Fluid retention was not experienced with doxorubicin, in 1 (5.88%) with paclitaxel and 5 (20%) with docetaxel. 93.89% of treatments with doxorubicin had no toxicity recorded as opposed to 64.7% with paclitaxel and 52% with docetaxel.

**CONCLUSIONS:** Subject to further statistical interrogation, toxicity profile of anthracyclines may be more favourable than that of taxanes. Small numbers in the taxane group may render more meaningful comparison difficult. Larger prospective studies are required.
EXAMINING THE COMMUNICATION PREFERENCES ON HUMAN PAPILLOMA VIRUS AND CERVICAL CANCER OF SEMI-URBAN AND RURAL DWELLERS IN ABUJA, NIGERIA

ABSTRACT REFERENCE NUMBER: 153

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BACKGROUND: The development of the HPV vaccine for the primary prevention of cervical cancer has focused attention on promoting its availability and acceptance in high disease burden resource-poor countries. Health promotion and illness prevention programs in Africa have suffered setbacks through inadequate attention to the peculiarities of the context. It is therefore important to ascertain not only people’s knowledge about disease conditions but also their resources and preferences for behavior change communication.

OBJECTIVE: To ascertain the level of knowledge of sexually transmitted diseases and human papilloma virus, the sources of health information and communication preferences of residents of Gwagwalada Area Council of Abuja, Nigeria.

METHOD: 400 participants consisting of 100 in-school pupils and 100 out-of-school youths aged 15-19 and 200 adults aged 15-45 years from Gwagwalada and nearby Giri village selected by purposive sampling responded to a structured multi-choice/free-response questionnaire. Biodata and information on the health communication resources in their communities and their knowledge of STIs, HPV and cervical cancer were obtained.

RESULTS: There was higher level of knowledge about STIs than HPV and cervical cancer in the cohort. The preferred channel of communication about HPV and STIs were religious associations 30%, electronic media 28.5%, traditional rulers 12.2%, social clubs/ethnic associations 11.5%, communal methods 4.8, others 1.8% while 8.75% showed no response.

CONCLUSION: There is need for a well planned intervention program on STIs, HPV and cervical cancer prevention for Gwawalada Area Council taking into consideration the people’s preferred means of health communication.
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**DIAGNOSING CANCER AT A RURAL HOSPITAL BY USING TELEPATHOLOGY**

**ABSTRACT REFERENCE NUMBER:** 154

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**OBJECTIVE:** The first crucial step in cancer management is making of a correct and accurate diagnosis. Usually the making of diagnosis is done by a pathologist using pathology laboratories. Both the pathologist and pathology laboratories are either scarce or completely missing in most of African countries. The objective is to present an experience of making cancer diagnosis at a rural hospital in Tanzania using telepathology.

**METHODS:** The practice of telepathology involves obtaining specimens and laboratory processing of the specimens at the local hospital and then getting of the pathologist’s evaluation from outside the hospital.

**RESULTS:** For the period of May 2007 to December 2008, a total of 880 biopsy specimens were processed at a rural hospital in Tanzania. By using telepathology, evaluation and diagnosis of the specimens were done using pathologists based in Europe. Biopsy results were available within a period of two weeks.

**CONCLUSION:** With the changing in life style and occurrence of infection related cancers, the burden of cancer is increasing in Africa. However, the availability of pathologists and their services in these countries are very scarce or completely missing. Telepathology has shown to be an alternative means in accessing the missing pathology services in these countries.

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**THE IBADAN MULTIDISCIPLINARY BREAST TUMOR BOARD: OUR INITIAL EXPERIENCE**

**ABSTRACT REFERENCE NUMBER:** 155

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OBJECTIVE: The management of breast cancer using the Multidisciplinary approach is the standard practice worldwide. The university college hospital of the college of medicine, university of Ibadan had an all purpose tumour board which met to discuss all kinds of tumours. The establishment of the multidisciplinary breast tumour board in our institution is to tailor patient’s treatment to imaging, pathology and surgical findings, immunochemistry results and patient’s preference and performance. 

METHODS: The team comprises of radiologists, surgeons, radiation and medical oncologist, pathologists, family physicians, pharmacists, radiographers, oncology and radiology nurses as well as researchers/scientists. We meet twice every month at the demonstration room of the Radiology department of the university college hospital, Ibadan. The meeting is usually chaired by Prof. Millicent Obajimi. Our mode of operation includes review of cases, consensus of opinion on line of management after discussions and recently power point presentations of specific topics.

RESULTS: Over the past 10 months we have had about 20 meetings. Our achievements so far include, coordinated management of patients, reduced waiting time, collaboration in the team for patient care, training and research. Our achievements so far, our limitations and the challenges we face will be the highlights of this presentation. Our recommendations and needs will also be enumerated.

CONCLUSION: The establishment of the Breast tumor board has resulted in the co-ordination of the multidisciplinary management of our breast cancer patients and collaboration between members of the team this in turn has improved the quality of life and offered better chances of Survival for our patients.

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EPIDEMIOLOGY, DIAGNOSTIC AND TREATMENT OF OSTEOSARCOMA OF THE CHILD ARISTIDE LE DANTEC HOSPITAL: ABOUT 19 CASES

ABSTRACT REFERENCE NUMBER: 156

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OBJECTIVE: To describe the epidemiology, diagnosis and treatment of osteosarcoma of the child.

METHODS: Retrospective study in ten years has collected 19 cases of osteosarcoma supported in the service of Paediatric Surgery Hospital Aristide Le Dantec in Dakar. The parameters studied were the educational level and socio parents, geographical origin, age, sex, history, the time limit for consultation, the reasons for consultation, physical signs, the signs radiological, biology, treatment modalities and trends. All patients had benefited from a pathological examination which confirmed the diagnosis of osteosarcoma.

RESULTS: For most of our patients (58% of cases) parents had a low level of education. The average age was 11. A male was found with a sex ratio of 2.16 / 1. The average consultation time was 16 months. The main reason for consultation was swelling (12 cases). Eight patients had received traditional treatment. The size of the tumor was more than 10 cm in 14 cases. The most common location was the knee (15 cases). X-ray standard found in 17 cases images of osteolysis. Assessing the extension had not
found metastases. The treatment choices were dominated by alone amputation (47.3% of cases). The 2-year survival was 17%.

CONCLUSION: The osteosarcoma is most often the boy after the age of 10 years. His support in Senegal faces enormous challenges related to the delayed diagnosis. The solution is based primarily on multidisciplinary collaboration.

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**COLPOSCOPY PRACTICE IN NIGERIA**

**ABSTRACT REFERENCE NUMBER:** 158

**AUTHOR/S:** Olaniyan, Yinka: Freeman-Wang, Theresa

**AFFILIATION/S:** National Hospital

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**OBJECTIVE:** The objective of this study was to evaluate the level of colposcopy practice among participants attending a 3-day colposcopy training workshop.

**METHOD:** The method of study was a questionnaire survey of participants at the colposcopy course.

**RESULTS:** There were 21 participants from 15 out of Nigeria’s 36 states. 91% of the participants were consultant gynaecologists, half of whom worked in teaching hospitals. 81% reported very little or no previous experience at colposcopy. Only 8 of participants had regular access to a colposcope. 71.4 % (15) had never received any training in colposcopy. Only 4 reported having a fair amount of experience of colposcopy. There were no colposcopes available in 66.7% of the health institutions represented, including 3 of the 9 teaching hospitals. Most centres conducted cervical screening using cytology, while only one centre reporting screening by VIA. There was no respondent currently engaged in any regular colposcopy service.

**CONCLUSION:** Colposcopy practice in Nigeria is extremely limited. There is a need to improve physician access to and expertise in the use of the colposcope.

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**HIGH DOSE RATE BRACHYTHERAPY IN THE TREATMENT OF CERVICAL CANCER: PRELIMINARY EXPERIENCE WITH COBALT 60 RADIONUCLIDE SOURCE**

**ABSTRACT REFERENCE NUMBER:** 160

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**OBJECTIVE:** To determine the acute genito-urinary and gastrointestinal toxicity after High Dose Rate (HDR) brachytherapy with Cobalt 60 radionuclide source

**METHODS AND MATERIALS:** Between July 2008 and December 2008, 70 HIV negative patients with FIGO stages 1-111 cancer of the cervix were treated with Teletherapy and HDR brachytherapy with Co 60 radionuclide source. All patients received 45 Gy in 22 fractions of teletherapy using antero posterior (AP) parallel opposing fields. (Four fields ‘box technique’ used for patients with AP diameter greater than 18 cm) and 6.5 Gy weekly fractions of HDR brachytherapy x 3. The patients also received cisplatin and 5 fluorouracil chemotherapy 3 weekly. Minimum follow up was 3 months (range 3-6months). Acute toxicity (within 90 days of treatment) was scored according to CTCAE version 4.0

**RESULTS:** Seventy patients were evaluated out of which 7 had stage 1 disease, 20 and 43 patients had stages 11 and 111 respectively. The acute complications experienced by the patients include proctitis grade 1; 35 (50%) grade 2; 5 (7%), diarrhea grade 1; 32 (46%), grade 2; 9(13%), and grade 3; 2 (3%). Grade 1 nausea was noted in 5 (7%) patients while 3 (4%) patients had grade 2 nausea. Five (7%) patients had grade 1 vomiting while 2 (3%) had grade 2. Grade 1 cystitis occurred in 50 (71%) patients while 20 (29%) had grade 2. Eleven (16%) patients had grade 1 urinary frequency while grade 2 occurred in 9 (13%) patients. From the results, only two patients (3%) had grade 3 diarrhea which necessitated suspension of therapy for one week. Other reactions did not delay regular treatments.

**CONCLUSION:** The acute reactions from this series were tolerable. The late toxicity is being evaluated. If the late reactions are tolerable, Co 60 HDR brachytherapy source with its longer half life may be economical for low resource countries compared with Iridium 192 which is widely used.

**ACKNOWLEDGEMENT:** IAEA who donated the HDR Gynesource afterloader manufactured by Eckert & Ziegler of Germany to our center

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**A POST MASTECTOMY RADIOTHERAPY TECHNIQUE FOR CENTRES WITH LIMITED RESOURCES**

**ABSTRACT REFERENCE NUMBER:** 161

**AUTHOR/S:** J Hough, E Murray, K Botha

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**OBJECTIVE:** A manual technique for planning and treating chest wall and supraclavicular fields has been devised for use in an environment of long waiting lists and limited staff and machine resources.

**METHODS:** A treatment technique was devised which eliminates all overlapping of treatment fields. A manual method of calculating treatment time using simple measurements and lookup tables was developed. The manual method was verified on a sample of 40 patients by computer generation of the doses expected within the patients using the lookup tables. These doses were compared to computer plans calculated in the normal way using the same treatment technique.

**RESULTS:** The treatment technique resulted in an average hotspot within the chest wall near the centre of the tangential fields of 111% of the prescribed chest wall dose. There was an average dose of 103% of the prescribed chest wall dose within or near the supraclavicular and tangential field matchline. The
manual method results in doses about 3% higher in or near the matchline compared to the computerised plans. The chest wall doses are 0.5% greater and the supraclavicular field 2.0% greater.

**CONCLUSIONS:** The described treatment technique and simple method of manual treatment time calculation is effective in terms of both resource use (CT scans, treatment planning computer) and quality of treatment. More patients can be treated and less time is spent in planning each patient. Minimal advanced equipment is used and hot and cold spots are avoided.

**ACKNOWLEDGEMENTS:** E Greeff and RTTs of the Department of Radiation Oncology, Groote Schuur Hospital

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**162**

**CERVICAL CANCER: WOMEN’S LIVED EXPERIENCE OF SUPPORT FROM THEIR PARTNERS**

**ABSTRACT REFERENCE NUMBER:** 162

**AUTHOR/S:** MA Mosalo

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**OBJECTIVE:** The objectives of the study were to explore the support women diagnosed with cervical cancer experienced received from their partners. Four levels of support were explored.

**METHODS:** An exploratory, qualitative phenomenological study was conducted using convenience sampling. Data were saturated after 17 interviews (n=17) and analyzed using open coding and Tesche’s approach.

**RESULTS:** Only two (n=17) of the participants were supported by their partners in all four levels namely instrumental, emotional, financial and informational support. Due to the fact that only five (n=17) of the participants lived with their partners, support were lacking. Three (n=3) of the participants’ relationships ended after being diagnosed with cervical cancer resulting in lack of support. The rest of the women received partial support. Informational support was the greatest problem as partners depended on the participants for information.

**CONCLUSION:** The study provided evidence that women suffering from cervical cancer lacked support from their partners. Receiving only partial support and the fact that partners did not seek information about the disease added to the burden of the women.

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**164**

**IMPACT OF THE ETHIOPIA BREAST CANCER PROJECT ON ACCESS TO CANCER CARE MEDICATION**

**ABSTRACT REFERENCE NUMBER:** 164

**AUTHOR/S:** Solomon Bogale (1), Yared Tilahun (2), Teshome Deressa (3), Vanessa Hechter (3), Anne Reeler (4), Timothy De Ver Dye (4, 5)
OBJECTIVE: A participatory evaluation was conducted of the Ethiopia Breast Cancer Project (EBCP) including assessment of EBCP’s impact on accessing adjuvant therapy (AT) and chemotherapy for breast cancer patients (BCP).

METHODS: Sixty-nine BCP at Tikur Anbessa Hospital (TAH) were interviewed regarding barriers, facilitators, and medication access. The project was IRB-approved.

RESULTS: Lack of access to financial resources was the most commonly-cited barrier (59.4%), followed by lack of cancer knowledge (34.8%), and unavailable medication (30.4%). The most commonly-cited impact of EBCP, which provides free AT, was access to the free medication (72.5%), followed by social networking (44.9 percent), and financial savings (20.3%). Qualitatively, BCP frequently mentioned they would not obtain AT without the free program, evidenced by continued difficulties accessing chemotherapy (not provided by EBCP) because of cost/inaccessibility, incomplete sales from other patients or deceased patients’ families, and significant time-lag saving money for chemotherapy. Once patients reach AT, however, compliance with medication is good and patients overcome other structural barriers to ensure continuous AT access.

CONCLUSIONS: BCP in Ethiopia face considerable socio-medical challenges, notably financial challenges obtaining medications required for treatment and recurrence prevention. The drug access component of EBCP successfully overcomes this barrier providing AT and demonstrates drugs can be locally-managed efficiently. Patients face considerable, sometimes insurmountable, challenges obtaining other medications required for their cancer care. Lack of effective access to chemotherapy shows that without a drug access program facilitating supply and affordability, BCP often cannot overcome the financial-availability barriers to obtain required medication for cancer treatment.

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BREAST CANCER IN EGYPT: PAST, PRESENT AND FUTURE BASED UPON POPULATION CANCER REGISTRY DATA

ABSTRACT REFERENCE NUMBER: 165

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INTRODUCTION: Breast cancer is one of the first reported cancers in history that was recorded in Egyptian medical papyri and is still the commonest cancer worldwide. In Egypt like many countries in Africa there were no cancer incidence data. A population based cancer registry (GPCR) was established in Egypt in 1997. It was then possible to use registry results for better understanding of the magnitude of breast cancer in Egypt and for future projections.
METHODS: The paper outlines the historical evolution of breast cancer over 6 centuries. Understanding the status quo of the disease was based upon results of the population based cancer registry and upon published descriptive and analytical studies. Current age specific incidence rates and future population projections were used for future projections.

RESULTS AND DISCUSSION: Breast cancer represented more than 1/3 of female cancers with an age standardized rate of 49.6/100,000. Age at diagnosis of more than half of the cases was <50 years; possibly a reflection of young age structure of Egyptian population or a true high incidence of pre-menopausal cancer. Age specific incidence rates in women <40 years are among the highest worldwide. Approximately 2/3 of incident cases were spread regionally or by distant metastasis. Although population is estimated to increase 145% and 182% in 2020 and 2050 relative to 2000; the number of incident breast cancer cases will increase 200% and 314% in the same time period. The number of prevalent breast cancer cases is estimated to increase from 42,000 cases in 2000, to 84,000 in 2020 and 132,000 in 2050 representing a serious burden on health care delivery system. Effect of early detection and change in risk factors are discussed.

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ASPECTS EPIDEMIOLOGIQUES ET HISTOPATHOLOGIQUES DES CANCERS DE L’ENFANT AU MALI

ABSTRACT REFERENCE NUMBER: 166

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Les cancers de l’enfant sont des maladies rares, qui ne représentent que 1% de l’ensemble des cancers humains. Il s’agissait dans notre série d’une étude descriptive transversale rétrospective de janvier 1999 à décembre 2005. Cette étude a permis d’obtenir 168 cas de cancers chez l’enfant ayant une confirmation histologique et ou cytologique sur un ensemble de 3 884 cas de cancers enregistrés à l’INRSP durant la même période soit 4,3%. Le sexe masculin a prédominé avec 64,3% soit un sex-ratio de 1,6. La moyenne d’âge était de 8,2 ± 4,5 ans. Les tumeurs sont ubiquitaires avec toutes une prédilection pour le nodule lymphatique 33,3%; le rein 15,5%; les vaisseaux 13,1%; abdomen (SAI) 11,3%. La confirmation histologique était de 100%. Les tumeurs les plus fréquentes étaient les lymphomes avec 51,2% dont 47,8% de lymphome de burkit, les néphroblastomes 15,5%, les leucémies 7,7% et les carcinomes 7,1%, les rhabdomyosarcomes 4,2%, les retinoblastomes 3%. D’autres études sont nécessaires pour approfondir le faible taux des tumeurs neurologiques et les différences d’âges entre les leucémies.

MOTS CLÉS: Cancer, Enfant, Mali
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RECTAL CANCER A STUDY OF 40 CASES PRESENTING TO THE NATIONAL RADIOTHERAPY CENTRE
ACCRA, GHANA

ABSTRACT REFERENCE NUMBER: 167

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PURPOSE: To evaluate presentation and management of rectal cancer in Ghana.

MATERIALS AND METHODS: Forty patients with rectal cancer presenting to the Radiotherapy Centre from 2001 – 2003 were analyzed. The age range, median, sex, stage, histology, treatment and time to presentation were studied.

RESULTS: Age range was 20 - 73 years with two modal peaks at 41 – 50 yrs and 61 – 70 yrs. Patients presented between 3 - 24 month of initial symptom. The male to female ratio was 1.2: 1.0. Staging was by clinical exam and CT scan. 3% had stage T1, 41% stage II, 20% Stage III, 22% stage IV, 3% had recurrence and 5% had unknown stage. 10% had RT only, 60% chemoradiation, 20% had chemotherapy only and 10% no treatment at all. 20% in all received palliative treatment. Median cycles of chemotherapy was 3. Median follow up time was 13 months. Most common pathology was adenocarcinoma in 37 patients (92%), 5 had squamous cell Ca, 2 cases had unknown histology. Dose of palliative radiotherapy was 30Gy/10fx, and 54Gy/27fx for curative intent with chemotherapy. 9 had Capectabine continuously and 20 patients had 5Flourouracil/Leucovorin as bolus infusion day 1-5 in combination with radiation.

CONCLUSION: Ca rectum is rising in developing countries with an equal male to female ratio. Adenoma carcinoma is most common histological type. Limiting factors in this study are loss to follow up and staging limitations. There is a need for increased national screening and awareness of this curable disease.

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BREAST CANCER SURVIVAL IN SUDANESE WOMEN

ABSTRACT REFERENCE NUMBER: 168

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Breast cancer is very common in Sudanese women and constitutes about 29 – 34.5% of all women cancers. About 85% of these women present with locally advanced or metastatic disease, however, after diagnosis patients fail to follow up with treatment. In the few patients that were treated at the Radiation and Isotope Center and that survived for > 5 years, data were collected from 180 breast cancer patients during the period of 1993-2003. At diagnosis, women age ranged from 20-80 years with mean and median age of 50 and 49 years, respectively. Women were presented with tumor stage as following, T1N0 MO and T1N1b MO (39.4%); T2NOMO and T2 N1b MO (27.3%); T3 NO MO and T3 N1b MO (12.7%); T4b NO MO, T4b N1b MO, T4b N2 MO, and T4C NO MO (15%); Stage 4 (5.6%). Women were treated with surgery either simple or radical mastectomy followed by adjuvant therapy that included CAF, CEF, some Patients had CAF and Taxotere, while elderly patients had CMF. Postoperative Radiotherapy was given to all patients with early breast cancer who had BCS or Simple Mastectomies.

Estrogen receptors (ER) and Progesterone receptor (PR) expression status were known for 72 patients. Thirty women (40%) has tumor that are ER-positive and PR-positive, 24 (34%) women had a tumor that are ER-positive and PR-negative; and 18 women (26%) their tumor expressed no receptors and negative for both ER and PR. Her-2 receptor expression was only known for 11 patients (immunostaining was performed outside Sudan) and only three patients had tumors that are HER-2 positive. Hormonal treatment was mainly by Tamoxifen offered for premenopausal and most postmenopausal women while other postmenopausal women were treated with Letrozole or Anastrozole.

Patient survival data examined in December, 2008 was as follows 12.3% were survived for 5 years, 17.2% for 6 years; 28% for 7 years; 17.3% for 8 years, 8.3% for 9 years; 7.7% for 10 years; and 8.3% survived more than 10 years.

Although we have analyzed only women who are surviving breast cancer up to date, a limitation that we are aware of, because of patient incompliance to follow-up with treatment due to poverty, illiteracy and other factors like local healers treatments etc., we still can conclude from this study that women that were diagnosed with early stage breast cancer and treated at the Radiation and Isotope center showed good outcome even some women with locally advanced disease or metastatic disease survived for more than 5 years.

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EVALUATION OF SCREENING FOR CERVICAL CANCER NEOPLASIA USING VISUAL INSPECTION TECHNIQUES IN TANZANIA

ABSTRACT REFERENCE NUMBER: 169

AUTHOR/S: Twalib Ngoma (1), Richard Muwonge (2), Jean-Marie Fayette (2), Rengaswamy Sankaranarayanan (2)

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OBJECTIVE: Evaluate the performance of cervical screening for cervical cancer using visual inspection with acetic acid (VIA) or Lugol’s iodine (VILI) in Tanzania and discuss factors that affected test performance

METHODS: The accuracy of the two screening tests for detection of cervical intraepithelial neoplasia (CIN) 2 and/or 3 was assessed in a cross-sectional study. Colposcopy was carried out on all women screened, and biopsies directed among colposcopically abnormal women.

RESULTS: The analysis included 10,378 women aged 25-59 years screened with VIA and/or VILI. The positivity rates for VIA and VILI were 3.9% and 4.8%, respectively. The test positivity rates for both tests were at least 8% in the two quarters of the year when the training and retraining took place and gradually declined in some cases to below 2% in the quarters that followed. CIN 1 was diagnosed in 41 women, CIN 2 in 23, CIN 3 in 10 and invasive cancer in 200 women. The sensitivity and specificity estimates of VIA for the detection of CIN 2-3 lesions was 60.6% (95%CI=42.1-77.1%) and 98.2% (95%CI=97.9-98.4%), respectively. These estimates for VILI were 93.9% (95%CI=79.8-99.3%) and 97.3% (95%CI=97.0-97.6%).

CONCLUSION: VILI had a significantly higher sensitivity than VIA but a lower specificity. Both tests showed good performance standards. However, maintaining high quality standards of these tests fraught with challenges.

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EVALUATION OF CERVICAL VISUAL INSPECTION SCREENING IN ANGOLA

ABSTRACT REFERENCE NUMBER: 170

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OBJECTIVE: Evaluate the performance of cervical screening for cervical cancer using visual inspection with acetic acid (VIA) or Lugol’s iodine (VILI) in Angola and discuss factors that affected test performance

METHODS: The accuracy of the two screening tests for detection of cervical intraepithelial neoplasia (CIN) 2 and/or 3 was assessed in a cross-sectional study. Colposcopy was carried out on all women screened, and biopsies directed among colposcopically abnormal women.

RESULTS: The analysis included 9,093 women screened with VIA and/or VILI. The positivity rates for VIA and VILI were 6.7% and 31.7%, respectively. While the rate was relative stable for VIA throughout the study period, that of VILI increased with study period and was significantly higher than that of VIA throughout. CIN 1 was diagnosed in 160, CIN 2 in 64, CIN 3 in 11 and invasive cancer in 57 women. The sensitivity and specificity of VIA for the detection of CIN 2-3 lesions was 70.7% (95%CI=59.0-80.6%) and 94.4% (95%CI=93.9-94.9%), respectively. These estimates for VILI were 88.0% (95%CI=78.4-94.4%) and 69.2% (95%CI=68.2-70.1%).
CONCLUSION: Both visual screening tests are useful and accurate tests for women, especially in developing settings. Standardization of assessment of the visual inspection techniques, continual training and supervision, and quality control measures are of utmost importance for successful visual screening programmes.

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EVALUATION OF STANDARD OF COLPOSCOPY PERFORMED IN FIVE SUB-SAHARAN AFRICAN COUNTRIES

ABSTRACT REFERENCE NUMBER: 171

AUTHOR/S: Richard Muwonge (1), Charles Gombe Mbalawa (2), Namory Keïta (3), Amadou Dolo (4), Hassan Nouhou (5), Marius Nacoulma (6), Rengaswamy Sankaranarayanan (7)


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OBJECTIVE: The performance of colposcopy provided in a screening study in five African countries was evaluated.

METHODS: Newly trained local doctors investigated with colposcopy 29,033 women aged 25-59 years participating in a cervical screening study in the five French-speaking countries (Burkina Faso, Congo Brazzaville, Guinea Conakry, Mali and Niger), and directed biopsies as indicated. Using meta-analytical tools, four measures of colposcopy performance (Proportions of women receiving biopsies, adequate biopsies and women who were diagnosed with histological cervical intraepithelial neoplasia (CIN)) at different thresholds of colposcopic abnormalities were assessed. Comparisons are made with the standards set by the National Health Service Cervical Screening Programme (NHSCSP) in UK. Sources of heterogeneity were also assessed.

RESULTS: Among 28,553 women with satisfactory colposcopy, 3,101 had a colposcopic diagnosis of probable low-grade or worse lesions and 1,128 probable high-grade or worse. Overall, the measures that reached the set standards were proportion of biopsy taken at colposcopy threshold of probable high-grade or worse lesions (95%, 95% CI=90-100%) and proportion of adequate biopsy samples. The set standards were not met for the proportions of women diagnosed with CIN at different colposcopic abnormality thresholds. Detection of CIN 2 or worse lesions increased with increasing colposcopy severity.

CONCLUSIONS: The performance of colposcopy in some of the African sites studied was comparable to that previously observed in other studies. With appropriate training, monitoring, continuing practice and quality assurance, adequate standards of colposcopy can be attained in sub-Saharan Africa.
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KNOWLEDGE, BELIEF, ATTITUDE AND CANCER RISK BEHAVIOUR OF RELATIVES OF PATIENTS LIVING WITH CANCER IN IBADAN, NIGERIA

ABSTRACT REFERENCE NUMBER: 172

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OBJECTIVE: Cancer burden is becoming a big national problem in many countries in Africa who are without resources to cope. Since cancer patients need the cooperation of members of their families and friends to be able to cope with various forms of regimen and the need to reduce the prevalence of cancer, this study found out knowledge, belief, attitude and cancer risk behaviour of relatives of patients living with cancer in Ibadan.

METHODS: Cross-sectional survey research design was adopted for the study. Data were collected from 182 study participants whose relatives were cancer patients at University College Hospital Ibadan, Nigeria through the use of self developed questionnaire (30.2% were parents, 25.3% were extended family members, 16.5% were children, 15.4% were friends and 12.6% were spouses). Data analysis was done through the use of frequency counts, percentage, x2 and t-test.

RESULTS: Study participants had significant knowledge, belief, attitude and cancer risk behaviour. Also, there were no significant gender differences in knowledge, belief, attitude and cancer risk behaviour of the participants. Though majority of study participants had knowledge about cancer, the proportion of those who engaged cancer risk behaviour calls for concern.

CONCLUSIONS: Though majority of study participants had knowledge of cancer, the proportion of those who engaged in cancer risk behaviour calls for concern. There is an urgent need for appropriate health education and behavioural change intervention programmes for those providing support network for cancer patients in the study area.

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3D CONFORMAL HIGH DOSE RATE BRACHYTHERAPY IN CANCER OF THE CERVIX

ABSTRACT REFERENCE NUMBER: 173

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INTRODUCTION/OBJECTIVE: Cancer of the cervix is the most common malignancy in South Africa. Definitive chemo-radiation is the cornerstone of its management; with Level 1 evidence (NCCN criteria) showing that a Brachytherapy boost in advanced disease in essence doubles the survival of patients of all stages of the disease (including HIV+ve patients). The advent of High Dose Rate (HDR) Brachytherapy has facilitated both an out-patient service, and enabled higher volumes of patients to be treated; invaluable in our local context. At the Department of Radiation Oncology at Pretoria Academic/Steve Biko Hospital we are fortunate to have a New Brachytherapy suite with Planning Software and Applicators that enable 3D Conformal Planning of Brachytherapy; in essence analogous to Teletherapy. It must be pointed out though, that while this method of HDR Gynaecological Brachytherapy represents the most modern and accurate technique, it is extremely resource intensive and is not at present feasible for all patients in the department.

METHOD AND DESIGN: Patients selected are usually Stage IIB (ideally with only proximal extension). These patients are surgically inoperable and the tumour volume of a size that can be adequately treated using Intra-cavitary Brachytherapy only. The source used is a Varian Iridium-192 HDR unit. The applicator currently used is the modern Ring and Tandem. This is a ‘Stockholm’ based technique and consists of a CT/MRI compatible rigid Uterine Tandem and Ring Applicator; with a Rectal Paddle attached via a removable hinge joint. The entire system is fixed with a screw. The patient is treated with 45Gy in 25 Fractions of External Beam Radiotherapy (EBRT)[4 field box shaped with multi-leaf Collimators]; with concurrent Cisplatin Chemotherapy. This enables sufficient tumour shrinkage and the GTV is the post EBRT volume. An individual body cast is made for the patient. The applicators are then inserted under conscious sedation, together with a contrast filled bladder and rectal catheter, as per ICRU 38 guidelines. A custom made Immobilization device is attached to both the applicator and the Body Cast. This ensures Immobilization of both the applicator and the patient during movement to the Treatment Room as well as inter-fraction reproducibility. The CT scan is done and both Coronal and Sagittal views are exported to the Planning system. The Brachytherapy prescription is 7Gy x 4 fractions to give a combined Isoeffective dose of 85Gy. A GTV and PTV are drawn in, as well as OAR volumes (bladder and Rectum). The treated volume is individualized with usually the 85Gy Isodose (100%) encompassing the PTV; bearing in mind the dose and volume parameters of the Organs at Risk (OAR) when optimizing the dose. Should the prescribed dose be unable to cover the lateral aspects of the PTV the patient is evaluated for either interstitial brachytherapy or an EBRT boost. The Dose Volume Histogram (DVH) of the PTV and the OAR are analysed before the plan is passed. In addition, dose Reporting is done as per ICRU 38 recommendations. A pre-treatment AP and Lateral verification film is done to ensure reproducibility; and should there be substantial differences to the previous fraction a repeat CT scan is done.

RESULTS AND CONCLUSION: 3D Conformal Brachytherapy represents the future of brachytherapy planning and while we have not done enough of these procedures to do a retrospective analysis, clinical experience does indicate a much more accurate and INDIVIDUALIZED form of brachytherapy, with a much lower incidence of Rectal and Bladder side-effects; in keeping with findings at other centres. Our department is working in using MRI/CT fusion scans for Brachytherapy Planning and we are due to use other Gynaecological applicators in the near future. The advent of new technology has enabled Gynaecological Brachytherapy to be highly individualized and optimized; though it does remain a resource intensive exercise. It is the author’s opinion that in the South African context it is reserved for highly selected patients and/or academic indications; at least in the near future.
TREATMENT WITH CONFORMAL RADIATION LEADS TO A HIGH PERCENTAGE OF PATIENTS COMPLETING RADICAL RADIOTHERAPY FOR CERVIX CARCINOMA IN A LOW-INCOME POPULATION

ABSTRACT REFERENCE NUMBER: 174

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OBJECTIVES: The primary end-point is to assess the percentage of patients completing primary radical external beam radiation (EBRT) and intracavitary brachytherapy for Stage Ibi – IIIb cervix carcinoma in a state institution which has recently acquired a Multi-Leaf Collimator LINAC. The cervix and pelvic nodes are now conformally CT-planned, 50Gy in 25 fractions EBRT is prescribed to the isocentre with 18MV, followed by 20Gy in 4 fractions HDR brachytherapy (45Gy EBRT is the minimum dose accepted). Secondary end-points include overall treatment time and completion of 4-6 cycles of weekly platinum-based chemosensitisation.

METHODS: A retrospective analysis was performed of a patient sample of 180 patients treated from June 2007 to December 2008. Of the 146 evaluable patients demographics, histology, and treatment regimen was documented.

RESULTS: Of the intention-to-treat population (n=146), 80.1% (n=117) received ≥ 45Gy EBRT, and standard brachytherapy. An additional 11.6% (n=17) were unsuitable for brachytherapy and received an EBRT boost. 8.2% (n=12) did not complete either their EBRT or brachytherapy/EBRT boost. Overall treatment time was 42.4 days (37 – 58) Of the 134 patients who completed EBRT, 55.2% (n=74) completed 4-6 cycles of chemotherapy. Of the intention-to treat population, 84.2% (n=123) received at least one cycle.

CONCLUSIONS: Remarkably, over 90% of locally advanced cervix carcinoma patients in this study completed ≥45Gy EBRT and either a brachytherapy or EBRT boost as planned. Only 55% of patients successfully completed chemoradiation and the reasons for this need to be investigated. Survival data will be evaluated in the years to come.

NEOADJUVANT CHEMOTHERAPY FOR LOCALLY ADVANCED UNRESECTABLE GASTRIC CANCER

ABSTRACT REFERENCE NUMBER: 176

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AFFILIATION/S: (1) Oncology department, CHU Mohamed VI, (2) Gastro enterology department, CHU Mohamed VI, (3) Surgery department, CHU Mohamed VI
OBJECTIVE: Surgery remains the most important and curative treatment of gastric cancer. Most of them are locally advanced at diagnosis and neoadjuvant chemotherapy (NACT), thanks to “downstaging” should improve the resectability.

PATIENTS AND METHODS: Prospective study from January 2007 to October 2008. 20 locally advanced gastric cancer were enrolled staged T3-T4;N+;M0 by imaging (thoracoabdominal scan) and fibroscopy initially unresectable. Patients had 3 courses of chemotherapy. In a multidisciplinary staff resectability was judged after imaging of control. The toxicity of the treatment was also evaluated.

RESULTS: We used active drugs on metastatic gastric cancer (FAP, ECX, FU-Platine, DCF). After 3 courses a thoraco abdominal scan was performed 3 to 4 weeks after last day of chemotherapy. The evaluation was as following:
 -- 2 improvement with possible resectability R0 but refused by one patient. No adjuvant treatment was added and the patient is still free of relapse.
 -- 12 stabilized lesions which resectability was impossible due to the locoregional spreading.
 -- In 6 cases, NACT failed. 3 patients had a metastatic disease to the liver and the peritoneum during treatment and 3 stopped because of nutritional status aggravation.
Chemotherapy was relatively well supported and toxicity was essentially haematological.

CONCLUSION: NACT seems to stabilize unresectable locally advanced gastric cancer without managing to improve the resectability. However a good staging and patients selection is needed to confirm the hypothesis. Thus, larger studies should be instaured

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REPARTITION OF CANCERS IN MARRAKECH 1996-2005

ABSTRACT REFERENCE NUMBER: 177

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OBJECTIVE: The cancer epidemiology has become a very interesting science, studied by different institutes for better understanding this disease.

MATERIALS AND METHODS: Retrospective study of pathological registers of Marrakech

RESULTS: 11002 cases of cancers were admitted between January 1996 and December 2005, the digestive cancer ranged at the first place (26,7%), followed respectively by the gyneco-mammary cancer (23,3 %), urological cancers (12,6 %), head and neck cancers (11,5%), skin cancers (11,4%), lung and pleura cancers (5,3%), and haematological cancers (3,7%), while other localizations were rare. For the female, breast cancer ranged first with 20,5% of all cancers, followed respectively by cervix cancer (19,3%), skin cancer (8%), stomach cancer (6,4%), than the cancer of the thyroid (4,1%). For the male, stomach cancer took the first range (14,7%), followed respectively by skin cancer (14,4%), prostate cancer (12,4%), bladder cancer (7,9%), than the lung cancer (6,1%).
The evolution of these localizations showed that breast cancer for women and stomach cancer for man were permanently increasing, while the cervix cancer and the lung cancer were relatively stable among the last five years of our study.

**CONCLUSION:** These repartitions remind some reality, but knowing that our study contains also some statistics slants.

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**EVALUATION FONCTION ERECTILE ET INCONTINENCE DES PATIENTS APRES PROSTATECTOMIE RADICALE**

**ABSTRACT REFERENCE NUMBER:** 178

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**BUTS:** La prostatectomie radicale constitue le traitement de choix des cancers de prostate localisés. Cependant, elle s’accompagne d’une morbidité fonctionnelle sexuelle et urinaire post-opératoire qui grève considérablement la qualité de vie, et le confort des patients. Le but de cette étude était d’une part d’évaluer la fonction érectile et la satisfaction des patients après les rapports sexuels, d’autre part de mesurer le handicap urinaire associé à la prostatectomie radicale.

**MATERIELS ET METHODES:** Nous avons réalisé une étude rétrospective de 20 patients suivis à l’Hôpital Général de Grand Yoff après prostatectomie radicale. La revue de tous les dossiers des patients nous a permis de déterminer les aspects cliniques et para cliniques préopératoires. En post opératoire, la fonction érectile et urinaire ont été évaluées sur la base de questionnaires validés avec pour la fonction érectile le score IIEF-5 et pour la fonction urinaire le score MHU. Une étude descriptive des différents paramètres a été effectuée suivi d’une analyse univariée des principales variables.

**RESULTATS:** L’âge moyen des patients était de 62 ans +/- 2,2. une dysfonction érectile intermittente ainsi qu’une incontinence urinaire intermittente étaient retrouvés en préopératoire dans 35% et 25% des cas respectivement. Le taux de PSA moyen était de 31,1 +/- 11,1 ng/ml pour un score de Gleason moyen de 5. En post opératoire le score SHIM IIEF 5 moyen, inversement proportionnel à l’âge des patients était de 12,1 +/- 3,3. La sévérité de la dysfonction érectile était liée à l’existence d’une dysfonction préopératoire. Le score MHU moyen était de 6,6 +/- 2,9 dans 10% des cas l’handicap était sévère nécessitant le port de protection en permanence. Parmi les patients qui avaient gardé une activité professionnelle 40% avait une incontinence urinaire dont une sévère. Deux de nos patients présentaient une notion de climacturie et 3 autres avaient une sténose anastomotique.

**CONCLUSION:** la prise en charge thérapeutique des patients ayant un cancer de prostate ne doit pas se limiter à l’ablation de la tumeur. La prise en charge de la morbidité sexuelle et urinaire de façon encadrée doit être améliorée afin de réduire les répercussions psychosociales du cancer et de ses traitements.
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DEVELOPPEMENT DES SOINS PALLIATIFS AU SENEGAL

ABSTRACT REFERENCE NUMBER: 179

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La charge du cancer et des autres pathologies chroniques croit dans toutes les régions du monde, y compris les pays pauvres. Au Sénégal, avec la réforme hospitalière, de gros efforts ont été entrepris depuis quelques années pour les soins actifs par les pouvoirs publiques. Cependant dans notre société la mort est encore entourée de beaucoup de charge émotive. Ceci rend le travail d’approche de fin de vie très difficile pour le soignant car la tentation est grande de faire survivre le malade à tout prix, même si pour cela, on hypothèque sa qualité de survie ou de mort.

Le passage des soins actifs aux soins palliatifs n’est pas encore intégré par tous les acteurs de la santé: les soignants, le malade et sa famille, ainsi que les décideurs du système de santé. Nous ne pouvons que constater le vide qui existe encore pour les soins palliatifs et l’accompagnement des patients en fin de vie.

Après avoir fait l’état des lieux et déterminé les enjeux des soins palliatifs au Sénégal, nous essayons de tracer les voies et moyens de mettre en place une politique cohérente et rationnelle pour les soins palliatifs dans notre pays.

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PATTERN OF UROLOGICAL MALIGNANCY IN THE LAGOS UNIVERSITY TEACHING HOSPITAL BETWEEN 1992 AND 2006

ABSTRACT REFERENCE NUMBER: 180

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AIM: To determine the pattern of urological malignancy in the Lagos University Teaching Hospital between 1992 and 2006.
MATERIALS AND METHODS: The admission registers for the surgical wards were studied and relevant data about patients with Urological malignancy were extracted and analysed using Smith’s statistical package.

RESULTS: Altogether 1,844 patients were admitted with Urological conditions during the period. Of these 416 (22.5%) had Urological malignancy. Among the patients with urological malignancy, 305 (73.3%) had cancer of the prostate, 47 (11.3%) had bladder cancer, 43 (10.3%) had renal cell carcinoma, 12 (2.9%) had testicular cancer and 9 (2.2%) rare urological malignancy. 71 patients with Prostate cancer were admitted between 1992 and 1996, 93 patients between 1997 and 2001 and 141 patients between 2002 and 2006. The age range and mean age of patients with prostate cancer were 36-98 years and 68 years, Bladder cancer 13-85 years and 54 years, renal cell carcinoma 19-75 years and 44 years, and testicular cancer 19-65 years and 42 years respectively. 41% of the patients with prostate cancer were 65 years or less. 40.43% of the patients with bladder cancer were 50 years or less. 62.44% of the patients with renal cell carcinoma were 50 years or less. 50% of the patients with testicular cancer were between the ages of 40 and 50 years.

CONCLUSION: Patients with bladder cancer and renal cell carcinoma from our center are younger than those from developed countries. Also patients with testicular cancer are older than those from developed countries. The frequency of prostate cancer appears to be increasing.

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BLADDER CANCER IN LAGOS: A 15 YEAR HISTOPATHOLOGIC REVIEW

ABSTRACT REFERENCE NUMBER: 181

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OBJECTIVE: to present a 15year retrospective pathologic study of bladder cancers. The aim is to document histological pattern, incidence, sex and age distribution of urinary bladder cancers.

METHOD: the materials consisted of slides, paraffin embedded tissue blocks and histology request forms of all urinary bladder samples received at the Morbid Anatomy department of Lagos University Teaching Hospital Idi-Araba, Lagos between 1991 and 2005

RESULTS: Bladder malignancies comprised 39 (72.2 %) cases of all bladder biopsies and 0.86% of all diagnosed cancers in LUTH. The malignant lesions of the bladder generally showed a male preponderance with a M:F ratio of 4.6:1. The age range was 7-75 years with a mean age of 51.37 years and peak at 61-70 years age group. Transitional cell carcinoma was the commonest histological type accounting for 61.5% with a male to female ratio of 5:1 and mean age of 59 years. Squamous cell carcinoma accounted for 20.5% with a M:F ratio of 3:1 and a mean age of 47 years. Adenocarcinoma, anaplastic carcinoma and embryonal rhabdomyosarcoma accounted for 2(5.1%), 2(5.1%) and 3(7.8%) of cases respectively.

CONCLUSION: bladder cancer is not common in Lagos. Our findings are comparable to previous reports from schistosoma non-endemic regions of Nigeria and the world
EVALUATING GENETIC FACTORS INFLUENCING COLORECTAL CANCER PROGRESSION IN INDIVIDUALS OF AFRICAN DESCENT

ABSTRACT REFERENCE NUMBER: 182

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African Americans (AAs) have the highest incidence and mortality rates of colorectal cancer (CRC) in the U.S. Research shows that AA patients display younger age at presentation, higher incidence of proximal-located tumors and a higher prevalence of microsatellite instability-high (MSI-H) tumors, potentially indicating that inherited factors may increase CRC risk in people of African descent. To determine if the distribution of genetic/biological factors differ between AA and Caucasian (CA) CRC patients, we evaluated the mismatch repair and MAPK pathways in a hospital-based cohort of AAs and CAs.

The study included 952 lesions from 428 patients diagnosed with CRC at the University of Chicago Medical Center between 1992 and 2002. Tissue sections were constructed into tissue microarrays and immunostained with antibodies against MLH1, MSH2, MSH6 and PMS2. The MSI molecular study was conducted blindly using microsatellite markers BAT25, BAT26, BAT40, D5S346 and TGFβRII to determine MSI status. The BRAF V600E mutation was assessed by direct sequencing. Statistical analysis was performed using Stata 10.0.

Adjusting for age, grade and stage, AAs had a 40% increase in the hazard of death compared to CAs. There was no significant difference in MMR protein expression pattern, MSI-H tumor frequency or BRAF V600E mutation frequency between AAs and CAs. The BRAF mutation did correlate with MSI-H tumors, older patients, poor grade, proximal tumor site and female patients. Future work will evaluate the mutation spectrum of BRAF and other genes involved in CRC progression and how mutations in these genes affect response to treatment.

PALLIATIVE CARE NEEDS OF EGYPTIAN CANCER PATIENTS AND NURSES PERCEPTION

ABSTRACT REFERENCE NUMBER: 184

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BACKGROUND: Palliative care is a proactive care seeks to maximize quality of life for patients and families, it is a concept of care not only for patients with incurable disease, and those who need symptom relief during complications from which they will recover. Perception and level of experience of health care professionals may affect the continuity of care.

OBJECTIVES: 1-assess physical and psychosocial problems of Egyptian cancer patients during their palliative care course. 2-assess knowledge, perception and attitude regarding palliative care. 3-evaluate concordance between nurses perception and patients needs.

METHODS: A convenient sample included one hundred nurses recruited from different cancer settings at the National Cancer Institute, Cairo University, Egypt including medical and surgical oncology, critical care, and palliative care units. All palliative care patients.

TOOLS: 1- questionnaire completed by nurses included knowledge regarding goal of palliative care, their role, patients needs, facilities and problems. 2-checklist for performed nursing activities. 3-structured interview to patients and caregivers regarding main problems and needs. Statistical analysis used to conclude results.

RESULTS: The preliminary results showed that nurses who worked in other cancer care settings showed lack of knowledge. Also, there was significant difference between the perception and attitude of nurses working in palliative care setting compared to those who are working in other specialties.

CONCLUSION: Palliative care is important specialty, educational programs should be conducted to nurses regarding principles of palliative care. Guidelines should be developed to match the needs of each local setting.

THE KNOWLEDGE AND ATTITUDES OF NURSES IN A TEACHING HOSPITAL IN LAGOS, NIGERIA REGARDING TOBACCO USE AND CESSATION

ABSTRACT REFERENCE NUMBER: 185

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OBJECTIVES: To assess the knowledge and attitudes of nurses in a teaching hospital with a view to developing appropriate anti tobacco training programs for use in tobacco cessation efforts.

METHODS: A cross sectional descriptive study design was employed. One hundred and three (103) nurses on duty from all departments were mobilized with the assistance of the chief nursing officer. Each nurse was asked to fill a pre-tested self administered semi structured questionnaire. Data was collated and analyzed using EPI info 2002.

RESULTS: Most of the nurses were female and married (95.8%, 72.5%). Only 2% were current smokers. Their general knowledge about tobacco was found to be good with 81.4% being aware that tobacco was the leading cause of preventable deaths and 88% knew that nicotine was responsible for the addictive nature of tobacco, however one in four respondents were unaware that passive smoking had been
implicated in cancer and up to 88% erroneously believed that nicotine was responsible for the harmful effects of tobacco. Only 46% were aware that Nicotine replacement therapies (NRT) were helpful in quitting and up to 40% actually thought NRT’s were just as dangerous as tobacco. Majority of them would be willing to spend at least five minutes of their time with patients on anti tobacco counselling.

CONCLUSION: Nurses are willing to assist in smoking cessation but may not have the adequate knowledge about it; training programs should be developed for nurses to equip them with adequate knowledge and skills for effective tobacco cessation programs.

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CARE OF PATIENTS WITH HIV-ASSOCIATED MALIGNANCIES IN THE AMPATH PROGRAMME IN WESTERN KENYA

ABSTRACT REFERENCE NUMBER: 186

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OBJECTIVES: To determine the frequency and pattern of HIV associated malignancies. To evaluate the care and outcome of these patients.

SETTING: Oncology service at 6 AMPATH sites in Western Kenya region (MTRH, Chulaimbo, Webuye, Amukura, Kitale, Busia).

DESIGN: A retrospective review of patient records covering the period between January 2004 and December 2007.

RESULTS:
-- By 31/12/2007 about 60,285 patients had been enrolled into the AMPATH programme.
-- About 500 patients diagnosed with HIV associated malignancies were attended to.
-- Diagnosis was mainly clinical as opposed to histology or cytology.
-- Most patients did not have any medical insurance cover (NHIF).
-- Most patients had low CD4 counts and CD4 percentages at diagnosis and improvement in the counts were noted alongside clinical improvement.
-- Most patients received ARVs as well as specific treatment modalities for cancer i.e. Chemotherapy, Surgery or Radiotherapy either singly or in combination.
-- Responses of the HIV associated malignancies to therapy were varied i.e. complete response, partial response, stable disease and no response or worsening.
-- Loss to follow up was low.

CONCLUSION:
-- Use of CART together with specific cancer treatment improves patient’s quality of life and outcome.
-- Issues to address affordability, availability and accessibility of health care services to patient have a positive impact in reducing cases of loss to follow up.
-- Strengthening of the NHIF will improve the health care delivery system.
PERCEPTIONS AND SCREENING FOR COLORECTAL CANCER AMONG ETHNIC SUBGROUPS OF UNITED STATES BLACKS

ABSTRACT REFERENCE NUMBER: 188

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OBJECTIVE: US blacks are often treated as one homogeneous group due to skin color or African ancestry, not appreciating that the varied cultural backgrounds of subgroups may impact cancer control. This pilot project assessed perceptions and colorectal cancer (CRC) screening behaviors among U.S.-born/African American (AA) and immigrants from English speaking Caribbean (EC) countries and Haiti who resided in medically underserved areas of central Florida.

METHODS: Men and women aged 50 years or older from the three sub-groups, without a personal history of cancer responded to an in-person qualitative in-depth interview and a quantitative survey of perceptions and use of CRC screening.

RESULTS: Data were analyzed using Grounded Theory and content analysis, and descriptive/correlational statistics. The enrolled sample (n=62) consisted of 22 AA, 20 EC and 20 Haitian respondents. Across all subgroups, common perceived barriers to screening included cancer fatalism, fear of finding cancer, test related discomfort or embarrassment, presence of symptoms as a cue to screening, distrust of the healthcare system, lack of physician recommendation, and cost/lack of health insurance. Distinctly unique findings also emerged including perceived ethnic prejudice, use of colon cleansing or other home remedies to reduce risk. Only 15% of Haitian respondents ever had a colonoscopy screening compared to 50% for EC and AA (p<.029) suggesting the need to examine subgroups.

CONCLUSIONS: We identified common barriers and unique findings that support culturally targeted community-based interventions to reduce the cancer burden in this diverse population. Findings and lessons learned also have implications for adult immigrant blacks from Africa and South America.

BASELINE SELENIUM LEVELS AND ENDEMIC BURKITT’S LYMPHOMA IN WESTERN KENYA

ABSTRACT REFERENCE NUMBER: 190

AUTHOR/S: Sumba PO (1), Ephantus Kabiru (2), Alloys S Orago (2), Paula Rosenbaum (3), Ann M Moormann (4), Rosemary Rochford (3)
Endemic Burkitt’s lymphoma (eBL) is a common pediatric cancer in Kenya. The etiology of this cancer is multi-factorial involving early-age infection with Epstein Barr virus (EBV) and frequent exposure to Plasmodium falciparum malaria. Other environmental risk factors being investigated are Thevetia peruviana a plant associated with electrolyte disturbances and selenium. Selenium is an integral component of the antioxidant enzyme glutathione peroxidase (GPx). Little is known about selenium deficiency within African populations though emerging data suggests that selenium deficiency potentiates viral mutations. We hypothesized that deficiencies in selenium could increase risks for eBL by decreasing host ability to control EBV infection. To test this hypothesis, 145 children aged 1 to 11 years were sampled in a cross sectional survey in two areas with higher and lower than expected incident rates of eBL and tested for selenium using Plasma GPx enzyme immunoassay. We found that children living in a low BL risk area had a mean selenium level of 3.74 ug/dl (n=78) while children living in a high BL risk area had a mean selenium level of 2.44 ug/dl (n=67). These values were compared using a t-test for equality of means and the differences were highly significant (p<0.0001). Our data demonstrates that there is evidence that children living in a high BL risk regions have significantly less selenium GPx than children living in a low BL risk region but more studies are needed to determine what impact selenium deficiency has on immune function.

**KEY WORDS:** endemic Burkitt’s lymphoma (eBL), selenium deficiency
franche dans 13 cas (59,1%). L’examen a retrouvé un météorisme abdominal dans 17 cas (77,3%), une tumeur rectale dans 4 cas (18,2%) et un syndrome d’irritation péritonéale dans un cas (4,5%). Le compte rendu anatomo-pathologique était en faveur d’un adénocarcinome chez 21 patients (95,5%). La classification de Dukes ou TNM a été précisée chez 14 patients (63,6%). Une tomodensitométrie abdomino-pelvienne a été réalisée chez 13 patients (59,1%). Elle avait mis en évidence la tumeur colique ou rectale dans 10 cas (45,4%). Un examen endoscopique a été pratiqué chez 7 patients (31,8%). Tous les patients ont été opérés. Quinze on bénéficié de dérivation externes ou internes (68,2%) et 7 de résection colique (31,8%). Les suites opératoires étaient gravées de complications pour 6 patients (27,3%). Six patients avaient reçu une chimiothérapie adjuvante (27,3%). La survie dans les dossiers où elle a été précisée était de 40%.

**CONCLUSION:** l’occlusion représente un élément pronostique péjoratif dans la prise en charge des CCR.

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**SMOKING AND PROSTATE CANCER AMONG SENEGALESE AND AMERICAN POPULATIONS**

**ABSTRACT REFERENCE NUMBER:** 193

**AUTHOR/S:** E Spangler (1), C Zeigler-Johnson (1), M Jalloh (2), SB Malkowicz (1), S Gueye (2), T Rebbeck (1)

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**INTRODUCTION:** Smoking as a risk for prostate cancer (PC) is controversial, although recent reports suggest an association. Although smoking has increased in Senegal, the association of smoking on PC has not been examined in Senegalese populations. This study examined the association of smoking with PC outcomes in Senegalese and American populations.

**MATERIALS AND METHODS:** We performed case control analyses using 172 Senegalese men, 1417 European American (EA) and 481 African Americans (AA). Logistic regression analyses were conducted adjusting for age and education. Participants were Senegalese men diagnosed with PC recruited from the Hopital General de Grand Yoff in Dakar (n=111 cases, 65 controls) and European ( n=1150 cases 267 controls) and African American men (n=183 cases, 298 controls) recruited from the Hospital of the University of Pennsylvania in Philadelphia, PA. Patients were divided into low (T1/T2) and high (T3/T4) stage.

**RESULTS:** Regression models demonstrated that former smoking was associated with low stage (OR=7.61, 95% CI=2.44-23.70) and high stage (OR=3.09, 95% CI=1.01-9.38) among Senegalese. An association was also found for low stage (OR=9.77, 95% CI=5.72-16.68) and high stage (OR=11.01, 95% CI=6.20-19.56) among EA. Current smoking status was significant for EA (low stage OR=2.90, 95% CI=1.41-5.96; high stage OR=2.50, 95% CI=1.08-5.75). An inverse association for AA was found for low stage among current smokers (OR=0.38, 95% CI=0.16-0.91) No other associations were observed.

**CONCLUSIONS:** Smoking is associated with prostate cancer. However, its effects may vary among different populations. Future studies may examine smoking as a risk factor in the context of ethnicity.
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QUINONE AS AN ANTI-TUMOR AGENTS

ABSTRACT REFERENCE NUMBER: 195

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INTRODUCTION AND OBJECTIVE: Quinones occur widely in plants, animals, and microorganism. They have been found to possess significant anti-tumor activities. Recent studies have shown that these compounds kill tumor cells through apoptosis, which has been recognized as a target for anti-tumor therapy. The objective of this study was to get a better understanding of the bioactivity of quinones by evaluating the relationship between biological activity and structure of quinones compounds.

METHODS: Several synthetic quinone derivatives that are structurally related were synthesized and evaluated for potential anti-tumor activity by evaluating the pro-apoptotic activity of these compounds. A panel of cell lines, which included several human cancer cell lines, was treated with these compounds. The induction of apoptosis was measured by the detection of phosphatidylserine exposure using the APOPercentage™ assay; DNA fragmentation using the Terminal deoxynucleotidyl transferase dUTP Nick End Labelling assay; and the detection of activated caspase-3.

RESULTS: All the compounds tested in this study induced apoptosis in cultured cells, however the bioactivity of the different compounds varied significantly, and this can be attributed to the different structures of the quinone compounds.

CONCLUSION: The ability of a compound to induce apoptosis in cancer cells can be used as a measure to evaluate the potential use of such compound to treat cancer, since this study demonstrates that quinone compound induced apoptosis in human cancer cells under in vitro conditions, it can be concluded that the quinone compounds show potential as an anti-cancer drugs.

KEY WORDS: Apoptosis, anti-tumor, Quinone

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PREDICTIVE VALUE OF OXIDATIVE STRESS BIOMARKERS IN PROSTATE CANCER AND BENIGN PROSTATIC TUMORS

ABSTRACT REFERENCE NUMBER: 197

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OBJECTIVE: This study aims to determine the predictive value of oxidative stress (OS) biomarkers in the earlier detection of Prostate Cancer (PC) and Benign Prostatic tumors: Benign Prostatic Hyperplasia (BPH), Chronic Prostatic (CP) and to use those biomarkers with predictive value for discriminating these patients.

METHODS: 61 patients were selected and subdivided into three subgroups according the abovementioned pathologies. Control group included 40 healthy individuals. Prostate specific antigen (PSA), Lipid peroxides (LPO) were measured using classical methods whereas 4-hydroxy-nonenal (4-HNE), 8-hydroxy-2’-deoxy-guanosine (8-OHdG), Superoxide dismutase (SOD), Glutathione peroxidase (GPx) and Total antioxidant status (TAS) were evaluated using ELISA method for the first two biomarkers and kits commercially available for the lasts three one.

RESULTS: PSA level were 7.9; 11.4; and 5.9 ng/ml for BPH, CP and PC respectively. BPH were characterized by an increase value of LPO (73.4 μM/L) whereas an elevated value of 4-HNE (1.23 μg/ml) was observed in CP and that of 8-OHdG was increased in PC (13.9 ng/ml). Pearson correlations performed between PSA values and OS biomarkers level have shown positive correlations for 8-OHdG in PC, for LPO and TAS in CP in contrast to negative correlations for 8-OHdG in CP and for LPO in PC.

CONCLUSIONS: This study has demonstrated that 8-OHdG and LPO can be considered as good OS biomarkers with a predictive value for PC and CP. In addition, the general depletion of SOD observed in all these pathologies together with that of GPx in PC correspond to the extent of the implication of OS.

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CARCINOMA OF THE CERVIX: A TRAGEDY OF OUR TIME

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OBJECTIVE: Carcinoma of the cervix is still the commonest gynecological malignancy among women in the developing nations. The purpose of this study is to review our experience with carcinoma of the cervix in Northern Nigeria.

METHOD: From 11th November 2005 to 10th November 2008, a total of 406 cases of gynecological cancers were seen and managed at the Department of Obstetrics and Gynecology of the Ahmadu Bello University Teaching Hospital, Zaria, Nigeria.

RESULTS: Carcinoma of the cervix accounted for 65.7 % (267) of histologically confirmed gynecological cancers. Most of the patients were married 265 (99.2 %) and 40% were in the second order of marriage. 57.1% of these women were in a polygamous setting. Two hundred and two (75.6 %) patients were in the age bracket 40-69 years with a mean age of 44.5 years. The disease is associated with high parity with a range of 0-14 and grandmultiparous patients constituting 145 (68.3%) of the cases. Abnormal vaginal bleeding 219 (82 %), offensive vaginal discharge was recorded in 120 (44.9%) and postcoital bleeding 56(20.9%) were the common symptoms. About seventy eight percent of the patients
had advanced disease and stage III disease was the commonest stage accounting for 159 (59.5 %). Fifty six of this patients presents with vesico vaginal fistula.

CONCLUSION: This study has shown a high incidence of carcinoma of cervix at the Northern part Nigeria and it is not unconnected with the socio-cultural practices. Emphasis on screening is the way out.

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KNOWLEDGE AND PRACTICE OF BREAST CANCER SCREENING AMONG MANSOURA NURSES

ABSTRACT REFERENCE NUMBER: 199

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AIM OF THE STUDY: A descriptive study was conducted among nurses working in Mansoura University hospitals during five months to determine their knowledge of and proficiency with breast self-examination (BSE) and early detection of breast cancer.

SUBJECTS AND METHODS: 133 female nurses working in different healthcare settings were recruited based on eligible criteria. Their ages ranged from 19-53 years; nursing experience ranged from 2-33 years. A self-administered questionnaire was developed by the researcher and validated to test nurses' knowledge of and proficiency with breast self-examination (BSE) and early detection of breast cancer. It consisted of 24 questions derived from the American Cancer Society's guidelines regarding risk factors associated with breast cancer and methods of early detection. Descriptive statistics were used to summarize data

RESULTS: Nurses had low levels of knowledge about breast cancer early detection (54.88 %). Although 56.39% of the nurses reported performing BSE, only 18.79% reported doing so on a monthly basis.

CONCLUSION: Nurses had limited levels of knowledge about breast cancer and methods of early detection; few nurses practiced BSE monthly.

RECOMMENDATIONS: Continuing education programs for nurses are urgently needed to improve their knowledge about breast cancer and BSE. This might be achieved by expanding nurses' knowledge and developing programs that aim to change and measure attitudes, beliefs and barriers among nurses and others health care providers towards about breast cancer early detection. Additional studies to examine the impact of other variables on the practice of early-detection methods should be conducted.

KEY WORDS: Knowledge, Breast Cancer, Breast Self-Examination (BSE), Early Detection.
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PATTERN AND ANALYSIS OF BREAST BIOPSIES IN LAGOS STATE UNIVERSITY TEACHING HOSPITAL, LAGOS, NIGERIA

ABSTRACT REFERENCE NUMBER: 200

AUTHOR/S: Faduyile FA, Adeoye OA, Soyemi SS, Benebo AS, Obafunwa JO, Mordi VPN

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OBJECTIVES: Breast pathology is one of the most important tumours affecting the women folk in the world and in Nigeria. This study is to review the histology of all breast biopsies sent to our laboratory in LASUTH and to highlight the burden of breast tumour in our population.

METHODS: This is a retrospective study of all breast biopsy specimens seen in LASUTH over a two year period (January 2007 and December 2008). Clinical data such as the age, sex, site of lesion and clinical summary were retrieved from the clinical notes. All Haematoxylin and Eosin stained slides were retrieved, broken and lost slides were re-cut and they were all reviewed.

RESULT: A total of 731 breast biopsies representing 18.5% of all samples were received during the period under review. Seventy two percent are benign with fibroadenoma predominating representing 48.9% of the total breast tumours. Among the malignant components, invading ductal carcinoma represents 89.7% with 53.7% presenting in SBR Grade 2. Age group 20 - 29 year represents the highest presenting age group (29.9%). Among the 30 years and below age group, majority 97.3% of breast tumours are benign while among those above 50 years, about 70% of breast lesions are malignant.

CONCLUSIONS: Most breast tumour occurs in the first three decades of life but most breast tumours in the elderly are malignant. It is therefore important that strong awareness among the populace is instituted to improve the presentation of these lumps early.

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THE SCOURGE OF BREAST CANCER IN ≤40 YEARS AFRICAN PATIENTS IN NORTH WESTERN NIGERIA: A MULTICENTER/MULTIDISCIPLINARY STUDY (JANUARY 1, 1981 – JANUARY 1, 2009)

ABSTRACT REFERENCE NUMBER: 201

AUTHOR/S: Odigie VI (1), Yusufu LMD (1), Dawotola DA (2), Shehu SM (3), Abur P (1), Kene P (4), Yakubu AA (5), Sheshe AA (5)

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INTRODUCTION: The icon of breast cancer in the developing countries is advanced disease associated with relative literature paucity on collaborative multicenter/multidisciplinary study of the disease in the young. Worldwide the disease is on the marching increase but it is sandwich and latently eclipsed by poverty, infective diseases and infestations (Malaria) in Africa. In the subregion it ranks as the first or second most common cancer in women even of different ethnic/sociocultural populations.

MATERIALS AND METHOD: This communication is a collaborative study of 29 years experience consisting of a retrospective (1990 -1993) and prospective (1994 – 2009) study period of some clinicopathological observations of breast cancer in the young African ≤ 40 years old in Two teaching hospitals in North western Nigeria. Most patients had surgery and six courses of CMF or CAF (as the commonest/affordable/available cytotoxics) and hormonal manipulation by Tamoxifen or Bilateral oophorectomy. Disease progression and morbidity was observed and data was analysed using stat graphics version 2.3 and SPSS.

RESULTS: 334 pts had breast cancer in the study period. 211 pts (63.2% were ≤ 40yrs old). There was a Two fold increase of breast cancer prevalence in (2001 -2009) compared to (1981 -1990). Male:Female ratio was 1 :16.5. Peak age group was 4th decade 119 pts (56.4%). 11.3% were nulliparous. 56.9% tumors occurred on right breast; 7.1% had bilateral disease and was associated with large >20cm tumours p<0.05. Commonest subsite 41.7% was UOQ plus axillary tail of Spence; 20.3% the whole breast was involved. Ulceration rate was 58.8%; it was commonly from without p<0.001. Preop oedema arm was commonly associated with fungating ulcerated tumours than lymph node metastasis alone. 61.6% pts had advanced disease. Infiltrating ductal carcinoma was 59.7%, Cystosarcoma phylloides 7.1%; 2 out of every 5 cancer was poorly differentiated. 1 in 10 breast cancers was inoperable even after neoadjuvant cytotoxics. Wound, seroma and skin flap necrosis were the commonest postop complications. Survival function for advanced breast cancer using Wilcox Gehan was 36months p =0.0001 in the study.

CONCLUSION: The major trust of mammary cancer in our subregion is a greater affliction for young parous mothers 63.2% ≤ 40yrs old, with early locally advanced diseased, ulceration from leeches, salves and portions. Part of the clinician role in combating this should be routine Clinical Breast Exam of all patients more radio health talks in indigenous languages on the scourge of breast cancer.

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DOSE FRACTIONATION IN PALLIATIVE RADIOTHERAPY FOR BONE METASTASES IN BREAST CANCER PATIENTS IN NORTHERN NIGERIA

ABSTRACT REFERENCE NUMBER: 202

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OBJECTIVE: Bone metastasis one of the manifestation of advanced stage of disease in breast cancer, which is one on the two most common cancers in Nigeria. Bone pain is the most common presenting symptoms. Radiotherapy is one of the most effective modalities in bone bane pain palliation. Optimal dose fractionation, in terms of multiple fraction or single dose treatments, has not been studied in the African cancer patients. The study examined the pattern of dose fractionation and treatment outcome in breast cancer patients who received radiotherapy for bone pain.

METHODOLOGY: All histologically proven breast cancer patients with radiological evidence of bone metastases and presenting with bone pain between January 2004 and December 2008 were prospectively studied. The patients were not randomized and for purpose of analysis, they were divided into two groups, based on treatment intent. In Group A were patients treated with single fractions, while in Group B, those treated with multiple fractions. Demographical data, pattern of presentation, performance status, site of metastases, radiation dose and fractionation were recorded and treatment outcomes as well as pattern of analgesic requirements before and after treatments between the two groups over 3 months were analyzed and presented as tables and charts.

RESULTS: Thirty-eight patients with breast cancer were studied. The mean age was 42 years. The age range was 30 years to 69 years. Male to Female ratio 0.02:1 39.5% of the patients had multiple bone metastases. The mean pre-treatment Visual Analogue Scale pain score for all the patients was 8. 76.3% of the patients were in Group B. Pain control was better in Group B patients than in Group A, while significant reduction in rate of analgesic requirement was observed in both Groups. (p-value to be discussed)

CONCLUSION: The study showed that multiple dose fraction is more effective in bone pain palliation due to metastasis in patients with breast cancer.

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PATTERN OF MALIGNANT BREAST TUMOURS IN LAGOS STATE UNIVERSITY TEACHING HOSPITAL, IKEJA, LAGOS, NIGERIA

ABSTRACT REFERENCE NUMBER: 203

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OBJECTIVES: Cancer of the breast is one of the leading causes of cancer deaths among the female gender in Nigeria. This study is to characterize the pattern of malignant breast tumour and to determine the age distribution and histological grade at presentation of malignant breast tumours.

MATERIALS: This is a retrospective study of all malignant breast tumours seen in our laboratory for a period of two years - January 2007 and December 2008. All the slides were retrieved, broken and lost slides were re-cut, stained and were all reviewed. The grading of the breast tumour was done using the SBR grading system.
RESULTS: A total of 153 malignant breast tumours are seen representing 26.9% of all breast biopsy specimens received during the period under review. Invasive ductal carcinoma accounts for the majority (91%) of the breast malignancies seen. About 90% of these malignant tumours were SBR Grade 2 and 3. Age groups 30 - 39 years and 40 - 49 years are the most common age group at presentation accounting for about 25% each. Most (70%) breast tumours in the older age groups are malignant.

CONCLUSION: Invasive ductal carcinoma account for most of the breast malignancy and they tend to be of higher grades. Most patients present late in the hospital which make them to have poor prognosis. Breast cancers are seen more among the premenopausal women in Nigeria but most postmenopausal breast tumours are malignant.

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CHILDHOOD HEAD AND NECK MALIGNANCIES IN IBADAN, NIGERIA

ABSTRACT REFERENCE NUMBER: 204

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BACKGROUND: The causative factors of childhood cancers are largely unknown but a review of the incidence might suggest new direction to continue research. The goal of this study is to review available data on the incidence of childhood malignancies in the Head and Neck region, in Ibadan, Nigeria.

METHODS: Using data obtained from the Cancer registry of the Pathology department University College Hospital, Ibadan. The incidence of primary Head and Neck cancers diagnosed in children aged 18 years and younger between 1981 and 2008 were analyzed.

RESULTS: The lesions were grouped according to histologic characteristic. M:F ratio was 1.9:1. Male predominance was seen in all histologic categories except for ameloblastoma where females were more affected. The age group of 7-12 years had the highest frequency, constituting 47% of the total study population. Burkitt lymphoma was the commonest lesion seen overall (56.5%), and it occurred in all ages while Embryonal rhabdomyosarcoma (5.6%) was most frequent soft tissue tumour.

CONCLUSION: The trend in childhood head and neck malignancies appears to remain constant with Burkitt lymphoma still the commonest lesion in the region.

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PREVALENCE OF ABNORMAL CERVICAL SMEAR AMONG HIV-POSITIVE WOMEN IN ENUGU, SOUTH EASTERN NIGERIA

ABSTRACT REFERENCE NUMBER: 205

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BACKGROUND: HIV and cervical cancer are common in Nigeria. The standard modes of conservative management for abnormal Pap smear are satisfactory in HIV-positive women. Studies have demonstrated the relationship between positive HIV sero-status and cervical neoplasm but none originated from South Eastern Nigeria hence this study.

OBJECTIVES: To determine the effect of HIV sero-positivity on the prevalence of abnormal cervical smear in Enugu, Southeastern Nigeria

METHODS: Pap smear was administered on 150 consecutive HIV-positive women and a control group of 150 HIV-negative women attending the Voluntary Counselling and Testing (VCT) clinic of the University of Nigeria Teaching Hospital (UNTH) Enugu, Nigeria from December 2007 to March 2008. Data analysis was by descriptive and inferential statistics at 95% confidence level.

RESULTS: The mean age of the patients was 34.9 ± 7.5 years, and the modal age group was 31 – 40 years. The modal educational status for the study group was secondary education (45.3%), while that of the control group was tertiary education (50.0%).

The prevalence of cervical squamous intraepithelial lesion (SIL) in HIV- positive women was higher than HIV- negative women, 12.6% and 4.6% respectively (P = 0.014). Also, the prevalence of low-grade cytology (LGSIL and ASC) was higher in HIV- positive women than the control group, 9.3% and 3.3% respectively (P = 0.033). However, prevalence of HGSIL did not vary significantly between the two group, 3.3% and 1.3% respectively (P = 0.444).

CONCLUSION: There is significant association between HIV infection and SIL in Enugu Southeastern Nigeria.

PROFIL IMMUNOHISTOCHIMIQUE DES LYMPHOMES NON-HODGKINIENS EN RÉPUBLIQUE DÉMOCRATIQUE DU CONGO

INTRODUCTION: Les lymphomes constituent un groupe particulier de tumeurs malignes. L'historique de ces tumeurs remonte au 19e siècle. Elles ont été l'objet de plusieurs études à travers le monde depuis les travaux de Thomas HODGKIN en 1832, de plusieurs classifications dont celle de RYE pour la Maladie de Hodgkin (MH), celles RAPPAPORT, de KIEL pour les Lymphomes Non Hodgkiniens (LNHs) et la

OBJECTIF: Dresser le profil immunohistochimique des LNHs en RD Congo.

MATERIEL ET METHODES: Nous avons revu 58 cas de LNHs provenant de 4 Laboratoires d'Anatomie Pathologique de Kinshasa (1993-2002) en vue d'étudier le profil immunohistochimique des marqueurs classiques ainsi que celui des galexines 1 et 3. Nous avons recouru à la Classification REAL.

RESULTATS: L'immunotypage a montré que la plupart des LNHs en RDC se sont révélés immunohistochimiquement être des lymphomes B (96,5%); l'antigène CD20 a été identifié dans 62%, tandis que l'anticorps CD45RO (UCHL1) a été positif dans 13%. Quant aux galexines 1 et 3, elles ont été exprimées dans les LNHs et l'expression de la galexine 1 s'est avérée plus marquée que celle de la galexine 3.

CONCLUSIONS: Pour la 1ère fois en RDC, nous avons grâce à l'immunohistochimie, démontré que la très grande majorité des LNHs en RDC sont des lymphomes B (96,5%); pour les LNHs, l'antigène CD20 (L26) a été identifié dans 62% et l'anticorps UCHL1 a été + dans 13% ; les galexines 1 et 3 étaient exprimées dans les LNHs de notre série et l'expression de la galexine 1 s'est avérée plus marquée que celle de la galexine 3.

MOTS CLÉS: Lymphomes Non-Hodgkiniens, Profil Anatomoclinique et Immunohistochimique.

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LYMPHOEDEMA SECONDARY TO POSTMASTECTOMY RADIATION: INCIDENCE AND SOME OBSERVATIONS IN NORTH WESTERN NIGERIA

ABSTRACT REFERENCE NUMBER: 209

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INTRODUCTION: Although Postmastectomy radiotherapy (PMRT) reduces locoregional failure and prolongs disease-free survival and overall survival in breast cancer patients it carries a risk of lymphedema. The incidence of lymphedema secondary to PMRT, delivered by Cobalt -60 has not been widely reported in Africans despite the latter’s increasing availability by clinicians.

AIM: To highlight the incidence, subsite, severity, relationship/association of age, surgical wound infection, BMI, to postoperative lymphoedema after modified radical mastectomy (for Manchester Stage II and III) with clearance of level I and II positive axillary lymph nodes and postoperative
axillary/supraclavicular irradiation using cobalt-60 megavoltage (50Gy in 25 fractions in 5 weeks using three field technique).

**PATIENTS AND METHODS:** Between Jan 2001- Jan 2009, 102 consecutive patients were prospectively between followed-up and analysed. All patients completed a six month cyclical combined chemotherapy of cyclophosphamide, adriamycin, and 5-flourouracil (CAF). Thereafter they received fractionated standard irradiation to axilla and chest wall. Lymphoedema was assessed preop and postop (12 months after irradiation) by patients observer impression and by authors objective tape measurements 15cm above and below the lateral epicondyle on the ipsilateral and contralateral limbs. Subsite of lymphoedema, severity handedness, onset, and relationship of lymphoedema to age, surgical wound infection, Body mass index BMI, to radiotherapy is highlighted. Exclusion criteria all patients who had preop oedema of arm.

**RESULTS:** Age was 24-76 years, Mean follow up was 26.3±5.0 months. 54 pts (52.9%) had PMRT lymphoedema. Subjective-(Awareness)-assessment was low 10pts (9.8%) Objective assessment was 44pts (43.3%); Arm was the commonest subsite 72.2%. 1 out every 5 had whole limb affected. Mild lymphoedema occurred in almost one half of the affected patients (48.1%) 26pts; in 11 patients (20.4%) it was severe (symptomatic). Radiotherapy, BMI > 25, flap necrosis/seroma and Tumour (T) stage were related to and worsened lymphoedema in the study. The risk of developing lymphoedema was unrelated to handedness, age (p-values to be discussed).

**CONCLUSION:** Almost One half of African breast cancer patients will develop PMRT lymphoedema when axillary lymph node surgery and axillary radiation therapy are combined in African breast cancer patients using Colbalt-60 megavotage. In 1 out of every 5 patients it is severe and symptomatic, and whole limb may be involved. Post mastectomy Lymphoedema and its effects may become more prevalent with the increasing survival of breast cancer patients. Patients awareness, preventive strategies and therapeutic interventions in a low resource setting are needful now.

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**USEFULNESS OF THE EASTERN COOPERATIVE ONCOLOGY GROUP (ECOG) SCORE IN PATIENTS RECEIVING DAY CHEMOTHERAPY IN A RESOURCE STRAINED SETTING**

**ABSTRACT REFERENCE NUMBER:** 210

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The Eastern Cooperative Oncology Group (ECOG) score is widely used to determine eligibility for clinical trials and to monitor disease progress. The authors used this tool to determine the usefulness of ECOG performance scores in outpatient chemotherapy setting. There is very little data on the use of ECOG in resource poor countries

**OBJECTIVE:** To determine the usefulness and the factors influencing ECOG performance status tool in patients receiving day chemotherapy.

**MATERIALS & METHODS:** All patients receiving day chemotherapy have their performance status assessed on every visit using the Eastern Cooperative Oncology Group (ECOG) score scale. Data was
collected retrospectively from patients’ records for 30 randomly selected patients on different treatment protocols for various malignancies. All patients were surveyed in their third cycle of treatment. Data was coded and analyzed using SPSS

**FINDINGS:** Poor ECOG scores were noted in older patients. The treatment protocol did not seem to have any influence on the ECOG performance status though presence of co-morbidities had a negative effect on the ECOG scores.

**CONCLUSION:** The Eastern Cooperative Oncology Group (ECOG) score is a useful, simple, cost effective tool to monitor how patients performance and quality is affected by chemotherapy. It can be incorporated into existing patients’ assessment forms.

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**LA CHIMIOThÉRAPIE INTRAPÉRITONÉALE ADJUVANTE POUR CANCER COLIQUE LOCALEMENT AVANCÉ**

**ABSTRACT**

**REFERENCE NUMBER:** 212

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**INTRODUCTION:** Le cancer colique localement avancé (séreuse ou organe de voisinage envahi) pose le problème de la récidive péritonéale après chirurgie curative. Une des solutions à cette problématique est l’association d’une chimiothérapie intrapéritonéale.

**PATIENTS ET MÉTHODE:** Nous avons entrepris un travail prospectif associant à l’acte opératoire d’éradication de la tumeur, une chimiothérapie intrapéritonéale postopératoire immédiate (CIPPI) chez tous patient présentant une tumeur touchant la séreuse ou un organe de voisinage. Nous avons colligé 41 patients, d’un âge moyen de 55 ans (20-70ans). Il s’agit de 21 hommes et 20 femmes. 10 patients ont eu une colectomie élargie à un organe de voisinage pour réséquer la tumeur et tous ont eu une résection de type R0. Le protocole de chimiothérapie utilisé est l’association de la mitomycine (10 à 20mg au J0) suivie du 5FU (500 mg/m2 de J1 à J5). 38 patients (92%) ont bénéficié d’une chimiothérapie systémique après la chirurgie. La mortalité postopératoire est de 2,3% (1patiente) et la morbidité est de 14,5% (6patients). 6 patients (14,5%) ont récidivé à ce jour dont 1 seul sous forme de carcinose péritonéale (2,3%). Les autres sites de récidive sont ganglionnaire (2cas), hépatique (2cas), pulmonaire (1cas) colique (1cas). 34 (82,7%) patients sont en vie sans récidive avec une moyenne de 45 mois.

**CONCLUSION:** Cette courte série semble indiquer que l’adjonction d’une chimiothérapie intrapéritonéale réduit les risques d’une récidive péritonéale des cancers coliques localement avancés. Elle autorise la réalisation d’une étude de phase III afin de confirmer ces résultats.
THE ASSOCIATION BETWEEN CANCER AND LYMPHEDEMA, IN CAPE TOWN

ABSTRACT REFERENCE NUMBER: 216

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BACKGROUND: Lymphedema is characterized by the abnormal accumulation of fluid in the interstitial spaces due to the insufficiency of the lymphatic system and manifests as swelling of affected body parts. The insufficiency may be genetic or due to external factors of which cancer and cancer treatment is the most common. There is a dearth of documented information in South Africa regarding the association between cancer and lymphedema and therefore a pilot study was conducted at eight day clinics of the St Luke’s Hospice in Cape Town to gain preliminary evidence.

AIM: The aim was to determine the prevalence of lymphedema amongst cancer patients and survivors in Cape Town.

METHODOLOGY: Individual interviews were conducted in the language preference of the patients and these include English, Afrikaans and Xhosa. Verbal consent was received from each patient prior to the interview.

RESULTS: Fifty six patients were interviewed. The mean age of patients was 68 and the range was between 38 and 89 years of age. The treatment patients received includes surgery, radiation and chemotherapy. Twenty three (41%) reported signs of lymphedema. The most common cancers associated with lymphedema include breast cancer 13 (56%) and cervical cancer 3 (13%).

CONCLUSION: Despite the study sample size the results indicate that there is an association between cancer and lymphedema. A national prevalence study of the association between lymphedema and cancer is imperative. Interventions should then be designed to inform the national department of health to provide a comprehensive oncology service that includes the management of lymphedema.

GLOBAL DISPARITIES IN PROSTATE CANCER MANAGEMENT: CHALLENGES FOR CHANGE

ABSTRACT REFERENCE NUMBER: 219

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INTRODUCTION AND AIMS: Prostate cancer incidence continues to increase worldwide. Studies are largely confined to the West, where this disease is found to be high-risk among men of African descent. Little is known of the true incidence, impact and behaviour of this disease in Africa. This study aims to evaluate data from Africa on prostate cancer, and address how the global gap in managing prostate cancer can be bridged. Urolink is a charity under BAUS that aims to promote urological care and education worldwide, and has ongoing projects in Africa.

MATERIALS AND METHODS: A detailed PubMed search from 2000 onwards was performed with key words “prostate cancer and Africa”. Our experiences through Urolink in Africa were also reviewed from Urolink reports and discussions.

RESULTS: The PubMed search yielded 113 papers. Forty-four papers, mostly descriptive studies, were relevant to the question. Half of these were from Western Africa, a quarter outside Africa, 14% from East Africa, and less than 5% from either Southern or Northern Africa. Most studies reported an increasing incidence of prostate cancer. Highlights included late presentation, lack of diagnostics and curative treatments and poor survival outcomes. This was echoed in our experiences.

CONCLUSION: As prostate cancer management in the West continues to develop at a meteoric pace and escalating cost, there is a glaring discrepancy in management in the third world, especially Africa. Training, education and tailored input from the developed urological world is much needed. How this is achieved is a mammoth challenge for all of us.

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IMPROVED SURVIVAL OF PATIENTS WITH CHILDHOOD BURKITT’S LYMPHOMA IN UGANDA, A LINKAGE OF DATA FROM KAMPALA CANCER REGISTRY AND UGANDA CANCER INSTITUTE

ABSTRACT REFERENCE NUMBER: 221

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BACKGROUND: Burkitt’s lymphoma (BL) is the commonest childhood cancer in Uganda and other sub Saharan African countries with noted great increase in its incidence in recent time. It is not known what factors are responsible for the marked increase in the incidence rates. It also appears that the proportion of children with BL who fail to show adequate and/or total lack of response to the first line chemotherapy is on the rise at Uganda Cancer Institute, a national cancer treatment centre at Kampala. The characteristics of these children who fail to respond to first chemotherapy are not known. There is no population based data on survival of children with Burkitt’s lymphoma (BL) in Uganda. The link between a population based registry and clinical data provides an opportunity to understand factors affecting survival of children with BL in the population.

OBJECTIVE: To determine survival of children with Burkitt’s lymphoma in Uganda.
SUBJECTS AND METHODS: We identified patients registered at the Kampala Cancer registry with histologic diagnosis of BL and residing within Kyadondo County at the time of their BL diagnosis and who were treated at UCI between 1st January 1990 - 31st Dec 2002. We retrieved information on 111 children aged 2 – 15 years with records available both in UCI and KCR. Using validated questionnaires data was abstracted and analyzed using STATA soft ware. Kaplan-Meier survival analysis was used to determine median and overall survival. Cox proportional hazards and regression analysis were done on factors that significantly related with survival on bivariate analysis.

RESULTS: Of 111 patients aged 2 – 15 years analyzed, 59 (57.2%) were HIV positive and 53.2% (59/11) were males. The mean age was 7.5 years (standard deviation, std= 2.9). Median age was 7 years. Median 5 year’s survival was 99 weeks (24.75 months), and overall 5 years survival was 1825 weeks (456.25 months). Patients with abdominal disease (71/108) had poorer median survival of 384 weeks compared to 582.3 weeks for the general population.

CONCLUSIONS: This study shows survival of patients with Burkitt’s lymphoma (BL) in Uganda. The good survival is confirmatory that BL is still basically responsive to chemotherapy with good overall survival hence there is need to improve access to treatment in sub-Saharan Africa.

RECOMMENDATIONS: Prospective study to evaluate short term treatment response, relapse rate and effectiveness of second line chemotherapy in this era of HIV/AIDS and HAART.

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DYSREGULATION OF TRANSCRIPTIONAL REGULATION CAUSES CHILDREN’S BRAIN TUMOR MEDULLOBLASTOMA

ABSTRACT REFERENCE NUMBER: 222

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OBJECTIVE: Medulloblastoma is one of the most malignant children’s brain tumors. Although signalling pathways such as Hedgehog and Wnt have been found to be involved in medulloblastoma, they represent only a small subset of human medulloblastoma tumors. The objective of this study is to determine molecular mechanisms that dictate major subgroup of medulloblastomas.

METHODS: We analyzed the expression pattern of the neuronal transcriptional repressor, RE1-silencing transcription factor (REST) in human medulloblastoma patient samples. We then used mouse models to confirm the mechanism.

RESULTS: Our studies indicate that although neither Myc nor REST alone can cause brain tumor formation, >30% of human medulloblastomas abnormally overexpress both proteins. Using a mouse model, we further found that the abnormal overexpression of REST and Myc in cerebellar stem/progenitor cells led to the development of cerebellum-specific tumors, similar to human medulloblastoma. These tumors did not form in the cerebral cortex, suggesting a critical role of the cerebellar environment in medulloblastoma. We further found that the tumorigenic potential of these tumors could be blocked by restricting REST function.
CONCLUSION: Our studies indicate that medulloblastoma tumors are caused by blockade of differentiation and maintenance of “stemness” of neural stem/progenitor cells. Our studies also show that REST is a potential therapeutic target for medulloblastomas. We recently found that REST maintains self-renewal and pluripotency in mouse embryonic stem (mES) cells through suppression of microRNA pathways. We are currently testing whether such a mechanism also regulates REST-mediated control of medulloblastoma.

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IMMUNOHISTOCHEMISTRY IN CANCER MEDICINE: OUR EXPERIENCE IN CAMEROON

ABSTRACT REFERENCE NUMBER: 223

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BACKGROUND: Immunohistochemistry or IHC refers to the process of localizing proteins in cells of a tissue section exploiting the principle of antibodies binding specifically to antigens in biological tissues. It takes its name from the roots "immuno," in reference to antibodies used in the procedure, and "histo," meaning tissue (compare to immunocytochemistry). In developed countries, Immunohistochemical staining is widely used in the diagnosis of abnormal cells such as those found in cancerous tumors. Specific molecular markers are characteristic of particular cellular events such as proliferation or cell death (apoptosis). IHC is also widely used in basic research to understand the distribution and localization of biomarkers and differentially expressed proteins in different parts of a biological tissue. Visualising an antibody-antigen interaction can be accomplished in a number of ways. In the most common instance, an antibody is conjugated to an enzyme, such as peroxidase, that can catalyse a colour-producing reaction. Alternatively, the antibody can also be tagged to a fluorophore, (immunofluorescence). The latter method is of great use in confocal laser scanning microscopy, which is highly sensitive and can also be used to visualise interactions between multiple proteins. Most of these techniques can be used on paraffin-embedded specimens.

MATERIAL AND METHODS: In Cameroon, the techniques above are not available. We established a collaboration with few laboratories in developed countries mainly in Switzerland and France. Paraffin blocks of diagnosed cancers were sent abroad since January 2000. Immunohistochemistry was performed free of charge.

RESULTS: A series of 103 cancer patients was included in this study. There was 40 malignant lymphomas, 20 cases of early stage Kaposi’s sarcoma, 20 soft tissue tumours, 15 breast cancers, 5 brain tumours, 3 urethral cancers.
PSYCHOSOCIAL NEEDS OF COUPLES SURVIVING PROSTATE CANCER

ABSTRACT REFERENCE NUMBER: 224

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INTRODUCTION: According to a recent Institute of Medicine report, few research studies have examined the psychosocial issues encountered by African American and West African prostate cancer survivors and their spouses. Additionally, several studies have found wives of prostate cancer survivors experience a greater amount of psychological distress in comparison to their husbands. To address this gap in the science, the primary goal of this study was to identify the most salient psychosocial related dimensions of quality of life as self-reported by African American prostate cancer survivors and their spouses.

METHODS: Thirty African American heterosexual married couples were recruited to participate in an in-depth face to face interview. Participants were recruited from a National Cancer Institute Comprehensive Cancer Center cancer registry and a state based non-profit organization. The interview guide was structured according to Betty Ferrell’s Quality of Life Conceptual Model. The qualitative methodological research design was according to the Triangulation of Observers model.

RESULTS: The interview transcripts were analyzed using a combination of hand coding and Atlas Ti. software. Content analysis was conducted using an immersion/crystallizing analysis plan.

CONCLUSION: Common themes regarding couples’ psychosocial needs based on the behavioral, social, psychological, spiritual domains, within the subcategories of length of years since last treatment, socioeconomic status, education level, and length of time married will be presented. These findings will assist in the development and testing of culturally appropriate educational resources and interventions to minimize the impact of the burden of treatment among African Americans and those of West African Ancestry.

LAbORATORY DIAGNOSTIC CAPACITY FOR INCREASING ACCESS TO IMATINIB MESYLATE FOR PATIENTS UNDER THE GLIEVEC INTERNATIONAL PATIENT ASSISTANCE PROGRAM IN SUB-SAHARAN AFRICA

ABSTRACT REFERENCE NUMBER: 228

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OBJECTIVE: The use of Imatinib for CML and GIST in resource poor countries faces a diagnostic capacity challenge. The study demonstrates three diagnostic models used and their success in improving treatment access.

METHODS: Institutions were categorized into three diagnostic models; basic internal cytogenetic capacity, sample reference in-country and sample reference system out of the country. We compared the level of patient uptake and average duration on the program to the models used. Data presented was obtained from program review reports, program data, and impact studies performed since 2002.

RESULTS: 15 countries with the highest patient enrolment were selected. One (7%) country confirmed availability of diagnostic capacity on qualification. 3 (20%) countries were using sample reference in-country, 11 (73%) countries sourced this service from abroad. By January 2009, patients enrolled were 1,644. 766 (47%) patients from countries with in-country referrals; 676 (41%) patients from countries out sourcing their diagnostic capacity and 202 (12%) patients from the country with basic internal diagnostic capacity in the institution. All countries demonstrated improved capacity as evidenced by patient enrolment. Notable challenges are high cost of establishing and operating molecular cytogenetics laboratories, limited knowledge amongst clinicians and lab scientists and inadequate government support.

CONCLUSIONS: There is need to mobilize and harness novel funding mechanisms and build capacity for the development of diagnostics and human resources to improve the management of cancer in the developing countries.

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HIV INFECTION AND SURVIVAL AMONG PATIENTS WITH NON-HODGKIN'S LYMPHOMA, KAMPALA, UGANDA

ABSTRACT REFERENCE NUMBER: 231

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OBJECTIVE: This study was designed to better understand the predictors of survival among persons with Non Hodgkin’s Lymphoma (NHL) in Uganda, specifically looking at how HIV infection modifies the natural history of NHL. The main objective was to compare survival between HIV positive and HIV Negative Patients with NHL.

METHODS: A retrospective review of records of patients with NHL diagnosed at the Uganda Cancer Institute between January 2004 and August 2008.
RESULTS: Of 228 patients, 59 (30%) were HIV sero-positive, 136 (60%) were HIV-sero-negative, and 33 (14%) unknown HIV sero-status. Women constituted 33% of the cohort; the mean age was 29.6 (range 2-82) and 71% of patients were 13 or older. Overall 1-year survival was low at 25%. Most deaths occurred within 6 months of diagnosis. Patients who were HIV-positive and not on ART had almost the higher risk of death risk as those who were HIV sero-negative (HR 2.3 p-value =0.03) and although this risk increased after adjusting for key risk factors, the difference was not statistically significant. In multivariate analysis of risk factors for survival, only receipt of 1-5 courses of (HR 0.3, 95% CI 0.2-0.5, p-value <0.0001) or a complete course of chemotherapy (HR 0.3, 95% CI 0.2-0.6, p-value 0.0006)

CONCLUSIONS: Survival of patients with NHL in Kampala was poor regardless of HIV status. Further studies need to focus on earlier diagnosis and improved access to health care to impact the outcome of patients with NHL. Chemotherapy for NHL is essential for improving the prognosis in both HIV negative and HIV positive patients.

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THE CANCER CENTRE: HARARE, ZIMBABWE

ABSTRACT REFERENCE NUMBER: 233

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The Cancer Centre in Harare, is part of the Cancer Association in Zimbabwe, Africa. The Cancer Centre is a non profit making organization which is supported by local donors and well wishers. The services that are provided to the patients and the communities are free as well as the print media. The Cancer Association was first started in Bulawayo in 1959 and this was the Headquarters. The Harare Cancer Association was formed in 1961.

MISSION STATEMENT: The Harare Cancer Centre is committed to empowering clients and their families to cope with the crisis of dealing with cancer through a holistic approach which will enable the client to develop a positive attitude to the disease during diagnosis and treatment. The Centre is dedicated to providing the community with information to promote a healthy lifestyle and to increase public awareness in the prevention and early detection of cancer.

THE CANCER CENTRE IN HARARE SEEKS TO:
-- Carry out counselling services and give psychological support to patients and their families.
-- Provide complimentary health therapies to those diagnosed of cancer.
-- Teach breast care, breast self examination, carry out referrals for further investigations.
-- The patients as they recuperate after mastectomy.
-- Promote prevention of cancer through public awareness talks, discussions and lectures.
-- Give nutritional guidance towards prevention of cancer and after cancer diagnosis.
-- The Cancer Centre serves as a Resource Centre to health workers and students.
-- Supporting the Reach for Recovery support group which is more than three years now.
-- Support patients after mastectomy during treatment, with chemotherapy and radiotherapy.
The Cancer Centre operates under various constraints such as lack of screening facilities, treatment equipment, financial and other material needs. Due to these challenges being faced currently, representation of the Cancer Centre through attending the conference would be of great importance.

FUTURE FOCUS:
-- To intensify awareness outreach programs to schools and rural areas through health workers.
-- To provide training for health workers and encourage screening for women cancers.
-- To promote research in cancer topics.

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CHARACTERIZATION OF EBV STRAINS IN MOTHER-CHILD PAIRS: WESTERN KENYA

ABSTRACT REFERENCE NUMBER: 234

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Endemic Burkitt’s lymphoma (BL) is a common childhood cancer associated with EBV and holoendemic malaria. There are two EBV strains, Type 1&2 that have genotypic and phenotypic differences. The EBV strains in children at risk for Burkitt’s lymphoma in malaria holoendemic areas have not been well established. In this cross sectional study, we investigated differences in the EBV strain between an area in western Kenya where BL risk is high as compared to a neighboring area where BL risk is low. Fifty mother-child pairs were recruited from areas with holoendemic malaria and varying Burkitt’s lymphoma incidence rates. DNA was extracted from all samples and EBV strains analyzed by PCR techniques based on genetic differences in the EBV EBNA3C gene. Blood slides were taken and analyzed for malaria infection. Individual EBV strain distribution showed 40.7% and 11.1% type 1 and type 2 single infections and 7.4% type 1 and 2 mixed infections in saliva and 20.6% type 1, 38.2% type 1 and 2 infections in blood. Positive malaria infections were observed in 15% of the participants and all were positive with type 1 and 2 EBV co-infections. Type 1 and 2 strain co-infections were predominant in blood and saliva samples from the high BL incidence areas compared to samples from the low BL incidence areas ($X^2$ p=0.0001). The high prevalence of co-infections with EBV type 1 and 2 strains in the malaria holoendemic region with high BL incidence could be indicative of underlying health differences between children from these two regions.

KEY WORDS: Burkitt’s lymphoma, Malaria and EBV
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AWARENESS OF BREAST CANCER SCREENING AMONG FEMALE UNDERGRADUATE STUDENTS OF UNIVERSITY OF IBADAN, NIGERIA

ABSTRACT REFERENCE NUMBER: 236

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OBJECTIVE: The high mortality rate due to delayed detection of breast cancer is alarming. On this premise this study aims to determine the level of awareness of breast cancer screening methods among the female undergraduate students of University of Ibadan who are future mothers.

METHOD: This is a cross-sectional study that utilised a self-structured questionnaire for collection of data. Three hundred willing female undergraduate students drawn proportionately from the three halls of residence participated in the study. Only 286 out of the 300 questionnaires distributed, were correctly filled, and fit for analysis. The Statistical Package of Social Sciences (SPSS) was utilised for analysis of data.

RESULTS: The age of the respondents ranged from 16 to 40 years. Majority (92.6%) were single. Those who have heard about BSE, CBE and mammography were 82.7%, 59.8% and 46% respectively. The mass media top the list of sources of information. However, only 33.8% demonstrated good knowledge of appropriate time BSE should be carried out. Larger proportion; 81.2% had never accessed CBE at any particular time in life. There is a significant association between the respondents' level of awareness of mammography and the respondent mothers' level of education, (P < 0.05).

CONCLUSION: The findings of the study revealed high level of awareness of BSE but low level of knowledge. Similarly, the number of respondents who had benefited from CBE was very low. Therefore, nurses, midwives and doctors are encouraged to teach their clients BSE and incorporate CBE into the routine physical examination of their clients.

KEY WORDS: Awareness, Breast cancer, Screening, Undergraduate students

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UROLINK: REPRESENTING THE BRITISH ASSOCIATION OF UROLOGICAL SURGEONS IN THE DEVELOPING WORLD

ABSTRACT REFERENCE NUMBER: 237

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Urolink represents the British Association of Urological Surgeons in the Developing world. We aim to forge links with departments and, through these, provide support and training. We already have links with institutions in Kenya, Tanzania, Zambia, Malawi, Zimbabwe, Mozambique, Gambia and Senegal. Our activities include the training of doctors and other clinical staff in basic and advanced surgical and urological techniques so that they can then provide vital care to their populations. This is usually done through training workshops run and funded by Urolink. In addition to this, we also send out interested surgeons to operate for periods at the participating centres. We can also provide equipment and other forms of support to centres that forge a successful relationship, and by so doing help to develop a service for the local populations. We make regular, competitive awards for doctors and trainees from the developing world to attend training courses in the UK as well as our annual meeting. We believe that UK trainees and Consultants also learn a great deal from spending some time at institutions in Africa. We wish to continue forming more links with overseas institutions, while building on those that we already have, and hope that the AORTIC Conference 2009 is an ideal opportunity to do so.

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THE INCIDENCE OF PROSTATE CANCER AMONGST BLACK AFRICAN MEN IN THE UNITED KINGDOM: THE PROCESS COHORT STUDY

ABSTRACT REFERENCE NUMBER: 238

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OBJECTIVES: While African American men have a greater risk of prostate cancer compared to White men, little is known of the risk amongst Black African men. This study investigates the risk and clinical presentation of prostate cancer amongst Black African men in the United Kingdom, whilst making comparisons with other ethnic subgroups.

METHODS: A retrospective clinical cohort study design recruiting all cases of prostate cancer diagnosed over a five-year period and residing in defined areas of London and Bristol. We calculated the age standardised incidence rates and relative risk for all Black men, Black Caribbean and Black African versus White men.

RESULTS: Black men had higher age-adjusted rates of prostate cancer (166 per 100,000, 95% CI 151 to 180 per 100,000) than White men (56.4 per 100,000, 95% CI 53.3 to 59.5 per 100,000). The relative risks for All Black, Black Caribbean and Black African men were 3.09 (95% CI 2.79 to 3.43, p<0.0001), 3.19 (95% CI 2.85 to 3.56, p<0.0001) and 2.87 (95% CI 2.34 to 3.53, p<0.0001) respectively. There was no strong evidence that the rates for Black Caribbean men differed from Black African men. The higher risk in Black men compared to White men was more apparent in younger age groups (p-value for interaction <0.001). There were no differences in clinical presentation.
CONCLUSIONS: Black men in the United Kingdom have substantially greater risk of developing prostate cancer compared to White men. The similar rates in Black African and Black Caribbean men favour a common genetic aetiology, though migration may be associated with an increased risk due to a gene-environment interaction. Our results may have significant implications for the burden of the disease on the African subcontinent.

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RELATIVE FREQUENCY OF CANCERS IN THE ANATOMICAL PATHOLOGY LABORATORY OF THE TEACHING HOSPITAL OF BUTARE, RWANDA

ABSTRACT REFERENCE NUMBER: 239

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INTRODUCTION: Data available on Cancer in Rwanda have been reported for the sixties and eighties respectively by Clemmessen et al, Ngendahayo and Parkin. The objectives were to establish a cancer registry in Rwanda covering the general population which runs up during two years 1992-1993. Very recently a retrospective and descriptive study was carried out with the same objectives to determine the frequency of cancers in admitted and outpatients in Butare and Kigali teaching hospitals by Ndahindwa et al, 2005.

MATERIAL AND METHODS: The study covered a period of 7 years: 2000-2006 during which all cases with histological diagnosis of cancer in the anatomical pathology laboratory of the Butare Teaching Hospital (CHUB) were included. A pre-established form was used to collect variables including socio-demographic aspects, hospitals requesting the diagnosis, site and the types of cancer from archive records in the anatomical pathology laboratory. The classification followed the tenth edition of International Classification of Diseases- Oncology (ICD-O). Analysis was performed crossing those variables from the data base developed by SPSS 11.5.

RESULTS: Among 7216 samples received during this period we collect 1298 cancer cases (17.98%) histologically confirmed in the anatomical pathology laboratory with an average of almost 200 cases per year. About 56.8% of samples are coming from the Kigali Teaching hospital (CHUK) followed by the Butare Teaching Hospital (CHUB) with 24.7%, Kabyagyi Hospital (4.8%), KFH (3.8%) which start sending the specimens since may, 2006; Kibogora Hospital (3.2%) and the remaining (6.7%) belongs to other district hospitals and private clinics. The female subjects are more affected with 53.6% of the diagnosed cancers. The average age for women is of 43.4 years while for men it is 44.7 years old. The main diagnosed cancers of men are Non Hodgkin Lymphoma (19.3%), Stomach (11.6%), Kaposi sarcoma (6.8%), other skin (5.1%) and cancers of eyes (4.3%). In women, cervix and breast represent respectively 12.1% and are most predominant, followed by Non Hodgkin Lymphoma (11.6%), stomach (10.3%), eyes (6.2%), skin (5.9%), uterus (5.6%) and ovary (5.0%). Children under 15 years old presented 10.5% of the
total cases of malignancy; the most frequent childhood cancers are non-Hodgkin lymphomas (43.4%) and eyes (16.2%).

**DISCUSSION:** Cancer distribution varies according to age. However Non Hodgkin Lymphomas are most seen between 0-34 years of age. This should be explained by the VIH/AIDS infection arising in the country. The frequency of the malignant tumours observed in the anatomical pathology laboratory does not represent the reality of malignancy in Rwanda as the majority of diagnosed malignant tumours concern easily accessible sites and the anatomical pathology laboratory do not cover all the hospitals in the country.

**CONCLUSION:** This study is likely underestimated for the frequency of cancer in Rwanda: the coverage is low; no screening service is available; people who came are only those who have access to medical care. As confirmed by previous studies in Rwanda, the most frequent cancers remain the same but show an increase particularly NHL in young adults, and stomach in both sexes. More information for the general population is needed and can be available by set up a national cancer control program.

**KEY WORDS:** Cancer, Epidemiology, Anatomical pathology, Teaching hospital, Rwanda

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**CERVICAL CANCER PREVENTION PROGRAM IN TANZANIA: AN INTEGRATED APPROACH IN THE REGIONS**

**ABSTRACT REFERENCE NUMBER:** 242

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**OBJECTIVE:** To scale up prevention of cervical cancer in Tanzania through integration into existing clinics by training primary health care workers (PHCW) on Visual Inspection Technique.

**METHODS:** The approach was to conduct a 14-days training for PHCW, from regional hospitals, specifically working in Gynecologic or Reproductive clinics. The training manual modified and adopted from IARC, covered theoretical and practical sessions. A stakeholder workshop was held in the respective regions with an aim of informing about the need to integrate screening in health care system to ensure sustainability.

**RESULTS:** Five regions were covered in the initial phase. The participants in the stakeholder workshops were regional administrative secretaries, health management teams, faith-based leaders, media personnel, medical officers, hospitals and community leaders. The participants agreed and included the program in their comprehensive health plan for the region. A total of 85 PHCW from Reproductive and Child Health (RCH) as well as Gynecology clinics were trained on Visual Inspection technique using Acetic Acid. The established cervical cancer screening most runs once per week. A total of 5546 women were screened. The mean age (SD) of the screened women was 38.5 (3.8). Majority of the screened women were married (79.6%), had primary education level (63.2%), not employed (67.3%), and had never been screened before (98.5%). Of the screened women, 7.1% were screen-positive and were treated according to the protocol and 2.5% women had invasive cancer and were referred for treatment according to the protocol.
**CONCLUSION:** The experience gained shows that with a 2-weeks training program, accompanied with commitment from stakeholders, PHCW in regional/ district hospitals can acquire expertise on Visual Inspection technique and establish a cervical cancer screening clinics.

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**TANZANIAN MEDICAL GRADUATES’ SKILLS, KNOWLEDGE AND PERCEPTIONS ON CANCER**

**ABSTRACT REFERENCE NUMBER:** 243

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**OBJECTIVE:** This study aimed at finding about Tanzanian medical graduates’ skills, knowledge and perceptions on cancer

**METHODS:** It was a descriptive cross-sectional study among medical graduates in Dar es Salaam, Tanzania who were on their one-year compulsory internship. These medical graduates had completed a 5-year degree course. A consecutive sample of 100 medical graduates was recruited for the study. Self-administered questionnaire was used to elicit medical graduates’ skills, knowledge and perceptions on cancer.

**RESULTS:** All 100 graduate doctors recruited for the study responded (100% response rate). Of the respondents, 64% were males and 36% females. In this study, the perceptions, knowledge and skills towards cancer is minimal with only about 16% showing interest to specialize in oncology as opposed to 22% in general physician. Majority had limited skills for counselling, examination and provision of cancer education.

**CONCLUSION:** These data highlight the need for improvements in the cancer curricula and clinical training in medical schools, in particular more instructional time devoted to prevention and detection of the cancer. It is essential that all medical students be taught how to prevent and detect cancer.

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**OESOPHAGEAL CANCER AND KAPOSI’S SARCOMA IN MALAWI: A COMPARATIVE ANALYSIS**

**ABSTRACT REFERENCE NUMBER:** 244

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OBJECTIVE: Given that oesophageal cancer (OC) is common in Malawi and its outcome is so dismal, would it be pragmatic to promptly mitigate the effects of smoking, alcohol and aflatoxins rather than seek a higher degree of local evidence for their role in OC?

METHOD: Retrospectively analysis of cases of OC in Malawi by district, as recorded in the Malawi National Cancer Registry (MNCR), over a period of twenty years (1987 – 2006). The MNCR has no population-based cancer registration covering the most populous and industrial District of Blantyre (urban and rural) as well as a national registry; we therefore integrated our analysis of OC with analysis of Kaposi’s sarcoma (KS). This served as internal control for the analysis. It was also a useful tool for testing the often strong suspicion that the prominence of KS in Malawi is merely a reflection of the fact that it is mainly diagnosed without histological confirmation whereas conditions like OC require histological diagnosis

RESULTS: We retrospectively analysed a total of 13,217 OC and Kaposi’s sarcoma (KS) cases as recorded in the Malawi National Cancer Registry from 1987 to February, 2006 and found no evidence of OC clustering to suggest a role for culturally variable habits like smoking, alcohol and maize use and storage in the country. Maize storage habits, smoking and alcohol usage are not uniform across the country and yet our analysis did not show any evidence of clustering of OC. Nor did we find evidence to support the notion that hasty current local OC preventive messages should be crafted based on the suspicion that KS has always outranked OC in Malawi. However the perceived association of OC and ingestion of very hot foods and beverages appears to be the most significant factor for OC in Malawi; as across Malawi cooked food is often eaten straight from the “fire place”.

CONCLUSION: There is a puzzling similarity in trends between OC and KS in Malawi, although KS has always appeared to outrank OC. There is also no clear association between current high trends of OC and food types in Malawi. This retrospective analysis therefore calls for a prospective study on clinical (including HIV status) and demographic characteristics of OC in Malawi in order to get a deeper understanding of the local issues affecting current high OC trends, such as eating food straight from ‘fire place’ as propagated by some authorities in other countries and regions of the world.

KEY WORDS: Esophageal neoplasms, Kaposi’s sarcoma, comparative study, Malawi, Africa, retrospective study.

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CANCER MORTALITY TRENDS IN NAIROBI PROVINCE 2003 – 2006

ABSTRACT REFERENCE NUMBER: 246

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OBJECTIVES: Describe cancer mortality trends in Nairobi and determine the occurrence of cancer-related deaths by geographic (divisions) distribution of the most common primary sites during the study period.

METHODS: Data on incidence of cancer and cancer-related deaths for the study period was retrieved from Nairobi Cancer Registry database. Data on all deaths that occurred in Nairobi was obtained from the Provincial Register of Deaths. Population data for Nairobi was obtained from Central Bureau of Statistics Population Census Report 1999.

RESULTS: During the period under review, 7,730 new cases of cancer were reported in Nairobi. Over the same period, 81,985 deaths (including stillbirths) were registered in the Province. Of the deaths registered for the period, 3.42% (2804) were cancer-related. The 50 – 54 age band recorded the highest number of deaths and accounted for 8.3% (233) of all deaths. Cancer of the esophagus was the leading cause of death accounting for 8.4% (236) of all cancer-related deaths. Haematological malignancies made up the second most common cause of death accounting for 7% (194) and followed by breast cancer at 5.5% (157).

CONCLUSION: Cancer of the esophagus which afflicts more males than females, was the leading cause of cancer-related deaths followed by haematological malignancies. This study shows that cancer of the esophagus is common in Nairobi and accounts for 8.4% of all cancer-related deaths.

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CLINICAL IMPLICATIONS OF PSYCHOSOCIAL IMPACT OF BODY IMAGE AND SEXUALITY FOR WOMEN WITH BREAST CANCER

ABSTRACT REFERENCE NUMBER: 248

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Breast cancer will affect one in eleven women during their lifetime. The potential for the diagnosis and treatment of breast cancer to impact on a woman’s sexuality and body image is well recognized and there has also been an increasing awareness of the psychosocial distress associated with breast cancer, which has put a new emphasis on quality of life. Sexuality is an important quality of life issue to breast cancer survivors, particularly as more women are living longer and have increased concerns with the quality of all aspects of their lives.

The impact of breast cancer on body image varies greatly among women, with both the diagnosis and treatment having a significant impact on this aspect of well being. The impact may include: altered sexual function; poor self-image; loss of libido, and relationship problems; Although body image is often perceived as relating to physical appearance alone, women describe it as involving a sense of wholeness and functionality.

The psychological sequelae of surgical treatment for breast cancer on body image and sexuality include: embarrassment in exposing one’s body; discomfort showing scars, overall body change; lack of sexual interest; problems with sexual relations and resumption of sexual activity; general sexual dysfunction; sexual satisfaction and concern about frequency; and difficulties with becoming sexually aroused.
The aim of this presentation is to: 1-give an overview of the psychosocial impact of breast cancer on women’s body image and sexuality, 2-focus on the general clinical implications of psychosocial impact of body image and sexuality for women with breast cancer

**KEY WORDS:** Psychosocial, Body image, Sexuality, Breast Cancer

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**249**

**SARCOMAS OF SOFT TISSUES: TREATMENT AND PROGNOSTIC ABOUT 83 CASES**

**ABSTRACT REFERENCE NUMBER:** 249

**AUTHOR/S:** Dem A, Dieng MM, Gaye PM, Fall Gaye MC, Loudiyi A, Diop M, Diouf D, Dembele B

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**CORRESPONDENCE:** Dem A: adehdem@gmail.com

**AIM:** To determine the epidemiological features, the clinical aspects and the treatment of soft sarcomas.

**PATIENTS AND METHODS:** It was a retrospective study of 83 cases of soft tissues sarcomas collected at the Cancer Institut of Dakar from January 2000 to December 2006. Not included in this group were the lymphosarcomas and the sarcomas of special organs (for example sarcomas of digestive tract, leiomyosarcomas of the uterus). We have pointed out the demographic features, the clinical aspects, the factors of recurrence and the survival at 5 years.

**RESULTS:** The mean age of ours patients was 40 years and the sex ratio was 1.24. The mean size of the tumor was 12 cm. Soft tissue sarcomas appear at any site where the parent tissue is present but in this study the tumor site was at the inferior lamb in 55.4%, at the trunk in 21.7%, at the superior lamb in 16.9%. We found 17 histologic types whose more frequent were: rhabdomyosarcomas (14.5 %), dermatofibrosarcomas of Darier Ferrand (13.8%), fibrosarcomas (12%), fibrohistiocytomas (10.8) and Kaposi sarcomas (10.8%). 77 patients have received a treatment whom 65 were curative and 12 were palliative. In this study adequate surgical excision was done in 68% and radical surgery by amputation was performed in 32%. We have observed 17 recurrence and a five year survival rate was 28.5%

**CONCLUSION:** Diagnosis of soft tissue sarcomas is very late in our country. The treatment should be adequate surgical excision but sometimes primary inadequate enucleation is done, then further treatment may necessitate amputation.

**KEY WORDS:** Soft tissues sarcomas, surgical excision, recurrence

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**250**

**MALIGNANT TUMOURS OF OVARY IN DAKAR INSTITUTE OF CANCER: THERAPEUTIC AND PROGNOSTIC ASPECTS, ABOUT 108 CASES**

**ABSTRACT REFERENCE NUMBER:** 250

**AUTHOR/S:** Dem A, Dieng MM, Faye GK, Fall Gaye MC, Gaye PM, Diouf D, Dembele B, Diop M
OBJECTIVE: To identify the epidemiological and clinical profile of the malignant epithelial tumors of the ovary observed in Dakar Institute of Cancer, in order to improve their treatment.

PATIENTS AND METHODS: It was a retrospective study relating to 108 cases of malignant epithelial tumors of the ovary treated in Dakar Institute of Cancer from January 2000 to December 2006 (7 years). For each patient, we studied the social and demographic characteristics, the diagnostic, the therapeutic and the prognostic aspects.

RESULTS: The average age was 50 years. They were women in reproduction age about 43% of cases, multiparous in 93% of cases. The circumstances of discovery were dominated by the pain, followed by growing abdominal volume. The serous cystadenocarcinoma represented the histological type most frequent with 59.3% of cases. The preferential treatment was surgery: the initial tumor reduction was so practiced in 72.2% of cases. It was complete in 22.2% of cases and suboptimal in 50%. The auxiliary treatment was based on chemotherapy used in 68.5% of cases. Global survival was 42.6% at 2 years, 23% at 5 years and 10.5% at 7 years.

CONCLUSION: Ovarian cancers always present a bad prognosis which could be littled by an early diagnosis and surgery as complete as possible.

KEY WORDS: Ovarian cancer, Surgery, Senegal

251

PATTERN OF CANCER FOR EASTERN ZONE TANZANIA

ABSTRACT REFERENCE NUMBER: 251

AUTHOR/S: J Mwaiselage (1), T Ngoma (1), C Yiannoustsos (2), K Wools-Kaloustian (2)

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CORRESPONDENCE: J Mwaiselage: jmwaieselage@yahoo.com

OBJECTIVE: To determine pattern of cancer for Eastern zone of Tanzania i.e. Dar es Salaam and Coast regions using a population-based cancer registry.

METHODS: A retrospective collection of data was performed for patients presenting to Tumbi regional hospitals with diagnosis of cancer and at Ocean Road Cancer Institute between July 2007 and December 2008. Only patient who reside in Dar es Salaam and Coast region where included. Cancer registry forms were used to record information on age, sex, residence, type of cancer and basis of diagnosis. The topography and morphology of the cancer types was coded according to International Classification of Disease for Oncology version 3 (ICD-O-3).

RESULTS: This initial analysis revealed a total of 1840 new cancer patients recorded during the 18-month period for eastern zone. Majority of the patients were females (66%). About 12% of the cases were children 14 years and below. Majority of the patients were coming from the Dar es Salaam (n = 1631;
88.6%). In females the most frequent cancer was carcinoma of cervix. In males, Kaposi Sarcoma was the most frequent cancer.

**CONCLUSION**: Our initial analysis indicates that HIV/AIDS related malignancies are the most common cancers in both males and females. It is recommended that HIV/AIDS clinics in the country should be given capacity to recognize and detect signs of common cancer. The next phase of the project is to calculate age-standardized incidence rates for each type of cancer; to link cancer registry and Care and Treatment Clinics data to determine the percentage of cancer patients with HIV.

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**254**

**SUCCESSFUL PREGNANCIES IN A NIGERIAN PATIENT WITH CHRONIC MYELOID LEUKEMIA ON IMATINIB**

**ABSTRACT REFERENCE NUMBER**: 254

**AUTHOR/S**: AA Oyekunle (1), OK Ajenifuja (2), RAA Bolarinwa (1), MA Durosinmi (1)

**AFFILIATION/S**: (1) Department of Haematology & Immunology, Obafemi Awolowo University, (2) Department of Obstetrics & Gynaecology, Obafemi Awolowo University

**CORRESPONDENCE**: AA Oyekunle: oyekunleaa@yahoo.co.uk, oyekunleaa@oauife.edu.ng

**OBJECTIVE/INTRODUCTION**: Imatinib mesylate (IM) has become established as the first-line therapy for all patients with chronic myeloid leukemia (CML). However, animal studies have suggested some teratogenic potential. Additionally, it has been variously associated with reduced fertility due to hypospermia and oligomenorrhoea. In spite of the latter however, several conceptions have been reported among patients or their partners.

**METHODS/CASE REPORT**: We report the first case of a CML patient conceiving twice in a 12-month period while on IM therapy. A 34-year-old Nigerian lady with CML, who had been on IM since November 2006, became pregnant in March 2007, stopped IM as soon as pregnancy was confirmed, and was delivered vaginally at term of a healthy baby girl in November 2007. While lactating in February 2008, she became pregnant again, but she opted for elective termination due to a failure to attain complete cytogenetic remission from frequent therapy interruptions.

**RESULTS**: Her baby developed and continues to thrive normally after 16 months of follow-up.

**CONCLUSIONS**: This suggests that imatinib may not reduce the ability to conceive in some patients.

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**256**

**ACTIVATION OF ANDROGEN RECEPTOR LIGAND BINDING DOMAIN-MUTANTS IN CV-1 CELL LINES BY CADMIUM**

**ABSTRACT REFERENCE NUMBER**: 256

**AUTHOR/S**: R Renee Reams, Equar Taka, Adrienne Stephenson, Jennifer Green

**AFFILIATION/S**: College Of Pharmacy & Pharmaceutical Sciences, Florida A&M University
Prostate cancer is the most frequent cancer affecting men in most Western countries. Certain risk factors have been identified (age, family history, ethnic origin, diet), but the etiology of this cancer remains largely unknown. However, a role for environmental factors is strongly suspected. One such substance is cadmium. Cadmium, a transition metal widely used in industry has been shown by epidemiological and animal studies to demonstrate a carcinogenic effect on the prostate. Naturally occurring Androgen receptor (AR) ligand binding domain mutations at residues 701,715,730,741,874 and 877 have been previously identified in prostate cancer samples. It has been suggested that mutations in the AR ligand binding domain can create promiscuous receptors which means that substances other than testosterone may act as ligands.

**OBJECTIVE:** The objective of this study was to assess the ability of Cd to regulate our LBD mutants in AR-responsive (LNCaP) and non-responsive cell lines (CV-1).

**METHODS:** We used an androgen response luciferase reporter for analysis of cadmium activity in the transient transfection assay in CV-1 cell lines.

**RESULTS:** The results showed that cadmium at $10^{-6}$ and $10^{-8}$ M activated the reporter in the absence of androgen. Of the following AR mutations tested, L701H, W715M, V730M, W741C, W741L, H874Y, and T877S. Mutations at residue 741 appear to be most crucial for transcriptional activation by cadmium.

**CONCLUSIONS:** The results demonstrate that cadmium has an androgen-like activity in CV-1 cells. Similar studies are underway in LNCaP, prostate epithelial cells.

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**257**

**USING RADIOTHERAPY AS AN ANCHOR TO BUILD SELF-SUSTAINING CANCER CURE AND CARE CAPACITY IN DEVELOPING COUNTRIES**

**ABSTRACT REFERENCE NUMBER:** 257

**AUTHOR/S:** M Samiei

**AFFILIATION/S:** PACT Programme Office, International Atomic Energy Agency

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**OBJECTIVE:** The Programme of Action for Cancer Therapy (PACT) was created within the IAEA in 2004 to enable developing countries to introduce, expand and improve their cancer cure and care capacity by integrating radiotherapy into a comprehensive national cancer control plan.

**METHODS:** Working through innovative partnerships with WHO, IARC, UIICC, INCTR, ACS, NCI, NFCR, PATH, Best Intl. and others, six PACT Model Demonstration Sites (PMDS) in Albania, Nicaragua, Tanzania, Sri Lanka, Vietnam and Yemen have been established. PMDS projects address all facets of cancer control by combining the individual strengths and resources of each partner and stakeholder to achieve maximum impact. This integrated approach focuses on building capacity for the long-term sustainability of all relevant services, especially radiotherapy, via timely and balanced investments. It also strengthens
the country’s capacity to develop proposals for funding and encourages interested donors to support such efforts.

RESULTS: Considerable progress has been recorded so far in terms of cancer control planning and establishing modalities to implement PMDS. More than $22 million has been mobilized in donations and contributions. PMDS have shown the synergies that international partners can achieve working together with national counterparts to advance cancer capacity building. PMDS have helped raise donor and public awareness for future national, regional and global initiatives.

CONCLUSIONS: PACT has demonstrated that interagency and public-private partnerships are an effective way of addressing the cancer problem in developing countries.

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**258**

**MULTIDISCIPLINARY EDUCATION AND TRAINING IN CANCER PREVENTION, TREATMENT AND CARE THROUGH REGIONAL NETWORKS AND A VIRTUAL UNIVERSITY**

**ABSTRACT REFERENCE NUMBER:** 258

**AUTHOR/S:** M Samiei

**AFFILIATION/S:** PACT Programme Office, International Atomic Energy Agency

**CORRESPONDENCE:** M Samiei: M.Samiei@iaea.org

**OBJECTIVE:** The IAEA through its Programme of Action for Cancer Therapy (PACT) and its emerging public-private partnerships propose to address the critical shortage of cancer professionals by accelerating multidisciplinary cancer control education and training through a Regional Cancer Training Network concept supported by a Virtual University for Cancer Control (VUCC).

**METHODS:** For this approach to be successful, South-to-South training within the developing world, and within specific regions, is preferable to extended multi-year training within the industrialized countries, where the dislocation of families, high cost, and talent flight are serious impediments and problems. Creating South-to-South and South-centric regional cancer training capabilities, with emphasis on radiotherapy, will safeguard and secure past, current and proposed investments in cancer care into the indefinite future. It is envisioned to have a network of 20-40 regional and national cancer training centres, supported by major donor investments and the emerging cancer control alliance.

**RESULTS:** PACT has developed with interested partners a programme framework and specific funding proposal for Africa. PACT has completed several studies of available training capacities and identified the cancer centres which may act as the initial hubs. The regional centres would use remote, web-based learning in combination with South-South in-person training within countries and at regional centres to minimize personal dislocation. For those trained through the VUCC as radiation oncologists, medical physicists and radiation therapy technologists, local certification either within the country or within the region is required to provide qualifications and recognition of all trainees.

In order to bring the vision of a network of cancer training centres to fruition and into a comprehensive, multidisciplinary funding proposal, PACT has.

**CONCLUSIONS:** The critical bottleneck to advancing cancer care capacity, whether in treatment or prevention, is education and training of staff in all areas of cancer care. In order to correct this situation, and achieve sustainable cancer care capacity in Africa, there must be a dramatic increase in
professionals trained locally or regionally, who remain within their home countries. Expanded facilities and modern IT tools are required for the education and training across Africa.

259

ROLE OF THE SYSTEMATIC DATABASE IN HISTOPATHOLOGY AND CLINICOPATHOLOGY RESEARCH

ABSTRACT REFERENCE NUMBER: 259

AUTHOR/S: AO Komolafe

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OBJECTIVES:
1. To show how databases can be developed for research in histopathology especially in third world countries where healthcare funding is poor.
2. To show how the database can be used primarily in prospective studies and secondarily in retrospective studies.
3. To demonstrate the use of databases in cluster researches (multiple researches going on concurrently with their variables being gathered at the same time)
4. To demonstrate the use of databases in composite researches (multiple variables being gathered together and then analyzed later)

METHODOLOGY: A systematic approach of progressive and serial documentation of vital features of main diagnosis is laid bare on a table with the biodata of patients included. Examples are given in this article to illustrate how the database can be of help in research especially for researchers in developing countries.

RESULTS: The data obtained are then analyzed with different variables in mind. One may use simple statistical methods.

CONCLUSIONS:
1. The database is a simple approach to data collection and research work.
2. It affords young researchers the opportunity to establish themselves in research.
3. It is systematic in the sense that one scientific analysis or evaluation of data inspires the researcher to generate related ideas that propagates other researches.
4. It is resourceful as it allows many variables to be considered on a single entity.

261

DEATH IS MY FRIEND? MANAGING PATIENT AND FAMILY NEEDS TOWARD THE END

ABSTRACT REFERENCE NUMBER: 261

AUTHOR/S: Anne Merriman
Dying in Africa today is dreaded, not so much for the dying but for the time before death when suffering for the patient and family is intensified. We as medical professionals are not very often with patients at the time of death but in palliative care we need to know what to expect and how to advise the family accordingly.

This paper will present the traditional pathways to death and how the knowledge of these can be culturally adapted to assist our patients and family at this special time of life.

INTRODUCTION:

La pathologie tumorale de l'intestin grêle est rare et son diagnostic est d’autant plus difficile qu’elle ne possède pas de signes cliniques spécifiques. De même, sa latence évolutive en fait une affection au diagnostic opératoire. Nous analysons ses aspects cliniques, anatomopathologiques et thérapeutiques à la lumière de 9 observations.

MATERIEL ET METHODES:

Nous avons colligé sur une période de 10 ans (1999-2009), 9 cas de tumeurs du grêle pris en charge à la clinique chirurgicale de l’hôpital Aristide LeDantec de Dakar. Il y avait 6 hommes et 3 femmes représentant 3% des patients suivis pour tumeurs du tractus digestif pour la même période. L’âge moyen de nos patients était de 52 ans (37-70 ans)
Le syndrome occlusif était au premier plan (8/9) et 4 de nos patients avaient des antécédents de chirurgie abdominale. Le transit du grêle a été réalisé chez 2 patients et le scanner abdominal chez 6 patients.
Le diagnostic de certitude était opératoire dans tous les cas et le traitement a été chirurgical: 6 patients ont bénéficié d’une résection segmentaire du grêle avec anastomose termino-terminale, 2 d’une iléo-hémiectomie droite avec anastomose iléo-transverse termino-latérale et dans 1 cas il s’agissait d’une tumeur envahissant les organes de voisinage imposant une exérèse large l’emportant avec rétablissement de la continuité digestive.
Selon le type histologique, les tumeurs bénignes étaient les plus fréquentes (5 cas)
La morbidité était dominée par les suppurations pariétales (2 cas) et les éviscérations (1 cas). 1 de nos patients est décédé.

CONCLUSION

Malgré l’accessibilité de plus en plus grande des explorations complémentaires, le diagnostic des tumeurs du grêle demeure encore opératoire dans nos pays; néanmoins, le transit du grêle et la tomodensitométrie peuvent pallier à cette incertitude diagnostique en pré-opératoire. La chirurgie laparoscopique serait d’un grand apport au traitement de ces tumeurs.
CONNAISSANCES, ATTITUDES ET PRATIQUES DES POPULATIONS VIS-À-VIS DU CANCER DU SEIN DANS LA RÉGION DES LAGUNES (CÔTE D’IVOIRE)

ABSTRACT REFERENCE NUMBER: 263

AUTHOR/S: Didi-Kouko Coulibaly J, Adoubi I, Yapo D, Touré M, Echimane KA

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OBJECTIFS: déterminer le niveau de connaissance de la population la maladie; améliorer la participation de la population aux actions de prévention

METHODE: Etude prospective, transversale menée dans la région des Lagunes en Côte d’Ivoire. 600 personnes (225 hommes et 375 femmes) interrogées réparties statistiquement dans 15 districts de la région en tenant compte des zones rurales et urbaines.


Malgré l’organisation d’émissions télévisées ou radiophoniques, la plupart des personnes interrogées n’avaient entendu parler du cancer du sein que lors de discussions entre proches. La majorité de ces personnes n’avait pas entendu parler du dépistage du cancer du sein, ne savait pas comment le faire, n’avait jamais participé à une séance de dépistage de cancer du sein et ne savait pas faire l’autopalpation du sein. Le niveau de connaissance et le coût des examens de dépistage influait sur le comportement des enquêtés.

CONCLUSION: Bien que des efforts notables de sensibilisation aient été déjà réalisés, améliorer la participation de la population aux actions de prévention en tenant compte de leurs besoins et de leurs suggestions pourrait être d’un apport considérable dans la lutte contre le cancer du sein.

MOTS CLÉS: Cancer du sein, prevention, dépistage, connaissances, attitudes-pratiques

PRIMARY MALIGNANT CHEST WALL TUMOURS: A RETROSPECTIVE STUDY ABOUT 8 CASES IN BLACK AFRICANS

ABSTRACT REFERENCE NUMBER: 264

AUTHOR/S: O Diarra, A Ndiaye, G Ciss, PA Dieng, PS Ba, S Diatta, M Gaye, SA Beye, O Kane, M Ndiaye

AFFILIATION/S: Cardiothoracic and vascular department, Dakar Teaching Hospital of FANN, Dakar, SENEGAL

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Primary malignant chest wall tumours (PMCWT) represent a multidisciplinary therapeutic challenge whose turning point is the surgery.

**OBJECTIVES:** To analyze the manifestations and to evaluate the results in short and medium terms of the surgical treatment of PMCWT.

**PATIENTS AND METHODS:** This retrospective study is related to 8 files of patients operated for PMCWT between 1990 and 2002. The diagnosis was based on a clinical assessment appreciating the general status, a radiological evaluation centred on the CT scan specifying the tumours’ topography and extensions and a preoperative surgical biopsy in order to define the histological types. Surgical resection and parietal reconstruction associated to radiotherapy and/or chemotherapy was used for all patients. The average duration of the follow-up was 68.84 months (6 and 144 months) and the survival rate without recurrence was analysed.

**RESULTS:** There were 5 men and 3 women, with average age of 44.75 years (26 to 70 years). The average time before consulting was 6 months (3 and 18 months). Chest pain and weight lost were the main complaints. There were 6 bony tumours (sternum: 3, rib: 3) and 2 tumours of minor pectoralis muscle. The preoperative surgical biopsy revealed: osteosarcoma (2 cases), solitary plasmocytoma (2 cases), myeloblastoma (1 case), rhabdomyosarcoma (1 case), fibrosarcoma (1 case) and chondrosarcoma (1 case). Wide radical “en-bloc” surgical resection was performed and consisted of 2/3 inferior sternectomy in 3 patients, pectoralis minor resection in 2 and rib resection in 3. Skeletal reconstruction used a myoplasty alone for 7 patients (latissimus dorsi: 1, pectoralis major: 4, rectus abdominis: 1, trapezius: 1) and 1 rib transposition associated to a myoplasty using latissimus dorsi. All the 8 patients underwent radiotherapy and/or chemotherapy before and/or after surgery. Two cases of postoperative suppuration were noted. Three deaths were noted in the 60 months. After an average follow-up time of 68.84 months (6 and 144 months), 5 patients are alive without recurrence, respiratory or parietal sequelae.

**CONCLUSION:** The treatment of the primary malignant chest wall tumours requires a documented preoperative histology. The surgery remains the treatment of choice within a multidisciplinary framework.

**KEY WORDS:** Primary malignant tumours, chest wall, histology, surgery

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**266**

**LA GESTION DU BURN OUT DANS LES SERVICES DE MALADIES INFECTIEUSES ET DE CANCEROLOGIE DU CHU DE TREICHVILLE**

**ABSTRACT REFERENCE NUMBER:** 266

**AUTHOR/S:** Didi-Kouko Coulibaly J, Adoubi I, Assanvo Adou D, Echimane KA

**CORRESPONDENCE:** Didi-Kouko Coulibaly J, didi_coulibaly@yahoo.fr

**OBJECTIFS:** déterminer la prévalence du burn out dans les services ciblés; améliorer sa gestion du burn out en tenant compte des causes identifiées pour chaque service.

**MÉTHODE:** Etude transversale menée dans les services de cancérologie et de maladies infectieuses et tropicales d’Abidjan. La totalité des médecins et infirmier(e)s des 2 services a bénéficié d’un interrogatoire guidé par un questionnaire.
RÉSULTATS: La quasi-totalité des soignants n’avaient aucune connaissance sur le burn-out. Tous présentaient au moins 2 signes du burn out. Les symptômes essentiellement retrouvés étaient l’épuisement émotionnel, une fatigue psychique ou physique d’apparition progressive avec une sensation de détachement vis-à-vis des malades. Le sentiment d’échec personnel était propre à la cancérologie. Les infirmiers des 2 services avaient un niveau d’épuisement professionnel plus important que les médecins. Les médecins présentaient, quelque soit le service, des signes d’épuisement professionnel, avec des causes différentes selon les spécialités. En infectiologie, malgré l’effectif important, la charge de travail était la principale cause. En cancérologie, on relevait principalement l’effectif réduit des médecins, les difficultés d’accessibilité aux médicaments anticancéreux, le sentiment de frustration et d’impuissance. En dehors de quelques moyens de prévention variés utilisés personnellement par chaque soignant, aucune mesure préventive ni thérapeutique n’existe au niveau collectif ou institutionnel.

CONCLUSION: La prévention du burn-out passe par son anticipation, d’où l’importance de favoriser la communication dans l’institution hospitalière, la formation et de pouvoir exprimer ses difficultés et son vécu émotionnel lors de groupes de paroles.

MOTS CLÉS: Burn out, Soignants, Cancer, VIH/sida, Côte d’Ivoire

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PALLIATIVE CARE IN ADVANCED BREAST CANCER

ABSTRACT REFERENCE NUMBER: 267

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Palliative Care is an approach that improves the quality of life of patients and their families facing life-threatening illnesses by providing pain relief and management of other distressing and debilitating symptoms. It aims to meet the medical, physical, psychological, social, emotional, spiritual and any other need that might arise in the family unit at that time. Breast cancer is among the cancers that are curable when detected early, while advanced breast cancer is among cancers that are treatable but not curable. Breast cancer is the most common tumour in Nigeria and approximately 10,000 cases are now diagnosed each year. The World Health Organization estimates that 1.1 million women worldwide are diagnosed with breast cancer annually and about 410,000 women die from this disease. Over 70% of these deaths occur in developing countries including Nigeria where there are limited resources for prevention, diagnosis and treatment. Treatments available for patients with advanced breast cancer include surgery, chemotherapy, radiotherapy, hormonal therapy, and targeted (biological) therapy. Breast cancer at advanced stage not only affect the patient, but the family as a system. In a survey conducted at the Zaria Palliative Care Centre, between January, 2006 to June, 2008. We found that breast cancer affect intimate relationships: Spouses, parents, stepparents, siblings, children, extended relative. Other intimate relationships include friends, colleagues at work, neighbours and the community at large. Out of 90 patients, anxiety and uncertainty affect all relationships. Only 50% have appropriate diagnostic measures.
There were 60% communication challenges. Changes in sexual functioning occur in 65%. Financial strains occur (85%) in majority of the families. Palliative care in advanced breast cancer is meant to relieve the common symptoms and other conditions. These include pain, shortness of breath, management of fungating wound, lymphoedema, psychological and social issues.

268

TOWARDS A GUIDELINE FOR MANAGEMENT OF PROSTATE CANCER IN AFRICA: A WEST-AFRICAN COLLEGE OF SURGEONS INITIATIVE

ABSTRACT REFERENCE NUMBER: 268

AUTHOR/S: Samuel Osaghae (1), George Fowlis (2), Serigne Gueye (3, 4), Olubunmi Olopade-Olaopa (4, 5), Onuora Mbonu (6, 8), Edward Yeboah (7, 8) on behalf of the West African College of Surgeons, WACS prostate cancer guideline panel

AFFILIATION/S: (1) Pilgrim Hospital, Boston, (2) North Middlesex University Hospital, (3) University Cheikh Anta Diop/Hospital General de Grand-Yoff, (4) Pan-African Urological Surgeons Association, (5) University College Hospital, Ibadan, (6) Nnamdi Azikiwe University College of Health Sciences, (7) Korle-bu Teaching Hospital and University of Ghana, (8) West African College of Surgeons

CORRESPONDENCE: Samuel Osaghae: sosaghae@aol.com

OBJECTIVE: A survey of West African Urologists revealed deficits and disparities in approaches to diagnosis and management of prostate cancer, absence of a critical threshold of appropriately educated network of Urologists to achieve effective diagnosis and treatment. This presented a rationale and challenge to develop a guideline.

METHOD: A working document: “Prostate cancer – suggested guideline for diagnosis and management in West Africa” (version 1) was drafted and presented by the author/project leader to open consensus development conference at the West African College of Surgeons, WACS meeting in Freetown, Sierra Leone (February 2008). It was adopted as “consensus statement” by the attendees albeit to be further critically reviewed by a core group of WACS Urologists (thought leaders). Following receipt of feedbacks, version 2 of the draft guideline was passed on to a panel of external reviewers. Subsequent feedbacks/reviews were progressively incorporated into a version 3 draft guideline. The final draft was presented at the WACS meeting in Conakry, Guinea (February 2009) and passed on to the council of WACS, for institutional approval, dissemination for use across West-Africa.

RESULTS: The WACS guideline is a policy document which sets out vision, benchmark and issues to consider in strategic planning. Guidance on screening, diagnosis, staging/grading, management, patient education/follow-up, data collection, audit/research, prostate cancer registry, Urologist CME and economics of management are presented.

CONCLUSIONS: It is a level 4 document predicated on the expertise and collective opinion of WACS Urologists. The key question addressed is how prostate cancer should be diagnosed and treated in West-Africa. The target population are indigenous West African men. It should serve as a driver for best practise in order to improve outcomes in WA.
AN OVERVIEW OF CONSULTATIONS AT THE UNIT OF SURGICAL ONCOLOGY, TEACHING HOSPITAL OF DONKA

ABSTRACT REFERENCE NUMBER: 269

AUTHOR/S: Traore B (1), Dassy E (1), Bilivogui K (1), Keita M (1), Sow MS (1), Sylla A (2), Koulibaly M (2)

AFFILIATION/S: (1) Unit of Chirurgical Oncology, (2) Laboratory of Pathologic Anatomy, Teaching Hospital of Donka

CORRESPONDENCE: Traore B: ucodonka@gmail.com

OBJECTIVES: The authors intend to describe the frequency, the clinical and therapeutic patterns of malignant tumours encountered at the Unit of Surgical Oncology of Donka.

MATERIALS AND METHOD: This prospective and descriptive study consisted in a registration of cases of malignant tumours during consultations from May 17th 2006 to December 31st 2008. All patients had a clinical check-up. In the absence of any histopathology, the diagnosis of malignant tumour was stated on the basis of clinical and radiological arguments. The evaluation enabled to classify each patient before suggesting a therapeutic strategy.

RESULTS: In 18 months of activity, we have registered 405 malignant tumours on 612 consultations (66.2%). The rate of confirmation at this present date is 47.2%. We listed 162 men for 243 women. The average age was 44.0 year-old with 10.6% of children. Per order of frequency in both sex, breast cancers were on top with 110 cases (27.2%), followed by liver tumours: 55 cases (13.6%), lymphomas: 33 cases (8.1%), soft tissues: 32 cases (7.9%) and the uterine cervix: 23 cases (5.7%). 98.5% of cases were diagnosed at stages of metastatic and locoregional involvement. Patients treated or under treatment are 90 cases (22.4%) in number. Methods of treatment were essentially surgical in 29 cases (7.2%) and chemotherapeutic in 81 cases (20.2%). Overall survival is 73% after a median follow-up of 3.7 months.

CONCLUSION: The advanced stages on diagnosis and the low rates of treatment of patients in this series should entice to a sensitization of populations and health professionals for an early diagnosis of cancers in a difficult context of practice.

KEY WORDS: Malignant tumours, treatment

ASSESSING THE RISK FACTORS FOR BREAST CANCER AND PREDICTING FACTORS FOR THE PRACTICE OF BREAST EXAMINATIONS

ABSTRACT REFERENCE NUMBER: 270

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OBJECTIVE: In Nigeria breast cancer is the most common cancer among women in majority of the regions. Late presentation has also been reported for over a decade. This study assessed the risk factors for breast cancer and predicting factors for the practice of breast examinations. The findings will be of help in enhancing early detection of the disease and reducing mortality from the disease.

METHODS: Utilizing a multi-stage sampling method 386 women were selected at Akniyele Local government area of Ibadan. Data was collected with questionnaire. The risk factor was evaluated from the age of respondent, age at menarche, and at first pregnancy, number of previous pregnancies, age at menopause, total number of months of breastfeeding and family history. Seven demographic factors, risk factors plus four covariates: knowledge of BSE/CBE, knowledge of the cause of, symptoms and signs of and treatment of breast cancer, were regressed against two dependent variables of practice of BSE and CBE using linear regression and binary logistic analyses.

RESULTS: The mean age of respondents was 37.3 (13.1) years. They were of low educational status and were mostly traders and married. Most of the women, 84.2%, had low risk for breast cancer. Four significant predictors: marital status (p=0.004), educational status (p=0.018), knowledge of treatment of breast cancer (p=0.029) and of BSE/CBE (p=0.000) were related to practice of BSE while educational status was the only significant predictor of CBE.

CONCLUSIONS: The findings are useful for planning interventional studies to enhance early detection in a low resource country.

KEY WORDS: breast cancer, risk factors, breast self examination, clinical breast examination

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ALTERATION OF THE INNATE IMMUNE REGULATION BY HUMAN PAPILLOMAVIRUS AND EPSTEIN-BARR VIRUS IN VIRAL PERSISTENCE AND CARCINOGENESIS

ABSTRACT REFERENCE NUMBER: 273

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About 15-20% of human cancers worldwide are attributed to infections agents and oncogenic viruses play a major role. Those viruses include human papillomavirus responsible for cervical cancer and other anogenital cancers, hepatitis viruses and hepatocellular carcinoma, and Epstein-Barr virus (EBV) associated with lymphoma, Hodgkin disease and gastric cancer. In addition to their ability to transform cells, the oncogenic viruses have the properties to persist in their hosts in chronic manner by escaping the control of the immune system, condition required for cancer development. Innate immunity plays a crucial role in orchestrating the machinery of the immune system for a proper and efficient control of infection. This process takes place through the activation of the toll like receptor signalling (TLRs) induced by products derived from infectious agents.
We show in this study that oncoproteins E6E7 of HPV16, a causal agent of cervical cancer, as well as the oncoprotein LMP1 of EBV inhibit the activation of TLR9. This negative regulation requires the activation of the transcription factor NF-kB. The study highlights a new mechanism by which HPV, EBV and potentially others oncogenic viruses persist and escape the control of the immune system by down regulating TLRs. Thus evading the immune control is important in virus-induced cancer development. Our findings open an avenue for development of preventive and therapeutic strategies in the control of virus-induced cancers.

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CORRUPTING CELLULAR SIGNALIZATION PATHWAYS IN VIRUS-INDUCED CELLULAR TRANSFORMATION: ROLE OF THE TUMOUR SUPPRESSOR DOK1

ABSTRACT REFERENCE NUMBER: 274

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Oncogenic viruses induce cancer in susceptible hosts by altering normal cellular signalling pathways. The process is accomplished mainly by their oncoproteins which can amplify signalling leading to cellular proliferation and/or down regulating pathways that control cellular growth or apoptosis. Activation of NF-kB signalling plays an important role in cell survival, cell proliferation and immune response. In many human cancers, NF-kB has been found to be constitutively activated. Viral oncoproteins such LMP1 from EBV or HPVE6E7 activate NF-kB to induce cellular immortalization and transformation. Dok1 is tumour suppressor which negative regulates cell proliferation and its signalling is altered in human cancers. We show in this study that the signalling of tumour suppressor Dok1 could be a target of LMP1 and E6E7 in the process of virus-induced human carcinogenesis. We also that Dok1 is a new marker of human cancers induced by viruses or not and elucidating its signalling could be useful in cancer control and management.

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FRÉQUENCE DU CARCINOME ADÉNOÏDE KYSTIQUE PARMI LES TUMEURS MALIGNE DES GLANDES SALIVAIRES DIAGNOSTIQUÉES AU CHU DE YAOUNDÉ AU COURS DES 20 DERNIÈRES ANNÉES

ABSTRACT REFERENCE NUMBER: 275

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**OBJECTIF:** A la base des subtilités morphologiques, de l'imagerie médicale, et à travers une revue des données de la littérature, une analyse des cas de tumeurs malignes des glandes salivaires diagnostiquées au CHU de Yaoundé est présentée afin de déterminer la fréquence du carcinome adénoïde kystique dans nos régions.

**MÉTHODES:** Il s’agissait d’une étude rétrospective couvrant la période comprise entre 1989 et 2009. Période au cours de laquelle quatre vingt trois documents histologiques et cytologiques portant le diagnostic de tumeur maligne ont été retrouvés et réexaminés, le diagnostic de carcinome adénoïde kystique reprécisé et sa fréquence calculée par rapport aux autres cancers.

**RESULTATS:** Les carcinomes adénoïdes kystiques représentaient 4 cas de néoplasmes, soit 4,82% par rapport au 57 cas (68,67%) de tumeurs épithéliales rencontrées; le reste des tumeurs, soit 26 cas (31,33%) représentaient les tumeurs non épithéliales. Les femmes étaient plus touchées (3/1). L’âge moyen d’apparition de ces tumeurs était de 58 ans. Le siège principal était la parotide avec atteinte de la mandibule. Dans tous ces cas, le tableau clinique évoquait manifestement la malignité. Un bilan d’extension mettait en évidence un soufflement de la mandibule et des métastases pulmonaires.

**CONCLUSIONS:** Les carcinomes adénoïdes kystiques des glandes salivaires sont des tumeurs rares mais très agressives. D’où la nécessité d’une prise en charge pluridisciplinaire de toutes les lésions rencontrées dans les régions anatomiques concernées par cette tumeur.

**MOTS CLES:** Parotide, carcinoma, adénoïde, kystique

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**276**

**PRELIMINARY ASSESSMENT OF A MULTIPLEX REAL-TIME PCR ASSAY FOR THE QUANTITATION OF BCR-ABL1 IN CHRONIC MYELOID LEUKAEMIA**

**ABSTRACT REFERENCE NUMBER:** 276

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**INTRODUCTION:** The BCR-ABL1 fusion-gene is the hallmark of CML and Ph+ ALL. Cytogenetics, FISH and polymerase chain reaction (PCR) are used for diagnosis and minimal residual disease (MRD) monitoring of these leukaemias, with the gold-standard being real-time PCR (RQ-PCR). The standard method quantifies BCR-ABL1 and a control gene (ABL1) in two separate reactions, which are then expressed as a percentage ratio. This can mean high inter-run variation (up to 27%) and is costly in terms of consumables and time. We optimized a multiplex RQ-PCR, in which both gene transcripts are co-amplified in a single reaction and evaluated efficiency and cost effectiveness.
**METHODS:** Dual-labelled probe-primer sets for BCR-ABL1 and ABL1 were adapted from the in-house standards to enable multiplex RQ-PCR. 120 samples were analyzed in parallel, using multiplex and singleplex RQ-PCR. The reproducibility, quantifiable range and inter-run variation were measured. A basic cost-analysis was also performed on a per-sample basis.

**RESULTS:** The standard curves generated by both methods showed no significant difference: slope -3.20 to -3.60; R² > 0.99, Y-intercept ≤40, Rn plateau = 1; delta Ct of triplicates < 1.0. BCR-ABL1/ABL ratios of 22 samples measured in triplicates for 3 consecutive days showed no significant difference (P = 0.17), and the quantifiable range was same for both methods. The 120 samples showed no significant difference between both methods (P = 0.34). Inter-run variation was lower in multiplex compared to singleplex (11% vs. 27%). The cost-analysis projected that the multiplex methodology will reduce total assay costs by 50%.

**CONCLUSION:** The multiplex RQ-PCR assay is a cost-effective, flexible, high throughput platform, retaining the quality assurance parameters of singleplex. Inter-run variation was reduced, and the lower cost will enable newer laboratories to perform MRD monitoring for BCR-ABL1 positive leukaemias.

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**HPV INFECTION AND EGFR ACTIVATION/ALTERATION IN THE DEVELOPMENT OF CONJUNCTIVAL CANCER AMONG HIV-INFECTED PATIENTS IN EAST AFRICA**

**ABSTRACT REFERENCE NUMBER:** 277

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**OBJECTIVE:** To prove our hypothesis that conjunctival squamous cell carcinoma, an AIDS-associated malignancy in equatorial Africa, harbors human papillomavirus DNA and is associated with activation of the EGFR signalling cascade. Positive findings would identify etiologic causes and provide clinical guidance to improve treatment.

**METHODS:** Expression of p-MAPK/MAPK, p-Akt/Akt and p-EGFR/EGFR in cell nucleus and cytoplasm of FFPE specimens were assessed by immunohistochemistry; viral DNA of high-risk HPV types (16, 18, 52 and 59) were detected by TaqMan qPCR assay; EGFR mutation was performed by DNA sequencing analysis; and EGFR mRNA expression was measured using real-time RQ PCR. Two-sided statistical analyses included Fisher exact test or chi-square test, Spearman correlation coefficient, ANOVA and SAS.

**RESULTS:** HPV 18 was found in 61% of samples, with HPV 16 double-genotype in 6 patients. Immunohistochemistry and real-time qPCR results suggest that activation and expression of the EGFR
signalling pathway is related to disease progression of conjunctival cancer. Nuclear p-EGFR appeared only in invasive cancers. A missense mutation in one patient and a SNP in 10 of the 38 examined samples were found within EGFR tyrosine kinase domain. Patients with EGFR expression more likely harbor EGFR mutations, compared to those without.

**CONCLUSIONS:** HPV types 16/18 infection is frequent in East African patients with AIDS-associated conjunctival squamous cell carcinoma. EGFR activation/mutation may contribute to and sustain the high prevalence of this cancer. Our findings hint that adoption of HPV vaccination strategies may impact the incidence of conjunctival carcinoma. Agents that target the EGFR pathway may have potential therapeutic benefit. (Supported in part by NIH grant nos. CA121947, CA70081, CA43703.)
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HISTOPATHOLOGICAL AND HISTOCHEMICAL PATTERNS OF SOFT TISSUE SARCOMAS IN ILORIN, NIGERIA

ABSTRACT REFERENCE NUMBER: 282

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OBJECTIVES: Soft tissue sarcomas are among the most difficult cancers to diagnosed, especially in the developing countries where modern diagnostic facilities are not available. Many centers still rely on Hematoxylin & Eosin (H & E) sections for diagnosis. This retrospective study was undertaken using special stains to clearly demonstrate pathognomonic features of sarcomas to aid histopathological diagnosis where immunohistochemistry and other modern techniques are unavailable.

MATERIALS AND METHODS: The materials for this study were made up of all the cases of soft tissue sarcomas reported in the Department of Pathology, University of Ilorin Teaching Hospital (UITH), Ilorin, from January 1979 to December 1996. The various histopathological diagnoses were reviewed from the request forms, duplicate copies of reports and slides. Lesions wherein sufficient features were present for histopathological diagnosis from H & E stains were diagnosed and classified accordingly. In others, histochemical studies were done for further characterization and classification. These histochemical studies included reticulin for fibrosarcoma, phosphotungstic acid hematoxylin (PTAH) for rhabdomyosarcoma and periodic acid Schiff (PAS) for alveolar soft part sarcoma.

RESULTS: A total of 148 cases of soft tissue sarcomas were found. Eighty four (56.8%) occurred in males while 64 (43.2%) occurred in females giving a male to female ratio of 1.3:1. The five commonest sarcomas in decreasing order are: fibrosarcoma 49 (33.1%), rhabdomyosarcoma 28 (19%) liposarcoma 20 (13.5%), Kaposi’s sarcoma 12 (8.1%), angiosarcoma 11 (7.4%). Initially, 13 cases were reported as poorly differentiated soft tissue sarcomas. The panel of histochemical techniques revealed sufficient features of rhabdomyosarcoma in 2 and alveolar soft part sarcoma in 1 of the 13 cases, thereby bringing the number of poorly differentiated soft tissue sarcomas to 10.

CONCLUSION: Diagnosis of soft tissue sarcomas using light microscopy with H & E sections has become grossly inadequate at this modern time. Histochemical studies (using special stains), should be encouraged and established, while the poorly differentiated sarcomas should be referred to advance centers for immunohistochemical and/or cytogenetic studies.

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CLINICOPATHOLOGICAL STUDY OF HEAD AND NECK CANCERS IN ILORIN, NIGERIA

ABSTRACT REFERENCE NUMBER: 283

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OBJECTIVES: Head and neck cancers are associated with high morbidity because there is interference with vital functions of life such as breathing, swallowing, speech, hearing, vision, taste and smell. This clinicopathological study was done to evaluate the site of primary lesions, distribution patterns and histopathological types of head and neck cancers in Ilorin, in the North Central geopolitical zone of Nigeria.

PATIENTS AND METHODS: The patients in this study were seen at the Ear, Nose and Throat (ENT) clinic of the University of Ilorin Teaching Hospital (UITH), Ilorin with complaints of mass(es) in the head and neck region during a 5-year period (January 1997 to December 2001). Depending on the site, biopsy specimens were obtained by excisional, incisional, curettage or punch biopsies. The biopsies were processed and histopathological diagnosis made in the Department of Pathology of the same hospital.

RESULTS: There were a total of 89 patients. Forty four (49.44%) were males while 45 (50.56%) were females giving a male to female ratio of 1:1.02. Of the 89 patients, 63 (70.8%) had carcinoma, 18 (20.2%) had lymphoma and 8 (9.0%) had blastoma. The most common site of primary lesion for carcinoma was nose/paranasal sinuses 16 (18%). Other common sites included thyroid gland 11 (12.4%), nasopharynx 10 (11.3%), larynx 4 (4.5%) and hypopharynx 3 (3.4%). Cervical lymphadenopathy with undetermined primary lesion sites occurred in 9 (10.1%) of the patients. The commonest carcinoma was squamous cell carcinoma, the commonest lymphoma was Non-Hodgkin’s lymphoma (NHL) while the commonest blastoma was retinoblastoma.

CONCLUSIONS: Most head and neck cancers in this study were of epithelial origin and the commonest histological type was squamous cell carcinoma. Cancers of the head and neck occurred in younger age groups among Black Africans compared to Caucasians. Apart from late presentation and diagnosis, there are logistic difficulties for radiotherapy and chemotherapy. These factors account for the poor prognosis which is usually found in patients from developing countries.

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PRACTICALITIES OF CANCER REGISTRATION IN THE RURAL AFRICAN SETTING

ABSTRACT REFERENCE NUMBER: 286

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INTRODUCTION: A population based cancer register in the former Transkei region of South Africa monitors the incidence of cancer among a rural population living in this region.
METHOD: Both active and passive methods are used for case finding, through collaborations with 19 health facilities: 11 district hospitals, 7 referral hospitals and one regional laboratory. Age specific rates are calculated relative to population data from the 2001 census.

RESULTS: A total of 2,829 new cancer cases were reported for the period 1998-2002. Of these, 52.3% cancer sites were histologically confirmed whereas 47.6% were clinically diagnosed. The age standardized rates for all cancers were 72.8 per 100,000 in males and 59.1 per 100,000 in females for 1998-2002. The leading top five cancers for males were oesophagus, lung, prostate, liver and larynx whereas for females were cervix, oesophagus, breast, ovary and liver.

CONCLUSION: Cancer registration in economically under-developed populations such as Africa is a difficult and challenging undertaking for a variety of reasons. These include ensuring that every new case is identified due to communication difficulties, absence of screening programmes especially in rural communities, Africans still believe strongly in traditional medicine and only seek for allopathic health care as a last resort, usual place of residence because people move from place to place seeking for employment, lack of trained personnel, limited resources and double burden of disease with communicable diseases including HIV and AIDS presenting a greater challenge to minimum health budgets. Another challenge is the availability of reliable population figures for calculating rates.

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CLINICAL AUDIT FOR THE BEST PRACTICE IN FACILITY AND COMMUNITY HOME BASED PALLIATIVE CARE MODEL IN ZOMBA DISTRICT, A CASE OF PALLIATIVE CARE UNIT (PCU) ST LUKE’S MISSION HOSPITAL, MALOSA, ZOMBA, MALAWI: FOUR YEARS EXPERIENCE (JUNE 2004-JUNE 2008)

ABSTRACT REFERENCE NUMBER: 287

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BACKGROUND: Palliative care unit was established in 2004 with several objectives and mission. In the past four years it has registered over 1071 patients on holistic Palliative care, trained over 56 staffs (nurses, clinicians and 29 palliative care volunteers in the community). It was registered by Palliative care association of Malawi (PACAM) in 2005. It is the first institution in Malawi that held first national events on world hospice and palliative care day in October 2005. In collaboration with PACAM it has organized three (3) introductory courses in Palliative care since 2004 funded by various donors i.e. VSO Malawi, PCI and Help the Hospice (HtH) UK. In the past four years, PCU has been a key player and PACAM chief supporter spearheading palliative care services in Malawi, Zomba district in particular. Mainly two model of care are practiced at PCU (hospital based and Community home based).

OBJECTIVE OF THE STUDY: Mainly three specific objectives; to evaluate demographic characteristics of our patients, care outcome and quality of palliative care services.

STANDARD MEASURES: Holistic patients care approach to physical, social, psychosocial and spiritual care must be rendered to all patients registered to receive palliative care and use of oral morphine to control chronic pain as compressive or minimal package.

METHODOLOGY USED: Retrospective survey of patients case files, PCU admission from registers, DDA morphine registers and other relevant patients data.
RESULT: a/. Demographic characteristics: Out of 1071 (100%) patients registered in 4 years, 749 (71) were female, 321 (29%) male of which 890 (83%) received palliative care at home based model and remaining 181 (17%) received palliative care in the hospital day care and in the wards. The portion of them 75 (7%) were confirmed to have good death however huge numbers 721 (67.3%) were lost to follow up in four years and due to distance to follow-up outside the district. 

b/. Care and support outcome measure: All registered clients at PCU received holistic care and over 40 liters of oral liquid morphine was dispensed in 4 years (average of 373.3 mls /pt/year) and NO report on addiction only minor side effects reported in few patient. 

c/. Quality of palliative care services: Some modest report from family members interviewed by pain study Tukiko et al (2005) in Zomba study revealed 63.6% higher appreciation for the care given and well controlled pain/satisfactorily in many cases which was a key issues to some guardian. However the surprise was in Zomba district over 60% of nurses and clinician did not know the use of analgesic ladder reported in similar pain study. 

DISCUSSION: WHO (1996) recommended use of oral morphine as strong opioids of control chronic pain as analgesic ladder dictate safe used by the clock, patients, dose and at right time. Since over 80% of cancer and HIV AND AIDS patients will experience pain in the life journey, provision of holistic care at home were most of these patients are is significant approach. This approach is cost effective, for both patient and family at the same time it reduces social, psychological and spiritual concerns/burden that patient may face else were which in turn may increases pain threshold.

RECOMMENDATIONS: Universal access and availability of oral morphine in community home based care(CHBC) is vital, use of dual model to deliver our services were majority of patient are should not be over emphasized and retraining of service providers (hospital and community) in a coordinated fashion is paramount spear head the quality care in CHBC vehicle.

CONCLUSION: Empower faith based/community organization (FBO/CBO) and local health facility to work in partnership DHO and CHAM facilities. Incorporate palliative care in day care OPD clinic, wards department and existing HBC. Consider use full training, resources, coordination, supervision, and sustainability as key factors to good practice. Morphine consumption of 373.3.ms/pt/year in average is low in this Cohort study and not acceptable by WHO recommendations of (1986) pain experts committee.
strengthening Community based organizations (CBO) or faith based organizations (FBO), extent of sustainability, unmet need/wish list and standard measure for organization capacity required by service Providers, actors. Are the service rendered effective and efficiency to the beneficiaries.

METHODS: Crosssectional quantitative design to CHBPC Service Providers (volunteers and HCW’s) and Qualitative study design by focus group discussion (FGD’S) and in-depth interview (IDI’S) to community based organization/faith based organizations (CBO/FBO’S) actors, Managers and supervisors.

RESULT: Over 80% (n= 40) questionnaire returned completed out of planed 100% (n=50) of which demography data of the respondents was 100% (n=21) were health workers questionnaire and 100 % (n=19) volunteers. All interviews planed were 100% (n=12) only 75% (n=9) done. Of interviews conducted 100% (n=5) were IDI’S for patients and guardians and 60% (n =3) were supervisors. Qualitative Interviews revealed from key informants (coded opinions and views) said that, the CBO services are of poor quality because of poor financial support. As such it is neglect because it lacks all necessary ingredients such as financial support, coordination, Inadequate, monitoring evaluation and reporting (MER), inappropriate training to HCW’S and lack of CHBC kits and medical suppliers in nutshell no holistic palliative care practiced in the ground yet it remain in the books and policy guidelines. Quantitative data 91% respondents disagreed with current quality of CBO and FBO services while 80% support the CBO/FBO care but they said Government should support them financially and materially to strengthens their services delivery and capacity. Furthermore up to 84.2% of volunteers lamented that owners of CBO’S/FBO should stop practicing selfishness by accumulating self benefits before patients (PLWAH/PLWC) or sole beneficiaries of the program. More still they emphasized that care should entail both patients and family members as whole, failure which it is neglect.

CONCLUSION: Current state of affairs for CHBC Services in Malawi is a neglect of Care due to low quality system of service. There is inefficiency of care and support and extreme lacks effectiveness to beneficiaries. This was noticed in a large scale of standards measures.

RECOMMENDATION: Holistic community home based palliative care is needed as a must do in a quality care and support for HIV/AIDS patients. Malawi can’t do a way without this model in the era of HIV pandemic. Policy and guidelines in books must be translated to implementations for effectiveness. A follow up descriptive study in future is strongly recommended in this regard.

KEY WORDS: Community home based care, palliative care, Home based care, HIV/AIDS, CBO, FBO, Malawi

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MORPHINE: PROCUREMENT AND USE IN AFRICA TODAY

ABSTRACT REFERENCE NUMBER: 289

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For palliative care to be successful in bringing the patient and family to peace during severe illness and at the end of life, severe pain must be controlled. Palliative care has moved more rapidly through the countries in Africa that have adopted the formula for oral affordable morphine and allowed the
importation of morphine powder for reconstitution in their countries in parallel with the training of the health professionals who will prescribe it. However it is still only reaching a small percentage of those in need of pain control. This is due to controls from Governments affecting the sites of reconstitution. Morphine should be reconstituted in the pharmacy nearest to the patient. This is being held back by Governments and those (even doctors and health professionals) who do not understand the affects their decisions are making on the individual patients suffering. This paper looks at the needs in some of the countries that have affordable morphine already available and ways that they can extend provision of morphine to all in need.

There is need for intensive advocacy to be brought to Governments, senior health professionals and to pharmacists at undergraduate and post graduate levels so that wherever there is a pharmacist, and a team trained to prescribe, morphine can be produced following legal guidelines.

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MORPHINE AND GOVERNMENTS

ABSTRACT REFERENCE NUMBER: 290

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It is a primary responsibility of any government to ensure that its people access pain relief because this is a Human Right. Governments are signatories to various International Conventions including that which deals with Narcotic Drugs as amended by the 1972 Protocol. This International Convention is overseen and supervised by the International Narcotic Control Board (UNCB) with its headquarters in Vienna, Austria. After signing this Convention, a national government is supposed to promulgate a law which operationalise the use of narcotic drugs and is supposed to ensure that these medicines are made available for medical use and research and at the same time ensure that they are not abused or diverted. It is through such laws that production, manufacture, distribution and use is controlled. All handlers of these narcotics are registered so that they are known to a Competent Authority.

Introduction of Palliative Care into a country follows the 4-WHO Foundation Measures as pronounced by the World Health Organization. Among these measures is the assurance that Morphine- the most powerful Opioid shall be made available for treatment of moderate to severe pain. When you look at the consumption of morphine as published by the Pain and Policy Studies Group (PPSG) at the WHO Collaborating Center, University of Wisconsin, USA one is amazed by the lack of equity in distribution and use of morphine in Africa! The paper will discuss in some detail lack of balance and the reasons leading to this. It will discuss the international regulations, the barriers and suggest solutions. It will point out the responsibilities of governments. Finally the paper will point out challenges and draw conclusions.
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WORKING TOGETHER IN RESOURCE-POOR CONDITIONS: MEETING NEEDS

ABSTRACT REFERENCE NUMBER: 291

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INTRODUCTION: In rural Africa, it is critical to access each and every resource that might be available. Good relationships are the only sound foundation for building a network of community partners. Delivering Palliative Care to those who most need it, especially in rural, hard-to-reach settings, requires flexibility, creativity and patience.

METHODS AND RESULTS: The example of the CHAT Program of the Evangelical Lutheran Church in Tanzania highlights what might be necessary for people living with terminal cancer to access palliative care when living in such remote places. Specific examples include: leveraging HIV funds to reach those with any cancer; using the palliative care, holistic approach as the paradigm for any good Home Based Care; finding local solutions for food security and intra-structure requirements for care of children; brokering of international, national, and local partnerships for program resources, credibility, and sustainability; maximizing the use of existing networks as provided by other NGOs, donors, church, and Government. Most of the CHAT sites also operate without oral morphine, presenting unique challenges in delivering quality care, yet also reflecting the reality of much of Africa. Qualitative data on Pain Control will be shared.

CONCLUSION: Partnering with large donors and government is a big challenge, but can bring huge dividends to local communities if wise and patient collaboration and complementing of various local strengths can be done. This includes quality care for cancer patients in the rural villages.

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THE IMPACT OF HIV ON CHILDHOOD CANCER: KAPOSI’S SARCOMA

ABSTRACT REFERENCE NUMBER: 292

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INTRODUCTION: The WHO estimates 3.5 million children are living with HIV infection in sub-Saharan Africa (SSA). Initial estimates of HIV-related malignancies (HRM) suggested an incidence of 2% with NHL
being the predominant cancer in the West. Experience in SSA suggests that Kaposi Sarcoma (KS) is significant and may represent half the cases of HRM. This study was done to determine the burden of KS in children in SSA and outcomes over the last 10 years.

**MATERIALS AND METHODS:** The NLM PubMed database was queried using: “Kaposi sarcoma” with limits of “all child”, “English”, and “published in the last 10 years”. Each abstract was reviewed to determine if the study was relevant to SSA. Papers using registry data from the US and other Western settings were excluded. Biological studies were included. Articles were then reviewed for epidemiology of KS, methods of diagnosis & treatment of KS and outcomes.

**RESULTS:** The search resulted in 312 articles of which only 48 articles were specific to the SSA setting. HHV-8 transmission appears to be both sexual & non-sexual in the African setting with vertical transmission being most likely the cause of primary infection in children. KS is the most frequent HRM in SSA. Pathologic diagnosis is feasible & preferred as childhood KS is often lymphadenopathic or systemic rather than cutaneous. Treatment of childhood KS in SSA has not been systematically published.

**CONCLUSIONS:** Childhood KS represents a major challenge in SSA. Future studies need to focus on treatment and outcomes in SSA.

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**AIDS-RELATED LYMPHOMAS IN AFRICA**

**ABSTRACT REFERENCE NUMBER:** 293

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The HIV/AIDS burden is heaviest in Africa where rates range from 26.1% in Swaziland to < 1% in Somalia and Senegal. HIV infection increases the risk of developing non-Hodgkin’s lymphoma (NHL) a hundred-fold. 95% of these are of high-grade B-cell variety, 80% being diffuse large B-cell and 20% Burkitt’s lymphomas, according to Western data. No such data exist in Africa.

Primary central nervous system lymphoma constitutes 20%, and has extremely poor prognosis. Systemic HIV-NHL constitutes about 80%. Curing aggressive phenotype NHLs with conventional chemotherapy needs intensive combination protocols, and anything less is basically palliative. 50% - 80% complete remission (CR) rates are realised and 30% - 60% are possibly cured.

In HIV-NHL before the era of highly active antiretroviral therapy (HAART), CR rates were 33% - 62% and 25% of the cases relapsed within 6 months. Median survival was 4 – 8 months. Half of the patients died of lymphoma, the other half of opportunistic infections. Treatment approaches to try and improve outcome adopted protocols with: (i) reduced doses of chemotherapeutic agents, (ii) standard doses, (iii) infusional chemotherapy with growth factor support. Results were not significantly different. Today concurrent HAART with standard aggressive chemotherapy is reported to be more beneficial though there are also contradicting reports, like a recent publication on low dose oral chemotherapy in the Journal of Clinical Oncology. Virtually all practicing oncologists in Africa treat HIV-NHL with standard combination protocols where possible, with or without rituximab, according to our survey. In another study in which standard combination protocols were used with HAART, we found CR rate of 21.9%
among HIV-NHL cases and 75% among non-HIV cases. Treatment-related death rate was 15.6% among HIV cases and none among non-HIV cases. Median survival was 6 months among HIV cases and 19 months for non-HIV cases.

**CONCLUSION:** Treating HIV-NHL in Africa is a challenge, though blanket adoption of purely palliative approaches is unacceptable.

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**CANCER REGISTRIES AND RESEARCH**

**ABSTRACT REFERENCE NUMBER:** 294

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Historically Population Based Cancer Registries (PBCR) are involved in collection of demographic and cancer date on patients diagnosed with cancer in a defined population or geographical region. In so doing PBCR generates site – specific incidence and mortality/survival rates. Using information such as sex, residence and ethnicity from registries can examine difference in the incidence or survival for cancer according to other variables and cancer registries act as tools for hypothesis generation.

However, now cancer registries have developed far beyond hypothesis generation and are becoming more involved in research on cause and prevention of cancer. In ecological study designs PBCR are acting as major resources of incidence data.

Cancer registries have also been extensively used in cohort studies to detect occurrence of new case of cancers. In most cases this involves linkage of pre-existing database with the cancer registry. An example is study of spectrum of cancer among HIV infected person in Africa in which there was an increased risk of a few non-AIDS defining cancers (Mbulaiteye et al 2006). Similarly registry data base was used in cohort study to determine the risk of second cancer to detect commonality of risk factors or the adverse effect of treatment (Travis 2007).

Despite the debate on the merit of registry data as a measure of variation in individual risk, linkage of cancer registry data and pre-existing data has been extended further on individual level. This is well exemplified by twin studies on cancer risk in offspring of cancer patients (Braun et al, 1995) and finding of no excess cancer risk in parents to childhood cancer patients (Olsen et al, 1995).

Other possible areas of research in future for the registries will include gene-environment interaction and familial aggregation of cancer.

RADIATION FOR TREATMENT OF CERVICAL CANCER: STATE OF THE ART

ABSTRACT REFERENCE NUMBER: 295

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Radiation treatment constitutes the most important and vital component of curative treatment of advanced cervical cancer. Optimized treatment includes both external beam pelvic irradiation (EBRT) and brachytherapy (BT). The biggest achievement in improving cure rates over those associated with radiation alone was determined a decade ago when concurrent chemotherapy was systematically identified to decrease failure rates by 40% and contribute a modest 7% improvement in survival. The magnitude of benefit appears to decline as stage advances. Recent data from a meta analysis has elucidated that benefits are not confined specifically to cisplatin alone; other agents such as 5FU are beneficial. A recent phase III international study appears to confirm additional benefits from Gemcitabine used concurrently with EBRT and cisplatin and as adjuvant treatment after radiation.

The introduction of intensity modulated radiation treatment (IMRT) contributes significantly to decreased dose to organs at risk for toxicity but no good outcomes data are available to confirm that grade 3/4 complications are reduced with this strategy. In addition, brachytherapy techniques are being modified from standard prescriptions to conventional point A, to that of image guided brachytherapy often to smaller defined target volumes.

Data will be shown and examples given to illustrate improvements in therapeutic ratio with the implementation of “state of the art” radiation and concurrent and adjuvant chemotherapy.

THE ROLE OF RADIOTHERAPY IN THE MANAGEMENT OF GYNECOLOGIC CANCERS

ABSTRACT REFERENCE NUMBER: 296

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Radiotherapy remains the mainstay of treatment for advanced cervical, vaginal and vulva cancers. Patient data from relevant clinical trials will demonstrate outcomes. While surgery plays a pivotal role in
the management of uterine cancers and early cancers of the aforementioned organs, access to radiotherapy is critical for both curative and palliative treatment of most gynecologic malignancies. Given the resource limitations for access to protracted courses of external beam irradiation in Africa, and in other developing regions collaborative international research into the optimal utilization of available radiation resources in constrained environments is necessary. Limited data in cervical cancer from India suggests that even hypofractionated pelvic irradiation, consuming fewer resources than 5 week daily fractionation schemes may result in significant cure rates for patients with advanced disease. Substantial cure rates are also achievable with simple and less expensive techniques using $^{60}$Co as opposed to costly and complex techniques using linear accelerators. The US National Cancer Institute and the International Gynecologic Cancer Society (IGCS) are seeking ways of disseminating education and doing relevant clinical trials to optimize the use of radio therapy for cervical cancer in resource constrained environments.

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PALLIATIVE CARE WHERE THERE IS NO ONCOLOGY

ABSTRACT REFERENCE NUMBER: 297

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INTRODUCTION: Malawi is a densely populated country in sub-Saharan Africa, critically affected by the combined effect of HIV/AIDS and poverty. There is no radiotherapy services and only paediatric chemotherapy unit for treatment of cancer patients. This paediatric oncology service at Queen Elizabeth Central Hospital is the only dedicated cancer service in the country. Adult chemotherapy, when available, is prohibitively expensive. PACAM was set up in September 2005 in order to coordinate a national effort for scaling up palliative care in Malawi. PACAM mission is to support, develop and promote affordable and culturally appropriate palliative care in Malawi.

METHOD AND MATERIALS: PACAM works in collaboration with the Ministry of health and was involved in all palliative care developments including training and national supervision. As a national association it receives reports of palliative care activities from implementing stakeholders then PACAM compiles annual reports.

RESULTS: In 2006 the Ministry of Health collaborated with PACAM produced a palliative care training manual for health professionals. Currently 700 health professional have undergone a 5 days palliative care course and 10 have completed advanced post graduate Diploma in Palliative care with Hospice Africa and Nairobi Hospice. Over 15 health institutions in Malawi have integrated palliative care into their existing services. Drugs such as Morphine Tablets is available in most hospitals and Liquid Oral Morphine is available in few selected sites.

CONCLUSION: The WHO had stated in 1986, that chemotherapy and radiotherapy would not be available to the majority of patients suffering from cancer in the developing world, for several generations because of the cost. They therefore stressed the necessity of bringing pain and symptom relief to these patients by the use of analgesic ladder through Palliative care.
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DEVELOPING CANCER SERVICES IN LOW-INCOME ECONOMIES

ABSTRACT REFERENCE NUMBER: 298

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INTRODUCTION: The WHO predicts an increase of cancers in developing countries less prepared to face this burden considering the low level of equipment and skills. In Rwanda, cancers are generally detected at a terminal stage, with 10.000.000 inhabitants; Rwanda is one of those countries where 1 doctor is serving 50.000 inhabitants with a very limited number of specialists: No Rwandan oncologist, interventional gastro-enterologist.

METHODS: In 2007, we reviewed retrospectively the data from 3,000 slides of biopsies collected from 2004 to 2006. Types of cancer were defined after classic laboratory pathology process.

RESULTS: Only 11% of the health facilities had sent specimen to the University Histopathology laboratory; 24% of the specimens were found malignant. The age of patient varied from 11 months to 91 years. The incidence peak is among the most active part of the population (45-59 years). Digestive cancers: Stomach, colorectal followed by lymph-nodes; gynecological: cervix, ovary, uterus and breast cancers were the most frequent.

CONCLUSION: Intensive use of HAART since 2003 may explain the reverse of the cancer of the lymph nodes. Gynecological and breast cancers are diagnosed at a late stage. This situation is economically and socially harming the country. National cancer program in Rwanda is long overdue as to establish appropriate policies allowing appropriate funds allocation for early detection, screening, treatment and care, and effective prevention interventions.

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SMUGGLING: SUPPORTING WAR IN THE DRC

ABSTRACT REFERENCE NUMBER: 299

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INTRODUCTION: Several sources, including the UN report on the war in the DRC on 10 December 2008 (S/2008/773) have provided evidence that tobacco industry had maintained the war in DRC. In all reports, the president a Tobacco Company, based in Goma (East of DRC) was named. Following a
complaint by the authorities of South Africa, the president of this industry that produces the cigarettes in Goma, was arrested in early November 2008 in London on the basis of an arrest warrant for “tax evasion” issued by South Africa. The South Africans would have seized as a precaution a few valuable assets belonging to Master Mind, including an aircraft, houses, vehicles and cash in cash with a value of 58 million rand. Referring to the Tobacco industry, the Ugandan weekly "The East African" noted in its issue on 5 December 2005 through the "Industry moves to stub out illicit cigarette trade," that this group is the subject of a thorough investigation by Interpol because the manufacturer is considered as the most involved in the fraud that exists in the DRC, Kenya and Uganda. According to information from Bandundu, one of 11 province of DRC, for more than three years, the company has used false statements of the provincial tax by falsifying documents and declaring in sales and receptions cigarettes in the province of Bandundu. Worse, it would pay its way or not to pay the provincial tax altogether. According to the governorate of Bandundu, which has in its sights this company, it has never paid even 10% of what it owed to the province. That, at least, gives a total minimum of US$ 157,000 (One hundred fifty-seven thousand dollars US) as a loss to the province over a period of three years. This, in turn, enabled him to make a huge profit, and maintain prices at the stem of his cigarette to 10 Congolese Franc from 2003 to 2007 despite all the fluctuations in that country (US$ 1 was equal 500 Congolese Francs in 2007).

MATERIALS AND METHODS:
Documents review:
1. UN Report on DRC
2. website Report:
   b. http://www.digitalcongo.net/article/43341

RESULTS:
The smuggling:
-- Present in DRC
-- Evade all taxes
-- Supply cheap tobacco products
-- Driven by manufacturers!

CONCLUSIONS: Smuggling is a growing problem in DRC which compromises health; economy & environment and contributed to maintain WAR in 2008.

300

GENETICS RESEARCH IN SOUTH AFRICA

ABSTRACT REFERENCE NUMBER: 300

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**INTRODUCTION:** Approximately 1 in 6 South African men over the age of 50 years old will be diagnosed with prostate cancer (PCa). The overall age standardized incidence and mortality rate of PCa in South African men is 34 and 27 per 100 000 individuals, respectively. Numerous studies in North and South American, Caribbean, European and West African men have demonstrated genetic associations between single nucleotide polymorphisms (SNPs) and PCa risk. We report on the genetic research in PCa being undertaken in South Africa.

**MATERIALS AND METHODS:** A retrospective case:control association study on several genes in South African White and Coloured (mixed ancestry) PCa patients and age-, ethnic- and geographically-matched control subjects was performed.

**RESULTS:** We described PCa risk associations in South African men following an investigation of SNPs in COX-2. Provisional analyses indicate a significant association with the SNP rs2740574 (CYP3A4) and a possible trend toward significance with rs501275 (CYP3A43) and rs776746 (CYP3A5). No associations in South African men have been observed for rs9282858 (A49T) and rs523349 (V89L) (SRD5A2), and rs9340799 (ESR1).

**CONCLUSIONS:** Genetic research in PCa is newly established in South Africa and funding limitations have resulted in the setting up of only a few research groups. The unique genetic composition of South African populations has led to the initiation of a collaborative project using mapping by admixture linkage disequilibrium (MALD). Despite limitations, progress has been made in establishing research initiatives in South Africa that might contribute to knowledge and understanding of PCa pathobiology.

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**301**

**REPORT ON RADIATION WORKSHOPS OF PREVIOUS AORTIC CONFERENCES**

**ABSTRACT REFERENCE NUMBER:** 301

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The topics discussed during the Radiation workshops of the previous three AORTIC conferences will be briefly summarized.
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OUTCOMES OF THE RADIOTHERAPEUTIC MANAGEMENT OF CERVICAL CANCER: A FEW SURVIVAL CURVES FROM CAPE TOWN

ABSTRACT REFERENCE NUMBER: 302

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The presenter has had an interest in maintaining a database of gynaecological cancer patients. All patients from 1984 – 2007 are available for survival analysis (data entry for 2008-9 not complete yet). Survival data are updated from the National Population Registry with kind cooperation of the Dept of Home Affairs via the Promotion of Access to Information Act of 2000. This requires that all patients have national identification numbers, and that these “ID” numbers are obtained from patients when they are registered at our department. The causes of death specified on death certificates are notoriously inaccurate, or is just called “natural causes” therefore a degree of “best-fit” interpretation has to be done on some cases as to the most likely cause of demise. In spite of loosing contact with many patients, survival data can still be generated in the context of a developing country. A number of survival curves of our patients with cervical cancer will be presented as an audit exercise.

303

THE ROLE OF PATHOLOGY IN THE EVALUATION OF BREAST CANCER

ABSTRACT REFERENCE NUMBER: 303

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Pathology plays an important part in breast cancer management; the Pathologist responsibility is to establish the microscopic diagnosis of cancer as well as its anatomic extent once sufficient tissue has been provided and to provide clinicians with all the information required for staging and appropriate treatment without being led astray by the new prognostic factors based on biological markers in fashion. Different tasks are expected from the Pathology lab: interpretation of biopsies, cytology or pathology report describing tumour size, lymph node status, histological type, tumour grade; determination and reporting of ER and PR status; determination and reporting of margin status; HER-2/neu status ; IHC staining of sentinel nodes to detect micro metastases. Any mistake in this exercise is associated with serious consequences.
The correct approach to specimens requires integration of clinical and imaging findings. This work requires safeguards, checks and quality-control schemes. The evaluation of the post treatment tumour residue helps in determining tumour response to treatment, establishing prognosis and adjusting adjuvant regimens. By providing diagnostic information and by characterizing the biologic behaviour of a breast lesion, a pathologist plays a critical role in a patient's life.

Pathologists must be part of the clinical team. New analytical techniques and therapeutic targets make it essential that we learn from past mistakes and integrate pathologists into the research teams pursing clinical trials and the assessment of new bio-markers. We must place emphasis on effectively using the talent and expertise of pathologists.

304

THE ROLE OF GOVERNMENT IN CERVICAL CANCER: STATE OF THE ART

ABSTRACT REFERENCE NUMBER: 304

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WHO’s presence in countries allows it to have a close relationship with ministries of health and with its partners inside and outside government. If cancer is not given higher priority through focused global efforts, health-care systems in sub Saharan countries will encounter even further problems as the number of cancer cases increases. More and more people will die prematurely and needlessly from cervical cancer, with devastating social and economic consequences for households, communities and countries alike.

Cervical cancer control could be achieved using a series of government and societal actions. The Health systems are being required to perform better at a time when the demands on them are increasing. National systems in a number of countries face fundamental weaknesses. Shortcomings exist in infrastructure, financing, human resources, supplies of high-quality essential commodities, and equitable access to services. Better and more equitable health outcomes depend on better service delivery. The primary health care approach provides a reliable and sustainable way to address the pressing health needs of impoverished, disadvantaged, and vulnerable groups. Maternal and child health services have long served as the backbone of primary health care and a platform for other health programmes. Primary health care services are also well placed to deliver cervical cancer prevention interventions. There is now a need for national evidence-based recommendations and consensus on comprehensive guidelines for cervical cancer prevention, that consider clinical and public health benefits, affordability and cost-effectiveness of these primary and secondary prevention strategies, when used alone or together.
The key strategy supported by WHO to reduce cancer morbidity and mortality and improve quality of life of patients and their families is a comprehensive approach for assessing the cancer burden, setting priorities and allocating resources, taking into account the social, economic and cultural context. The concept is built on the recognition that effective cancer prevention and control planning and programming should address a continuum of services that range from primary prevention and early detection through effective treatment, quality care, and end-of-life issues, such as pain relief.

Comprehensive cancer control also emphasizes integration of many disciplines including administration, basic and applied research, evaluation, health education, program development, public policy, surveillance, clinical services, and health communications. Comprehensiveness also signifies the inclusion of major cancers, all population groups, and all geographic regions. In sub Saharan Africa, a comprehensive approach to cancer control is needed because gaps in service delivery and coverage exist. Thus the scope of comprehensive cancer control involves a diverse group of stakeholders who must coordinate their efforts to implement such a plan.

The building blocks of a holistic cancer control programme are: Enhance infrastructure; Mobilize support; Use data and research; Build partnerships; Assess/address the cancer burden, and Conduct evaluation. Priorities must be realistic and achievable, and include the identification, delivery and assessment of effective cancer control measures. Depending on resources and competing health priorities, all steps must be taken to prevent treat and cure cancers; and to provide palliation and supportive care to patients throughout their cancer trajectory.

CANCER PREVENTION AND CONTROL IN THE WHO AFRICAN REGION:
Cancer accounted for 12.5% of all deaths worldwide in 2005; by 2020, new cases of cancer are projected to reach about 15 million every year, 70% of which will be in developing countries, including over one million in the African Region. The main factors contributing to the increasing incidence of cancer in the African Region are growing tobacco and alcohol use, unhealthy diet, physical inactivity, environmental pollution and action of infectious agents. Most cancer patients have no access to screening, early diagnosis, treatment or palliative care. Furthermore, the health systems of countries are not sufficiently equipped to provide cancer services. Cancers impact negatively on the overall health status of the population and lead to loss of income and huge health expenditures. They mostly occur in the economically productive age group.
The importance of the challenge posed by cancer was reiterated by the World Health Assembly in 2005, in Resolution 58.22 on Cancer Prevention and Control, which emphasized the need for comprehensive and integrated action to stop this global epidemic. WHO African Member states adopted a Regional strategy in which priority interventions include development of policies, legislation and regulations; mobilization and allocation of adequate resources; partnerships and coordination; training of health personnel; acquisition of adequate infrastructure and equipment for primary, secondary and tertiary prevention; and strategic information, surveillance and research. These interventions, with primary and secondary prevention as top priorities, and availability, affordability and accessibility of drugs for cancer treatment should be implemented and scaled up in countries.

306

SENEGALESE PSA RESULTS AND CORRELATION WITH TESTOSTERONE

ABSTRACT REFERENCE NUMBER: 306

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INTRODUCTION: Screening for prostate cancer is poorly described in African men. We describe characteristics of PSA in the detection of prostate cancer and the relation between serum PSA and testosterone among a population of unselected Senegalese men.

MATERIALS AND METHODS: We examined 575 men at the Hôpital General de Grand Yoff (Dakar, Senegal) during a community outreach program. All participants were assessed for prostate related symptoms (voiding dysfunction), underwent DRE, and provided a blood sample for serum PSA testing. In addition serum Testosterone level was measured in 340 men of the study group. In the case of abnormal DRE and/or PSA≥ 4 ng/ml, a prostate biopsy was performed to distinguish prostate cancer (cases) from non cancer (controls). All prostate cancer cases had a PSA≥ 4 ng/ml and/or abnormal DRE. We used Mann-Whitney and Kruskal-Wallis tests to compare median values of continuous traits and Chi-square tests for categorical variables.

RESULTS: 101 of 575 (18%) men were eligible to undergo prostate biopsies. Of these, 31 were performed by the time of data analysis. The number of participants involved in these analyses was 500 controls and 13 confirmed cases. Median age was 57 years (range: 36-82) for controls and 68 years (range: 52-83) for cases (p<0.001). Prostate-related symptoms increased with age (p<0.001) in controls but not cases. DRE revealed that there were more normal prostates and patients with Benign Prostate Hyperplasia in controls compared to cases (52% vs. 23% and 45% vs. 31%, respectively, p<0.001). In the control group, the percentage of prostates suspicious of cancer at DRE increased in men aged 60 and older compared to younger age groups (p<0.001). Median PSA increased with age among controls with 0.92 ng/ml, 0.98 ng/ml, 1.44 ng/ml and 1.58 ng/ml respectively in the age groups ≤ 49 years, 50-59 years, 60-69 years and ≥70 years (p<0.001). We found no significant difference in Median PSA among
the different prostate biopsy outcomes (p=0.36) in controls. We found no relation between serum PSA and serum Testosterone level in our study group.

CONCLUSION: In the Senegalese men studied here, we identified an increase in median PSA and an increase in the prevalence of prostate symptoms with age among controls. A high PSA and/or abnormal DRE were found in all of our confirmed prostate cancer cases. Additional prostate biopsies will allow a more complete assessment of PSA and DRE screening in the detection of prostate cancer in African men. We found no relation between serum PSA and testosterone levels

KEY WORDS: Prostate cancer, PSA, early detection, testosterone

307

SUPPORTING THE PALLIATIVE CARE NEEDS OF THE PATIENT IN THE CANCER WARD: CHILDREN

ABSTRACT REFERENCE NUMBER: 307

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INTRODUCTION: Hospice Africa Uganda commenced Palliative Care Services in 1993 as a model Hospice for Uganda and other African Countries, applying modern methods of pain and symptom controls to our Cancer & HIV/AIDS patients. Our traditional approach of care combines both adults and children care, but from January 2007 to date children’s services are a separate program to suit their needs.

ISSUES: Hospice Uganda treats and cares for many children with distressing pain and symptoms in the cancer ward of UCI. This hence gives us a lot of work to do for the children the cancer ward. The enrolment has progressively increased and majority of the children are on chemotherapy that comes with its side effects as well as other psychological, social and spiritual issues

DESCRIPTION: In our children’s care program, our holistic assessment leads to clear management strategy. As the children’s physical pain is less responsive to the ordinary analgesics, our readily available oral morphine helps to control their pains. Non pharmacological measures such as provision of a play room in the Hospital, toys, writing books, pencils, TV screen etc enhance this care. Socially, most of our children and their family are poor. HAU provides food, comfort fund, clothes, beddings, mosquito nets, transport facilitation. The psychological needs of the children increase as they grow up but our Nurses and teacher combine some counselling sessions with other activities which prove very useful. Spiritually, we pray with bigger ones as well as their carers.

ACHIEVEMENTS/IMPACT/CHALLENGES: Poverty; most children come from very poor backgrounds that cannot be sustained by their carers. Availability of funds; since the organisation is donor funded sometimes there is need to continue looking for funds from donors as to sustain this programme. Unavailability of some medications at the Uganda Cancer Institute tend to delay treatment of these patients and they overstay on the ward.

CONCLUSIONS AND RECOMMENDATIONS: Children in cancer wards get pain and symptom distresses. The specifically designed program and care offered by HAU to meet children’s numerous needs has proved affective of their challenges as a team.


308

ENGAGING THE MEDIA TO RAISE CANCER AWARENESS

ABSTRACT REFERENCE NUMBER: 308

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The HIV/AIDS movement has managed to engage the media in ways never seen before. Never before has a disease managed to get the media on board in the way that it has. Thousands of journalists converge on the plethora of AIDS conferences and meetings held every year and media centres are packed to the brim with journalists reporting on the complex science of the disease, the social issues and the issues affecting people living with HIV/AIDS.

The media has played a role in holding Governments accountable and been an ally in fighting for access to treatment for people living with HIV/AIDS, whether they live in Washington DC or in Tzaneen. How can the cancer movement - especially in Africa where resources that are so freely available in the Western world are simply non-existent - harness the world media to possibly have the same outcomes for cancer? What can we learn from HIV/AIDS without reinventing the wheel?

309

INTERNATIONAL COLLABORATIVE PROSTATE CANCER RESEARCH

ABSTRACT REFERENCE NUMBER: 309

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INTRODUCTION: International collaborative research provides opportunities to examine prostate cancer risk factors that vary by population attributes, including genetic characteristics. One-carbon metabolism genes influence DNA repair and methylation, but little is known about one-carbon genes and prostate cancer in men of African descent. Our goal is to study this association in American and Senegalese men. MATERIALS AND METHODS: We studied prostate cancer patients (1407 European American, 245 African American, 114 Senegalese) and unrelated controls (534 European American, 395 African American, 168 Senegalese). The genes of interest included CBS, MTHFD1, MTHFR, MTRR, MTR, SHMT1, and TYMS. Logistic regression adjusted for age was used to examine case-control associations.
RESULTS: Genotypes involved in prostate cancer etiology differed significantly across ethnicities. Among Senegalese, significant associations were found for homozygous carriage of the CBS 844ins68 variant and case status (OR=0.0009, 95% C.I. =<0.001-0.10.) For high Gleason cases, heterozygous CBS 844ins68 carriage was associated with increased odds in African-Americans (OR=2.49, 95% C.I.= 1.26-4.92). Reduced odds of prostate cancer were found for heterozygote MTHFR E429A in African-Americans diagnosed by age 61 (OR=0.44, 95% C.I.=0.20-0.98) and European-Americans ≥ 61 years old (OR=0.58, 95% C.I.=0.35-0.97). No other significant associations were observed.

CONCLUSIONS: These results suggest that one-carbon metabolism genotypes may be associated with prostate cancer in specific subgroups. Research of gene interactions and haplotype effects may provide clues about prevention and treatment of prostate cancer, especially for high risk populations of African descent.

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CENTERS FOR AIDS RESEARCH AND RESEARCH PARTNERSHIPS AT THE UGANDA CANCER INSTITUTE

ABSTRACT REFERENCE NUMBER: 310

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INTRODUCTION: Infection with HIV heightens the risk of developing cancer significantly, a problem that is increasingly important in sub-Saharan Africa. Both in resource-poor and resource-rich settings, response to treatment of HIV-associated malignancies (HIVAM) is suboptimal, and new strategies are needed in treatment and prevention worldwide.

MATERIALS AND METHODS: The Uganda Cancer Institute (UCI) is one of the oldest comprehensive cancer centers in Africa. Currently nearly 70% of patients at the UCI are HIV-infected. The US Centers for AIDS Research (CFARs) support a multi-disciplinary basic, clinical, epidemiologic, behavioral, and translational research in HIV. A network of Comprehensive Cancer Centers (CCCs) in the US conducts integrated, multidisciplinary cancer research aimed at rapid translation of findings into coordinated cancer care. Recognizing the opportunity for meaningful gains in the fight against HIVAM, the UCI, CFAR and CCCs have initiated a collaboration in cancer research, training and clinical care.

RESULTS: Over the last several years, the collaboration has: 1) Worked to improve the physical infrastructure for the conduct of state-of-the art translational cancer research; 2) Increased the human capacity for the conduct of high quality and ethical cancer research through bilateral training programs; 3) Initiated a series of research studies in HIVAM; 4) Developed strategies for improving the care of persons with HIVAM in resource-poor and resource-rich settings.
CONCLUSIONS: The collaboration between the UCI, CFAR and CCCs illustrates that partnerships between the US and African cancer researchers may lead to meaningful gains in the prevention of HIV-associated cancer worldwide.

311

HUMAN T-CELL LEUKEMIA/LYMPHOMA VIRUS TYPE I (HTLV-I) INFECTION IN NIGERIA: A HISTORICAL PERSPECTIVE

ABSTRACT REFERENCE NUMBER: 311

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METHODS: Using ELISA and investigational Western blot (IWB) assays, a small survey of the seroprevalence rate (SPR%) of HTLV-I and HIV was conducted in 3 regions of the country among 5 population groups with differing sexual behaviors, as documented in a detailed questionnaire: normal blood donors (NBD), female commercial sex workers (FCSW), sexually transmitted diseases patients, and religious male/female celibates. All serological tests were done at USNCI.

RESULTS: Indeterminate HTLV-I WB patterns were common and SPR varied from 0 to 16.7 by region and lifestyle, highest in eastern region (ER) (p=0.000095), FCSW of ER (p=0.0006), and in association with male heterosexual activity (p=0.024). HIV-1 was detectable at SPR of ~0.5-1.0 in Nigerian adults of varied lifestyles. ATL and AIDS were infrequently diagnosed.

CONCLUSION: High HTLV-I SPR contrasts against infrequent recognition of associated diseases, suggesting a need for enhanced elucidation of the retrovirus’s role in health and disease in the country.

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PC WHERE THERE IS NO AFFORDABLE ORAL MORPHINE

ABSTRACT REFERENCE NUMBER: 312

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The screams of a young soldier’s painful death in a military hospital inspired the author’s determination to practice palliative care in Malawi from 2002 onwards using the experience gained with Hospice Africa Uganda as a volunteer nurse. Over the next four years two local community organizations were assisted, utilizing personal resources. Morphine was first accessed in 2004 whilst other PC drugs were bought or obtained as donations.

Many today across Africa have to still sit by and see patients suffering due to the lack of affordable morphine, suitable for use in their own homes. Although some ignore the pain, many are suffering with their patients.

This paper describes the anguish of a carer having to witness pain in those who are critically ill or at the end of life.

However this anguish can spark the start of a service that reaches many. Such a service can control not only physical pain but pain from social, spiritual, and psychological needs.

Control of pain in the suffering is essential to be able to meet the many other needs. This paper goes on to tell the story of NdiMoyo, the only free standing Hospice in Malawi, and how our patients are being cared for today.

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313

**UROLOGICAL MALIGNANCIES IN SOUTHERN AFRICA**

**ABSTRACT REFERENCE NUMBER:** 313

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Urological malignancies found most commonly in Southern Africa (SA) includes renal cancer, cancers of the collecting system and bladder, prostate cancer, urethral cancer, penile cancer and testicular cancer. The countries of Zambia, Angola, Namibia, Zimbabwe, Botswana, Mozambique and South Africa is included in this part of the Africa. The socio-economic status of residents vary dramatically from region to region as well as intra-region. The available data from cancer databases as well as the electronic databases were consulted and summarized.

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314

**AN AFRICAN SUCCESS STORY: BURKITT’S LYMPHOMA**

**ABSTRACT REFERENCE NUMBER:** 314

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INTRODUCTION: In most sub-Saharan African countries, it is not feasible to treat patients with Burkitt lymphoma with intensive chemotherapy and there are few evaluated regimens for treating progressive or relapsed disease. A multicentre clinical trial in four sub-Saharan countries was initiated in 2004 under the auspices of the INCTR using a common protocol. The results of this ongoing trial are presented.

PATIENTS AND METHODS: Since August 335 patients commenced first line treatment. M:F =1.8:1; median age 7 years, range 2-59; Jaw and abdominal tumours were the most common presentation, 62% and 59% respectively, lymphadenopathy (20%), orbital tumours (18%) or combinations thereof (58%). CNS disease was seen in 10% and 13% had bone marrow involvement. Treatment (Rx) comprised: 6 cycles of cyclophosphamide:1.2G/m², vincristine:1.4mg/m² and methotrexate(MTX):75mg/m², with thrice weekly intra-theecal (IT) MTX+cytosine arabinoside (ara-C). Second line treatment (4 cycles of ifosfamide:1.5G/m² (with mesna), etoposide:60mg/m² and ara-C:100mg/m², + i/t MTX + ara-C) was given to 62 patients with refractory/recurrent disease.

RESULTS: 11 patients were not evaluable for response. To date the response to initial therapy is 287/324 (89%). CR:240 (74.1%), PR: 47 (14.5%). CR to second-line treatment was achieved in 22/62 (35%) and survival ranges to 1 mo to 40 mos. Potentially preventable deaths due to infection and tumour lysis were seen in 34/112 (30%). EFS is 54% at 12 months and 50% at 24 months. OS is 68% at 12 months and 61% at 24 months.

CONCLUSIONS: This regimen is feasible and the results are encouraging. A successful collaborative clinical trial in sub-Saharan Africa can be conducted with support (drugs, trained data managers). Strategies to prevent preventable deaths and improve on patient follow-up are needed.

315

CERVICAL CANCER PREVENTION: EXPERIENCE IN GUINEA

ABSTRACT REFERENCE NUMBER: 315

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The purpose of this communication is to assess the safety and acceptability of cervical cancer prevention combining alternative screening method such as VIA and VILI and management strategies by cryotherapy or LEEP in a low resources country. We have developed Guinea many activities aiming at evaluating all necessary components of an effective screening program based on visual methods, treatment of precancerous lesions, services delivery, follow-up and assessment, training, and cancer management.

Thanks to the findings yielded by those activities, IARC and others local partners like USAID were involved in an extensive and sustainable process of cervical cancer screening activities in Guinea. This allowed testing different options related to care provision, various awareness methods of the
population, evaluate information system associated with the project for the follow-up of performance, estimate the participation of population, and implement a training process. The results were interesting in terms of participation rate to the program, efficacy of screening methods and associated treatment and awareness used. In conclusion, cervical cancer prevention using visual method associated with management strategies by cryotherapy or LEEP, proved to be acceptable, efficient and feasible in both rural and urban areas in Guinea.

KEY WORDS: Visual inspection, Cervical Cancer screening, cryotherapy.

316

COMPLICATIONS OF RADIOTHERAPY

ABSTRACT REFERENCE NUMBER: 316

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Complications of radiotherapy are specific to the organ irradiated, the dose given, the fractionation regimen used, as well as a variety of other radiobiological variables.

A discussion of radiobiological principles, as well as a literature review of complications for each organ system will be presented and discussed.

Methods of avoiding complications will be discussed.

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CANCER REGISTRIES AND CANCER CONTROL PLANNING

ABSTRACT REFERENCE NUMBER: 317

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The Cancer Registry is an essential part of a national programme of cancer control (Muir et al. 1995). Its data can be used in a variety of areas of cancer control; ranging from aetiological research, through primary and secondary prevention to health care planning and patient care.
OBJECTIVE: To describe the role of cancer registry in cancer control programme mainly in African setting.

METHODOLOGY: A review of literature on cancer registry as a component of cancer control programme in Africa.

RESULTS: Two areas must be considered:
1/ Planning of cancer control programmes
   Population based cancer registry provides accurate information on cancer occurrence so that priorities can be determined. The incidence of cases is an indication of resources needed for primary treatment. The extent and nature of the cancer burden in community.
2/ Evaluation of cancer control programmes
   Primary prevention: Trends in cancer incidence can be related to changes over time in exposure to risk factors’ Gambia Hepatitis intervention study
   Screening and early detection: Cancer registration data have been used in routine-data studies to examine trends in disease rates in relation to screening frequencies within a population and to compare disease rates in different populations. This is the case of cervical cancer control programme monitored by visual inspection or cytology
   Tertiary prevention Registry information can be used in survival studies. It is also an important indirect contribution to patient care and to health –care planning. Many cancer treatment center can be monitored by follow up data from hospital registries in developing countries

CONCLUSION: Overall impact of can be evaluated by mortality due to cancer. So cancer registry is an important tool of planning of cancer control program

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PRACTICALITIES OF CANCER REGISTRATION IN THE URBAN AFRICAN SETTING

ABSTRACT REFERENCE NUMBER: 318

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INTRODUCTION: Cancer registry data from population-based cancer registries plays a major role in the monitoring of cancer trends, prevention, control and policy formulation. In developing countries, cancer and other non-communicable diseases are not yet a priority in the health sector since most of the priorities are still on infectious diseases. In the past few decades African countries have had an increase in chronic-disease burden including cancer. Cancer registration is mainly done in few countries and mostly concentration is in the urban setting.

OBJECTIVE: The aim of this review is to highlight some of the challenges of cancer registration in the African setting and to advocate for the need for availability of cancer data and discuss potential opportunities for population-based cancer registries in providing quality cancer data. This is mainly based on personal experience in cancer registration in Kenya.

DISCUSSION: The study of data from some of the registries in Africa and literature published from population-based cancer registries indicates that there are more challenges in developing compared to
developed countries. There is need for collaboration among various arms within the country including getting good support from both Non-Governmental and governmental organizations and cooperation from reporting health institutions. A successful high-quality cancer registration will also require continuous training of cancer registrars and technical support.

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TOBACCO INDUSTRY TARGETING IN AFRICA

ABSTRACT REFERENCE NUMBER: 319

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INTRODUCTION: Tobacco use is the single greatest cause of preventable death worldwide. Estimates indicate that tobacco use will kill 10 million people annually by 2030, with 70% of the deaths occurring in the developing world. According to the WHO, “African countries are experiencing the highest increase in the rate of tobacco use amongst developing countries. In the African region tobacco consumption is increasing by 4.3 percent per year.”

Because of comparatively low smoking prevalence (when compared with other continents) and especially among women, the tobacco industry has identified Africa as an emerging market for its products and continues to widen its influence on the continent by increasing production in countries with key tobacco cultivation economies (while also exaggerating the extent of country dependence on such production) and pursuing aggressive marketing techniques (no longer allowed in the developed world) designed to attract new consumers, particularly youth and women.

MATERIALS AND METHODS: Using examples from across the continent, the presenter shall:
1.) identify tobacco industry tactics to increase consumption of its products in Africa
2.) identify tobacco industry tactics to prevent, delay and defeat enactment and implementation of effective tobacco control policy and legislation

RESULTS: The tobacco industry’s promotional activities in Africa have led to increased tobacco use and resultant increased disease and poverty burden in Africa.

CONCLUSIONS: The tobacco industry’s promotional activities and interests in Africa are inimical to public health and development and must be monitored and counteracted.

320

WHY IS CANCER OF THE CERVIX SO COMMON IN AFRICA?

ABSTRACT REFERENCE NUMBER: 320

AUTHOR/S: Rose Ihuoma Anorlu
INTRODUCTION: Cervical cancer is a preventable disease. It is the most common cancer in women in many parts of Africa. It is preventable by screening and treatment of the pre-cancer, and recently by a vaccine.

METHODS: A computerized literature search was conducted for published articles. Mesh phrases used for the search were cervical cancer, cervical cancer Africa and cervical cancer screening Africa. Hand searches of journals and the proceedings of major conferences were also done.

RESULTS: The age specific incidence rate is 55/100,000 in some parts of Africa. The prevalence of human papillomavirus (HPV), the necessary cause of cervical cancer, in Africa is high. HPV-positive women in Africa are likely to have multiple infection with high-risk types. Many of the factors that increase the acquisition of HPV such as early marriage/sexual debut and polygamous marriage are common in the region and tend to be culture oriented. Some of the co-factors that promote the oncogenic potential of HPV like high parity, chronic cervical inflammation, and immunocompromised states like HIV/AIDS and micronutrient deficiency are also prevalent. Low level of awareness/poor knowledge of the disease coupled with poverty, unavailability and inaccessibility (financial and geographical) of cervical cancer screening services are responsible for only a very small number of women getting screened. There is very little or no budgetary allocation for the prevention of cervical cancer, as many governments in Africa are yet to consider it a serious public health concern.

CONCLUSION: There is need increase the awareness and knowledge cervical cancer. Governments in Africa must be committed in fighting this cancer that is preventable yet not prevented in the region.

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TOBACCO FARMING: THE POVERTY TRAP

ABSTRACT REFERENCE NUMBER: 321

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Tobacco production started in the Americas in 6000 BCE and, from 1492, slowly spread to the rest of the world. Globally, tobacco production has almost doubled in low and middle income countries but, decreased more than 50% in high income countries, including America where it started. However, increased production has not translated into improved national economies and, low and middle income tobacco producing countries have remained poor. Tobacco farming is labour-intensive, leaving little time for food crops and, is associated with exploitation of child and female labour. Pesticides and fertilize runoff pollute the environment leading to irreversible biodiversity changes. Tobacco farmers suffer from a multitude of tobacco related hazards and, tobacco curing leads to serious desertification, with countries losing more than 16,500 hectares of forests annually. The tobacco industry undermines
farmers, by giving them high priced loans for farm inputs, with the view of recovering these loans from tobacco sales. At selling times, tobacco companies normally downgrades the crop and, pay farmers insufficient money to repay the loan; hence, subjecting them to perpetual debt bondage. Tobacco farmers are thus victims of permanent food shortage and poverty. However, surveys have indicated that, in some countries, more than 65% of resource-poor tobacco farmers are now aware of the importance of adopting alternative livelihood to tobacco and, are ready for change, if assured of sustainable markets. A situational analysis from selected countries on the hazards of tobacco farming and, possible solutions to enhance change are presented.

322

RESOURCE SPARING IN CANCER MANAGEMENT: SCIENTIFIC APPROACHES FOR BREAST CANCER AS A MODEL

ABSTRACT REFERENCE NUMBER: 322

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INTRODUCTION: With the increasing costs of the novel drugs and radiotherapy, and with the increase of incidence of cancer, we assume that there would be more problems of affordability cancer treatment in the next decade in Low and Middle Income Countries LMCs. The overall and disease-free survival rates, scores of quality of life, cost effective and cost utility are not increasing in a measure commensurate with the expenses of cancer treatment. Breast Cancer is the most frequent malignancies among females.

METHODS: We cited examples of the recent scientific published and ongoing researches and approaches that could lead to lower costs breast cancer radiotherapy and breast cancer systemic therapy (BCST) without significant evidence of compromising the overall outcome.

RESULTS: In the field of BCST, we updated the win-win initiative with the ongoing international information. This initiative was proposed by ICEDOC’s Experts in Cancer without Borders (ICEDOC: is the International Campaign for Establishment and Development of Oncology Centers) started the year of 2008 with preparatory communications, and publications. For Radiotherapy of breast we include – in the present article - scientific ways for resource sparing by the adjustment of indications, procedures and techniques like shorten fractionation, less number of radiation fields and practical modification of the system of work.

CONCLUSION: There are scientific avenues that could lead to resource sparing and more affordability of radiotherapy and BCST tailored to the real regional conditions and patients in LMCs and subsequently could be extended to other cancers in the world.
**323**

**DEVELOPING POLITICAL WILL, RESOURCES AND PARTNERSHIPS FOR NCCP**

**ABSTRACT REFERENCE NUMBER:** 323

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**INTRODUCTION:** In 2006, the American Cancer Society (ACS), Centers for Disease Control and Prevention (CDC) and the National Cancer Institute (NCI), along with UICC, began a pilot that adapted the US state Comprehensive Cancer Control Leadership Institute model for Latin American countries. Since then, a series of Cancer Control Planning Forums have been held to assist countries (Brazil, Mexico, Peru, Uruguay, Argentina, Peru, Chile, Nicaragua, Sri Lanka, Vietnam, Albania, Tanzania, Yemen and Algeria) in developing strategies to develop and implement national cancer control plans. In 2008, the American Cancer Society partnered with International Atomic Energy Association (IAEA) to customize a cancer planning forum for their PACT countries. The Cancer Planning Forum assisted these countries with identifying partnerships, data, and resources for national cancer control plans.

**METHODS AND MATERIALS:** Participants for all Forums included country representatives from Government, NGOs, Cancer Institutes and Cancer Centers as well as tobacco advocates. All Forums included materials adapted from the US Comprehensive Cancer Control Leadership Institutes, the WHO National Cancer Control Programmes Policies and Managerial Guidelines, and the UICC National Planning Guide. The Forums advised a comprehensive approach to cancer planning and provided practical suggestions which could be applied to country-specific situations.

**RESULTS:** The Cancer Planning Forums for NGOs and government officials provide an overview of key components that should be considered in the development of cancer control plans as well as practical guidance for cancer plan development.

**CONCLUSIONS:** An assessment of accomplishments, success factors and challenges in cancer planning and implementation is in development.

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**324**

**IMPACT OF CANCER ON PATIENTS AND FAMILIES**

**ABSTRACT REFERENCE NUMBER:** 324

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INTRODUCTION: Caring for patients and families facing a diagnosis of cancer in Africa presents unique challenges. Economic and physical access to specialist healthcare for people with Chronic illnesses is a major challenge. This compounded by cultural and political barriers. These are factors that carers helping patients through the cancer journey must take into account.

METHODS: A desk and literature review on the impact of cancer on patients and families as seen in African in the context of social economic challenges, political upheavals.

FINDINGS: A diagnosis of cancer has a devastating effect on family dynamics. In Africa where the incidence is predicted to triple in the next 15 years, the cancer epidemic is happening in the context of wars, poverty and other social economic challenges. Poor people with cancer suffer disproportionate physical, psychological, and social distress due to lack of access to treatment. Poverty in itself is a major risk factor for cancer and other infectious diseases. A diagnosis of cancer further complicates the ability of poor people to undertake meaningful economic activities thus throwing them deeper into poverty.

CONCLUSIONS: Formal and informal carers must take cognizance of the fact that cancer patients in Africa maybe facing double tragedy of being refugees, slum dwellers or an internally displaced. The impact of a cancer diagnosis on individuals and families cannot be looked at from the emotional or physical perspectives alone but should be seen in the context of the patient’s social, economic and political environment.

325

SMOKELESS TOBACCO USE

ABSTRACT REFERENCE NUMBER: 325

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INTRODUCTION: The extent of ST use and the characteristics ST products used may influence outcomes of efforts to control cancer in Africa.

METHODS: This presentation therefore sought to provide data on the characteristics of ST products used in various parts of Africa, the extent of use and associated cancer risks. This involved presentation of primary data and the review of existing literature, including laboratory data obtained from product testing.

RESULTS: The use of ST either by oral or nasal application, is more common than smoking among women in many parts of Africa. The ST products tested from three countries in the region with high use rates revealed large variations in Tobacco Specific N-Nitrosamines contents and mostly an extremely high pH (9 -10) - a range that could promote nicotine dependency and contribute to in vitro formation of carcinogenic nitrosamines from nicotine. The limited data available from the region suggest ST use may be associated with increased risk for nasal sinus cancer, oral cancer and increased risk for high-grade cervical squamous intraepithelial lesions – an immediate precursor lesion of cervical cancer. Preliminary results of a study conducted in South Africa suggest ST use may be a gateway to smoking among adolescents.
CONCLUSIONS: The ST products used in the African region may vary in content and formulation. The cancer risks associated with the use of ST, particularly among the socially disadvantaged population, highlights the need for more research in this area. There is also a need to regulate these products.

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SURGICAL MANAGEMENT OF BREAST CANCER AND ESTABLISHING A RESEARCH INFRASTRUCTURE

ABSTRACT REFERENCE NUMBER: 326

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INTRODUCTION: In Africa, breast cancer has overtaken cervical cancer as the most common malignancy affecting women and the incidence rates appear to be rising. The hallmarks of the disease in Africa are patients presenting at advanced stage, lack of adequate mammography screening programs, preponderance of younger pre-menopausal patients, and a high morbidity and mortality. Breast cancer and its treatment constitute a great physical, psychosocial and economic challenge in resource limited societies as found in Africa. Most studies on breast cancer in Nigeria are clinical research as the infrastructure for molecular and laboratory work are limited. Accordingly, the aims of the collaborative study between Nigeria (Abia State University Teaching Hospital) and UCSF were to better characterize the biology of tumors from Nigeria; and ultimately, to improve the research capacity of ABSUTH.

MATERIALS AND METHODS: Hematoxylin-eosin staining was performed at UCSF on 18 breast tissue samples from women diagnosed with breast cancer at the ABSUTH. In addition, core biopsies taken from the tumor and from adjacent benign tissue of the same 18 women were tested for the presence of viral transcripts using Virochip, a DNA microarray bearing the most conserved sequences of all known viruses.

RESULTS: Among the 14 specimens that were actually tumors, 13 (93%) of the tumors were Grade 3 and one was Grade 2. Analysis of the microarray hybridization of tumor samples was negative for viral transcripts.

CONCLUSIONS: Preliminary analysis suggests that the breast cancers of Nigerian women are characteristically high grade; yet the highly aggressive nature of these tumors does not appear to be caused by viral activity. Future endeavors include ER/PR staining and genomic profiling in order to gain further understanding of tumor etiology and improve treatment strategy.

327

SUB-SAHARAN AFRICA LYMPHOMA CONSORTIUM (SSALC): UNDERSTANDING LYMPHOMA PHENOTYPES IN AFRICA; BUILDING CAPACITY FOR FUTURE TREATMENTS

ABSTRACT REFERENCE NUMBER: 327

AUTHOR/S: Leona W Ayers (1), Lynnette K Tumwine (2)
Objective: Prevalence and distribution of non-Hodgkin’s lymphoma (NHL) subtypes throughout Africa, particularly among persons with HIV/AIDS, is currently unknown. NHL phenotypes as well as disease grade and stage at presentation have greater diversity than is presently appreciated. The expansion of NHL treatment options, particularly for AIDS-related (AR) NHL, will be facilitated by improved understanding of NHL in Africa. Limited AR-NHL data suggests: 50% diffuse large B-cell with remaining 50% distributed among lymphoblastic, Burkitt, plasmablastic and other lymphomas.

Methods: SSALC was established in 2008 as a sponsored program of the US National Cancer Institute (NIH). The consortium is composed of participating pathologists from East, South, and West Africa and international collaborators. NHL samples are tested (IHC/ISH) using 20 monoclonal antibodies for common NHL antigens (IHC) and Lana-1 (HHV-8), ISH for EBV RNA (EBER), kappa/lambda light chains (ISH, Ventana, Tucson, AZ), c-myc t(8;14) (FISH, Abbott/Vysis, Downer’s Grove, IL). Results are available to consortium pathologists and collaborators.

Results: The SSALC web site is on-line at www.ssalc.org. Participants exchange information and digital images using the secure SSALC Internet work space. A public area offers virtual slide images of monthly cases and a virtual compendium of WHO NHL sub-types. The SSALC is now listed with the NCRI Oncology Information Exchange (ONIX), a free to use, international cancer research portal at ncri-onix.org.uk. Uganda results are presented.

Conclusions: SSALC provides a venue for direct participation and collaboration among African pathologists to characterize indigenous NHL and to identify phenotypes associated with AR-NHL. Your participation is welcomed.

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Nurses Can Be Leaders

Abstract Reference Number: 328

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Introduction: In many parts of the world, cancer incidence is rising. Over the next decade it is expected to increase significantly with the many of the cancer cases in countries with middle to low resources. Countries need to be prepared for this growing epidemic both at a policy and a practice level. One of the health care professional groups with significant knowledge and expertise to offer is nursing. Nurses can be leaders in cancer patient care, education, and research.
MATERIALS AND METHODS: This presentation will highlight the emerging thinking about leadership and about cancer nursing as a specialty practice. Illustrations of nurses who have acted as leaders when caring for patients/families, developing programs for patient populations, and initiating change in organizations will be profiled. Effective leadership behaviors will be described as they apply to nursing.

RESULTS: It is anticipated that this session will help the nurses who attend to begin to see themselves as leaders with the potential to influence patients, colleagues, decision-makers, and policy.

CONCLUSION: Many nurses do not see themselves as leaders or as having the influence to create change. However, with the appropriate learning, nurses can be very effective facilitative leaders.

329

MANAGEMENT OF SIDE EFFECTS OF CANCER

ABSTRACT REFERENCE NUMBER: 329

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INTRODUCTION: The presence of multiple co-occurring symptoms is critical to patients not only because of concern for altered comfort or distress, but also because multiple symptoms impact quality of life.

MATERIALS AND METHODS: Dodd et al. (2001) provides a conceptual model that gives direction for selecting clinical interventions or management strategies. The model helps describe and measure the relationship between the symptom experience (frequency, severity, distress, duration, quality, aggravating factors, alleviating factors and temporal pattern) symptom management strategies and potentially related symptom outcomes (quality of life, emotional status, functional status, self care, mortality/morbidity and costs). It provides direction for selecting interventions, and delineates cultural, disease related, and individual differences in symptoms. Commonly occurring symptoms like fatigue, pain, sleep disturbance and distress will be discussed. Information about algorithms and decision trees for in depth assessment and management of these symptoms will be provided.

RESULTS: Utilizing a symptom management model captures the impact of symptoms and enhances clinicians’ understanding of the experiences of patients.

CONCLUSIONS: The outcomes of major concern for patients with cancer include symptom control whether it is related to the cancer itself or treatment related adverse effects. This model can guide team members’ practice in the home care setting, the community, ambulatory out-patient settings, and hospital inpatient settings.
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NURSING CARE OF THE PATIENT WITH CANCER

ABSTRACT REFERENCE NUMBER: 330

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INTRODUCTION: Cancer is a complex disease with treatment protocols that vary widely. The effects of cancer and cancer treatment go beyond the physical aspects of care. Patients face uncertainty in relation to physical, emotional, psychological, social, spiritual and financial needs. They are also learning to cope with the long term nature of treatment, phases of illness, and the transition from acute treatment to long term follow-up or palliation.

MATERIALS AND METHODS: In this session we will describe an approach to care using the Supportive Care Framework (Fitch, 1994). It is designed as a tool to conceptualize what type of help cancer patients might require at anytime along the continuum. The group will focus on examples that incorporate supportive care planning and development where nurses organize services, interpret medical information, educate and coach in symptom management and provide emotional support tailored to meet complex patient needs.

RESULTS: This framework serves to ensure a patient centered approach to care and provides a valuable planning and evaluation tool that considers elements beyond those of physical care.

CONCLUSIONS: Patients and families have advocated for improvements in cancer care that incorporates a more holistic approach. Embracing the full range of issues/challenges individuals face when undergoing medical, surgical, or radiation interventions will help impact positively on the person’s experience.

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CASE STUDY: PUTTING IDEAS INTO PRACTICE

ABSTRACT REFERENCE NUMBER: 331

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INTRODUCTION: Attending conferences and workshops is a valuable way to learn new knowledge and about developments in nursing care. However, there can be challenges in applying what has been learned when the attendees return to their own clinical setting at the end of the educational sessions.

MATERIALS AND METHODS: This session will make use of a case based approach to learn about applying newfound learning in the clinical setting following a conference or workshop session. The case situation will be presented to, and discussed by, small groups of the participants. The group discussion will focus on what ought to be done to provide care, the challenges that may be encountered in providing that care, and the strategies that could be used to apply the new learning to overcome the barriers.

RESULTS: The participants will share their thinking with one another in a verbal reporting to the entire group.

CONCLUSIONS: It is anticipated the group will learn about the potential challenges they may face when introducing new knowledge to the clinical setting and how they may overcome the barriers. In the long term, this knowledge will help to improve patients care.

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PATTERNS OF CANCER INCIDENCE IN AFRICA: SOME REGISTRY RESULTS

ABSTRACT REFERENCE NUMBER: 332

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INTRODUCTION: to know the cancer profile in a country, the best tool accepted by all was a population based cancer registry. We will present here a global view of cancer in Africa through some cancer registries.

MATERIALS AND METHODS: the data analysed here were pulled of some African cancer registries from north, west, east and center of the continent. Cancer registration was done according criteria after demographic information and with a registry software.

RESULTS: cancer represents 10 to 20 % of all the pathologies. Cancer gathered here had common characteristics. Women were predominant in rate of 53,7% like in general population. The age bracket was 23-49 for men and 45-60 for women. About children less than 15; we found nephroblastoma and malignant lymphoma at the first rank with female predominance.

CONCLUSION: cancer is reality in Africa. To conduct an appropriate policy of fight we have to improve our cancer registry methods and to spread it.

KEY WORDS: cancer, registry, Africa
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GETTING CANCER ON TANZANIAN HEALTH AGENDA

ABSTRACT REFERENCE NUMBER: 333

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INTRODUCTION: Tanzania estimates over 21,000 newly diagnosed cancers annually; and due to late stage presentation, most have five-year survival rate of <10%. Women present the majority with cancers at Ocean Road Cancer Institute (ORCI) with cervical cancer being the leading cause and breast cancer accounting for 9.3%. Despite challenges of late diagnosis and referrals, resource allocation and prioritization for cancer screening had lacked attention in Tanzania.

MATERIALS AND METHODS: Medical Women Association of Tanzania (MEWATA) engaged media; deployed demand creation strategy with sensitization, mobilization and campaigned for public contribution towards mass breast cancer screening. Members of the public donated voluntarily; Screening points were stationed at regional and district levels in seven regions. Local MEWATA teams conducted community sensitization and mobilization. Screening activities received media coverage that included public opinions. MEWATA documented results.

RESULTS: A total of 63,983 women underwent clinical breast examination, 2,985 (4.7%) had breast lesions of which 152 (5.1%) was cancer. Upsurge of breast cancer patients and women seeking attention reported at ORCI and other hospitals. MEWATA presentations were invited at Ministerial and Presidential forums; The MOH supported campaigns in four regions; coordinated drafting of National Cancer Control Strategy; established a Reproductive-health cancer unit and included campaign results in the annual reports for the parliament. Bugando Medical Center at the lake zone now conducts cancer screening. Stakeholders in cancer are gradually coordinated alongside reviving of Tanzania Cancer Society.

CONCLUSION: Demand creation strategy with sensitization and mobilization efforts resulted into resource mobilization and true public demand of the service that brought cancer into health agenda.

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EXAMPLES OF CHEMORADIOThERAPY OF CANCER IN LOW RESOURCE SETTING

ABSTRACT REFERENCE NUMBER: 334

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Chemo radiation has made albeit small but significant improvements in cancer outcomes worldwide. Has been applied both as neoadjuvant or adjuvant and sometimes for palliation. Sites that have shown improved outcome include head and neck cancer, cervical, gastric, rectal, anus, vagina, lung and some brain tumors. However we need to deal with the added cost of treatment and toxicities that come along with it. For us again it comes down to cost effectiveness. A lot of radiation oncologists still believe that radiation is the corner stone of cancer treatment especially for palliation. Undoubtedly it may be true for our setting because more than two-thirds of our cases are incurable but we may improve the quality of the remaining life of some selected patients. In some instances we may have to make treatment decisions based on evidence, and should not hold back based on our personal preferences. We should discuss the available options with our patients and their families including the evidence that supports a particular treatment strategy and why he or she may not benefit from it. In this lecture we will discuss the various types of chemo radiation using my institution as an example.

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COST EFFECTIVENESS OF RADIOTHERAPY AND CANCER THERAPY IN DEVELOPING COUNTRIES

ABSTRACT REFERENCE NUMBER: 335

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The impact of cancer in developing countries is devastating in regards to access to care, affordability of basic needs, medical expertise, toxicity of treatment and dismal outcomes. The worse is the monetary cost to the already struggling families, care givers and the economic discourse in our health finance budget. Cost of treatment is expected to rapidly increase with the new estimates of cancer incidences and cancer deaths in our countries. How do we abrogate this? With our meager resources how do we ensure we deliver affordable, basic and yet effective care to our patients to improve cure and reduce suffering both physically and financially? Very few countries have comprehensive health insurance schemes and most do not cover cancer care. For countries with low GDP’s and monetary reserves, can we justify complete cancer therapy coverage? How do we make cancer a priority in our health budget when communicable diseases seem to have stolen the show. Admittedly more than three quarters of our patients present with very advanced and incurable cancers. Does radiation and chemotherapy make a difference in our patient’s lives? What about targeted therapy and evidence based medicine? Is it absolutely necessary to dispose of an estate to add a few months to our patient’s already dismal state? One sure way to improve cost effectiveness of cancer therapy is to ask our governments to establish cancer control measures to prevent cancers from developing and detect early disease and effectively treat them to improve cure.
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DEVELOPMENT OF CANCER NURSING IN TANZANIA

ABSTRACT REFERENCE NUMBER: 336

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INTRODUCTION: Ocean Road Cancer Institute (ORCI) is the only specialized centre for treatment of Cancer in Tanzania. It provides diagnostic as well as treatment services of cancer patients from all Regions in Tanzania as well as from other East and Southern African Countries. It is estimated that 1 in a 1000 people develop Cancer annually. 35,000 new cancer cases occur each year, 27,000 patients die each year, however only 10% of these cases reach at ORCI. About 3000 new cancer cases are attended per annum at ORCI and 75-80% of the cases are seen at advanced stages. There is no oncology training program in Tanzania, but, nurse and medical students from local colleges receive orientation courses on cancer at ORCI. Specialized nurses on cancer care are useful to disseminate knowledge on cancer prevention and to support cancer treatment as well as Palliative care at all levels of the Health Care System. Oncology nursing is still a new specialty in our country. There is no nurse who has specialized on Oncology nursing due to limited funds. Nevertheless, efforts are underway to collaborate with Local and International Organization to foster this process.

CONCLUSION: Collaboration with different nursing association from different country, will help to build strong leadership in oncology nursing in Africa, and strengthening our nurse in providing cancer care and be able to serve our people from cancer burden.

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PAEDIATRIC CANCER REGISTRIES IN AFRICA

ABSTRACT REFERENCE NUMBER: 337

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My own experience with paediatric cancer registries started with the Namibian Children’s tumour registry which was the basis for a PhD obtained in 1984. This started as a survey of Namibian children referred to TBH for treatment prior to independence in 1983. All the cases which occurred in Namibia were reviewed. The standardized incidence rate was only 55 per million children and 20% of the
diagnoses were only made during the survey and had not been referred. These figures were published in the 2nd ICCC. Since 1995 a population based registry of childhood malignancies was started in South A
Data from 1995 to 2007 indicated that 2641 tumours had been recorded with an incidence rate of 64.3 per million and a leukaemia rate of ALL = 7.99, AML = 3.00 and CML = 0.2 per million children. A previous study showed that over the past 18 years 1403 tumors were reported in Black children and only 541 in White children, however the standardized rates were 7.0 in Black children and 32 per million in White children, due to the majority of Black children in the population.

The registry is passively reported by the Different POU of which there are 8 with a limited number of private and satellite institutions which are contacted regularly to obtain information regarding paediatric tumours since 2009 except in Cape Town (before then).

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**MANAGING PAIN IN THE AFRICAN CANCER PATIENT**

**ABSTRACT REFERENCE NUMBER:** 338

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**INTRODUCTION:** This abstract will highlight the importance of understanding patient’s pain, managing pain in the African cancer patients, the barriers/challenges of managing pain and strategies being undertaken to ensure pain experienced by African cancer patients is addressed.

**DEFINITION OF PAIN:** Pain is what the patient says hurts, however scientifically it is an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage". (The International Association for the Study of Pain, 2007)

**PAIN ASSESSMENT AND MANAGEMENT:** Pain assessment and management require skilled and patient health care workers. To successfully manage patients pain you need to avail time to your patient, listening actively and use a holistic approach of pain assessment. Pain management in patients with cancer depends on a comprehensive assessment that characterises the symptom in terms of pathogenesis, assesses the relation between the pain and the disease, and clarifies the impact of the pain and conditions on the patient’s quality of life.

**BARRIERS/CHALLENGES:** Inadequate pain management in cancer patients is due to a number of factors including:
-- Attitudes of health workers towards pain in cancer patients
-- Inadequate skills in pain assessment and management
-- Heavy workload faced by health care workers in African hospitals
-- Communication challenges with adults and also with children
-- Insufficient stock of palliative care medications in hospitals including morphine a drug of choice for pain control.
-- Bureaucracy in the health care system
-- Cultural beliefs around cancer

WAY FORWARD:
-- Empower all health care workers with palliative care knowledge and skills so that patients with life limiting illnesses can be helped.
-- Incorporate palliative care into the curriculum of all health care training institutions.
-- Budget for palliative care activities be included in all the health care budgeted plans.
-- Raise palliative care awareness among the public

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THE ROLE OF OOPHORECTOMY IN ER POSITIVE BREAST CANCER

ABSTRACT REFERENCE NUMBER: 340

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In all circumstances where management of tested tissues has been carefully accomplished, including African centers, the majority of breast cancers have been found to be hormone receptor positive. Because of broad based population pyramids in many countries, the majority of breast cancer cases is usually in pre-menopausal women. Surgical oophorectomy is a safe, limited toxicity, relatively inexpensive, effective and cost effective therapy in hormone receptor positive breast cancer. Oophorectomy plus tamoxifen is marginally more effective in many populations. Clinical trial data demonstrate risk reductions with adjuvant oophorectomy and tamoxifen of magnitudes similar to those seen with usual chemotherapy treatment programs. For example the 10 year overall survival in one adjuvant study in Vietnamese and Chinese axillary node positive patients treated with oophorectomy and tamoxifen, was 76%. In an American study of CAF chemotherapy plus ovarian suppressing therapy and tamoxifen, the 9 year overall survival in a similar group of patients was 76%. A small international clinical trial of oophorectomy plus tamoxifen followed or not by CAF chemotherapy, showed 10 year relapse free survival rates of 74 and 76% respectively. Surgical oophorectomy does not have the immediate life-threatening GI and hematopoetic toxicities associated with chemotherapeutic treatments. Limited data suggest that timing of surgical oophorectomy in the luteal phase of the menstrual cycle may be significantly more effective than follicular phase surgery.

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MOLECULAR BIOLOGY OF SQUAMOUS CELL CARCINOMA OF THE OESOPHAGUS

ABSTRACT REFERENCE NUMBER: 341

AUTHOR/S: M Iqbal Parker
INTRODUCTION: Several studies have implicated p53 mutations in the aetiology of squamous cell carcinoma of the oesophagus (SCCO), but such mutations have been shown to be rare in South African patients. Since earlier studies have shown the presence of HPV in South African SCCO patients, we investigated whether an alternate mechanism of HPV E6 mediated inactivation of p53 could play a role in carcinogenesis.

MATERIALS AND METHODS: DNA from 114 patients with SCCO were evaluated and HPV DNA was determined using PCR consensus primers to the L1 gene and the E6 gene. Immunohistochemical staining was performed using antibodies to p53 and 73, a structural homologue of p53.

RESULTS: HPV DNA was shown to be present in 39% of tumour biopsies with the majority corresponding to HPV11. Immunohistochemical staining showed intense p53 staining in 59% of the cases, while less than 10% of cells in the normal neighbouring epithelium stained positive. The nuclear p73 was similarly elevated in tumour cells (61% of patients) while only 8% of normal neighbouring epithelia showed elevated p73 expression. Co-expression of both p53 and p73 was statistically significant (P < 0.05) in 54% of tumours. No statistically significant relationship was observed between p53 protein accumulation and HPV status (P = 0.16), while p73 was higher in HPV DNA positive patients than in HPV DNA negative samples (P=0.01).

CONCLUSIONS: Over-expression of p53 is usually correlated with the presence of p53 gene mutations, therefore, these results suggest that it is unlikely that HPV contributes to tumourigenesis via p53 degradation in SCCO. Perhaps a different mechanism involving inactivation of p53 in a manner similar to that of the SV40 large T antigen is involved, and elevation of p73 is mechanism to compensate for the loss of 53 activity.

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BREAST CANCER IN AFRICA: THE NEED FOR CONTEXTUAL SOLUTIONS

ABSTRACT REFERENCE NUMBER: 342

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Breast cancer is a serious health problem in countries of all resource levels accounting for nearly one-quarter of all cancers in women globally. In Africa, breast cancer ranks a close second behind cervical cancer when the continent is considered as a whole, but breast cancer is the leading female cancer in many parts of Africa. Despite its high ranking among female cancers, the incidence rates for breast cancer are markedly lower in Africa than those seen in more developed countries. This difference has implications in designing breast health programs most notably in the area of screening for breast cancer, since the yield of cases in an African context is likely to be lower, and the cost-benefit analyses for screening programs are likely to be less favorable. In general, the prognosis for women with breast
cancer is much worse in Africa than in the more developed world. Contributing to poorer outcomes are the limited capabilities of the health care systems of the continent to provide successful early detection, diagnosis, and treatment of breast cancer. Impediments to better outcomes include insufficient numbers of appropriately trained healthcare workers, limited access to screening/treatment facilities, inadequate supplies of necessary drugs, and the timeliness of treatment after diagnosis. One attempt begun in 2002 to address the issues of breast cancer in context is the Breast Health Global Initiative (BHGI: http://www.fhcrc.org/science/PHS/bhgi/) that seeks to define guidelines for detection, diagnosis, and treatment of breast cancer that are resource-level appropriate. Issues related to implementation of BHGI guidelines in an African context will be highlighted.

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ASSUMPTIONS AND FACTS: RESEARCH TO DECREASE MORTALITY FROM BREAST CANCER IN LOW AND MIDDLE INCOME COUNTRIES

ABSTRACT REFERENCE NUMBER: 343

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In the same way that planning approaches to economic development in low income countries, as opposed to “search and research” approaches, have been significantly unsuccessful, so “technology transfer” approaches to decreasing high mortality rates from breast cancer as opposed to “search and research” approaches, are doomed to failure. This is so because the majority of therapeutic data about breast cancer has come from studies in middle class women of northern European genetic background, while in different populations there are known and potential and expected differences in 1.) the epidemiology (incidence for example); 2.) biology of the tumors (expected to result in different responses to therapies); 3.) biology of the hosts (expected to result in different toxicities and levels of effects from therapies); 4.) cultural and psychosocial characteristics; and 5.) health systems. Additionally, a treatment that may be reasonably considered “cost effective” in one country, may not meet such a standard in another place. To address these challenges, in every country there needs to be greater education and debate about: i.) what is really known; ii.) the value of specific interventions in particular country settings; iii.) increasing investigator capacity; iv.) the economic impacts of alternative strategies; and v.) the ethical complexities of medical care.
GHANA PROSTATE CANCER SCREENING STUDY RESULTS

ABSTRACT REFERENCE NUMBER: 344

AUTHOR/S: Ann W Hsing (1), Edward Yeboah (2), Richard Biritwum (2), Yao Tettey (2), Angelo M De Marzo (3), Andrew Adjei (2), George J Netto (3), Kai Yu (1), Yan Li (1), Anand P Chokkalingam (4), David Chia (5), Sana Jadallah (3), Alan Partin (3), Ian M Thompson (6), Sabah M Quraishi (1), Gloria Addo-Ayensu (7), Shelley Niwa (8), Robert Tarone (9), Robert N Hoover (1)

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INTRODUCTION: Reasons for the very high prostate cancer incidence and mortality rates among African Americans are unclear. Most speculation has centered on environmental and lifestyle factors rather than genetics, because of the apparent reported low rates and the limited available data on West Africans. A better understanding of prostate cancer rates in West Africans would help shed some light on why African Americans have such high rates of prostate cancer, since African Americans share similar genetic ancestry with West Africans yet have very different lifestyles.

MATERIALS AND METHODS: We selected a total of 1,037 healthy men aged 50-74 randomly from the Accra, Ghana population for prostate cancer screening with digital rectal examination (DRE) and prostate specific antigen (PSA) testing. Men who had a positive screen (DRE+ or PSA >2.5 mg/ml) underwent a transrectal ultrasound-guided biopsy.

RESULTS: Of the 1,037 randomly selected men, 154 (14.9%) had a positive DRE and 272 (26.2%) had a PSA >2.5 ng/ml (166 had a PSA >4.0 ng/ml). In total, 352 (33.9%) men had a positive screen by either PSA or DRE, and 307 (87%) had a biopsy. Of these, 73 were confirmed to have prostate cancer, yielding a 7.0% screen-detected prevalence of prostate cancer.

CONCLUSIONS: The prostate cancer prevalence rate in West Africans is relatively high and similar to that in African Americans, suggesting an important role of genetics in both prostate cancer etiology and the disparity in prostate cancer risk between African Americans and Caucasian Americans.

INFLAMMATORY BREAST CANCER: A WESTERN PERSPECTIVE

ABSTRACT REFERENCE NUMBER: 345

AUTHOR/S: Silvia C Formenti, Christine Min, Alan Arslan, Deborah Silvera, Robert Schneider
Inflammatory breast cancer (IBC) was first described as early as 1814. Recognized to be a lethal form of breast cancer, IBC outcome has improved in the past 20 years with the introduction of multi-agent chemotherapy and high dose radiotherapy. Survival has increased in patients receiving anthracycline-containing regimens and taxanes, particularly in the neoadjuvant setting, followed by surgery. Mastectomy has been found to provide a benefit in local control and survival, among patients who have had good responses to neoadjuvant chemotherapy. To overcome the rapid doubling time of IBC cells, radiation is frequently given in hyper-fractionated schedules, with twice daily treatments totalling at least 60 Gy. With tri-modality therapy, 5-year local control rates approach 80%, and survival rates approach 40%. Recent SEER registry data suggest an increased incidence of IBC, that currently represent 2.5% of newly diagnosed breast cancers in US. Interestingly, a younger age at the time of first parity has shown some association with IBC, an area of investigation our group is actively pursuing. A hallmark of IBC is dermal lymphatic invasion by lumps of tumor cells (emboli), known to result from over-expression of E-cadherin, with increased tumor cell connections to each other rather than adherence to the stroma. E-cadherin, a surface component of cell junctions is anchored with p120 catenin (p120). Our group demonstrated in a preclinical model of IBC that over-expression of the protein translation factor eIF4GI promoted formation of IBC tumor emboli, by increasing the translation of mRNAs with internal ribosomal entry sites, like the p120 mRNA. The findings provide a novel understanding of IBC and identified key targets for treatment.

CERVICAL CANCER IN HIV-INFECTED WOMEN IN AFRICA

ABSTRACT REFERENCE NUMBER: 346

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INTRODUCTION: In some parts of Africa, the HIV epidemic affects up to 20-30% of the population, in a context of a very high incidence of cervical cancer. There are no evidence-based guidelines on screening HIV positive women. This study set out to track the natural history of HPV infection and cervical disease in HIV infected women in order to inform screening guidelines.

METHODS: A cohort of 400 HIV positive women were followed over a period of 36 months for status of HIV disease (CD4 counts; viral loads) and cervical disease (HPV DNA testing using HC2, HPV typing, cytology and colposcopy at 6 monthly intervals).

RESULTS: Overall 68% of the women were positive for HC 2, 35% had a cytological diagnosis of LSIL, 13% HSIL and only 45% had a normal Pap smear at entry to the study. 87 (22%) women died during the follow up period, with the majority (n = 76) occurring in the first 18 months when access to anti-
retroviral therapy was limited. Clearance of HPV infection was observed in 6% of. Among women with a LSIL pap at baseline, regression to normal cytology was observed in 11%. Initial cytology of LSIL progressed to HSIL in only 4% of cases and no cancers were detected.

CONCLUSIONS: No cancers developed in this 3 year period and we recommend that 2 yearly follow up for women with histologically confirmed LSIL. HSIL should be treated as for HIV negative women.

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PC WITHIN A CANCER CONTROL ACTIVITY

ABSTRACT REFERENCE NUMBER: 347

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National or regional cancer Control plans are important for the improvement in cancer services. Cancer Control activities include prevention, screening, treatment and palliative care. Cancer Pain relief is a particularly important area of neglect with palliative care. Examples of Cancer Control plans that include palliative care will be reviewed including the Wisconsin Cancer Control Plan (http://www.wicancer.org/). All too often, palliative care is neglected as part of a cancer control plan, either because it is not considered important or because there are limited resources. Access to opioids is an important part of these plans and review of the International Narcotic Control Board data on opioid consumption (http://www.painpolicy.wisc.edu/internat/countryprofiles.htm) highlights the need to improve of opioid access. Cancer Control plans may provide an excellent vehicle to improve opioid access.

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CERVICAL CANCER ADVOCACY: HOW THE PUBLIC, PRIVATE AND NGO SECTORS CAN AND ARE COLLABORATING TO IMPROVE ACCESS TO SCREENING AND PREVENTION

ABSTRACT REFERENCE NUMBER: 348

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INTRODUCTION: Cervical cancer is the most preventable of all cancers through early detection and treatment of precursor lesions (CIN). With new tools to prevent and screen cervical cancer, even in low resource settings, the global cervical cancer movement is at a tipping point. Now the greatest barriers to eliminating cervical cancer continue to be inequities in access to screening and prevention tools,
especially between developed and developing nations; inconsistent political will to allocate resources for prevention, screening, and treatment; and lack of clarity about appropriate delivery systems across health sectors as numerous stakeholders – reproductive health, immunization, cancer, youth and women’s groups – seek to integrate the new and variable coordination amongst stakeholders.

MATERIALS AND METHODS: At this point in time, realistic medium-term cervical cancer control goals include:
-- Control infection with the most prevalent oncogenic HPV types through routine vaccination in all countries.
-- Increase pre-cancer screening and treatment of all women.
-- Improve management of cervical cancer, including increasing access to effective palliative care for advanced cases.

The key for achieving such goals is a combination of effective coordination and advocacy. A key in developing coordinated responses to new opportunities for impacting cervical cancer came with the launch of the Alliance for Cervical Cancer Prevention and had continued with concerted efforts by GAVI, the World Cancer Declaration of UICC and Cervical Cancer Action which has as its mandate to expedite availability, affordability and accessibility of appropriate cervical cancer primary and secondary prevention tools. The activities of these groups have ranged from setting targets around universal vaccination programs in areas most affected by HPV to working with GAVI on ensuring access to the vaccine to launching the Global Call to STOP Cervical Cancer, with over 500 signatories, and supplemented it with a dossier of letters from health ministers and others in support of access to improved cervical cancer prevention as part of SAGE/WHO engagement.

RESULTS: It appears that these advocacy efforts have led to specific wins including inclusion of HPV vaccines on the GAVI agenda (though specifics of delivery remains to be resolved); the process of setting goals has also led to collaboration and dialogue among disparate stakeholders. The challenges remain in ensuring coordination and acceleration of efforts to integrate sustainable approaches to the new prevention and screening tools in low resource settings.

CONCLUSIONS: Given the wealth of evidence-based interventions for prevention, early detection, and treatment success will be directly linked to effective advocacy and coordination among stakeholders. Groups such as Cervical Cancer Action will be key in creating demand for primary and secondary prevention tools, calling on governments and donors to recognize and adequately resource such efforts, and building capacity of individuals and institutions to deliver them.

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PALLIATIVE CARE IN ONCOLOGY

ABSTRACT REFERENCE NUMBER: 349

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Approximately 50% of all cancer cases in the Western world can be cured with radical treatment. For developing countries the number of cured cancer cases is much lower. This means that a large number
of cancer patients will die from the disease, and a significant proportion of patients with incurable cancer will require oncologists to switch from cure to palliative care. The symptoms associated with progressive cancer which require care include pain, nausea, anorexia, fatigue, immobility, and depression. Other non physical problems in cancer patients requiring care include: personal dignity, socio-economic, moral and spiritual issues.

While many of above problems fall within the remit of the oncologist, palliative care has in recent years matured into a separate, closely allied specialty to address both physical and non-physical problems of patients with advanced cancer. Simply stated, palliative care has become an essential part of the multidisciplinary cancer care team and it has been shown to less hospital-based than oncology with nurses and doctors being able to visit patients at home.

**KEY WORDS:** Oncology, Palliative Care and Symptoms Control

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### 350

**EPIGENOMICS IN CANCER BIOLOGY: THE ROLE OF DIETARY NUTRIENTS**

**ABSTRACT REFERENCE NUMBER:** 350

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The importance of epigenomics and nutrition in cancer biology was established early by scientists who demonstrated a correlation between methyl-deficient diets and activation of oncogenes (Bhave, 1988, Carcinogenesis). Abnormal diets account for more cancer-related deaths in the U.S. than other environmental or genetic factors. Dietary nutrients can directly influence the activity of critical enzymes such as methyltransferases, which are known to play an important role in cancer development. Inactivation of critical genes through hypermethylation is an important hallmark of early cancer etiology. However, various components found in vegetables and fruits have shown anti-cancer properties through epigenetic mechanisms. We have shown using real-time PCR that indole-3-carbinol (I3C) significantly decreases the expression of DNA methyltransferases (Haefele, et. al, 2007) in pancreatic cancer cells. Using MSP-PCR analysis we further have demonstrated that I3C can reactivate p16 expression in pancreatic cancer cells through hypomethylation. Recent studies in our laboratory have shown decreased expression of UGT1A10 in African American breast cancer tissues in comparison to normal tissue (Starlard, et al. 2008). Indole-3-carbinol increases expression of UGT1A1 in breast cancer cells. These studies show the importance of certain nutrients in inhibiting cancer growth through epigenetic mechanisms. Therefore, more research is needed, using new technology, that will allow scientists an opportunity to further explore the effects of nutrients on levels of expression of thousands of genes involved in cancer development. These studies further enhance our knowledge in understanding the role of dietary nutrients in cancer development.
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EVALUATING RESULTS IN NCCP IMPLEMENTATION

ABSTRACT REFERENCE NUMBER: 351

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The formulation of a national cancer control plan (NCCP) as recommended by WHO is conducive to plan, implement and augment national capacity through appropriate strategies and actions to prevent, early detect and treat cancer and improve survival and quality of life of cancer patients. Monitoring and evaluation of NCCP is essential to assess progress and enhance its effectiveness; it is also critical to ensure optimum inputs and utilization of resources. Evaluation is totally dependent on the availability of valid information systems such as NCCP program database, population-based cancer registries and complete and valid mortality registration systems. It is critical to develop such information systems quite early in the program in order to monitor input measures and assess intermediate outcome measures to improve the implementation of NCCP. The process measures of evaluation include organizational aspects of implementation of the plan, planned, available and utilized budget, the extent of implementation of planned activities, timeline of implementation, organization of the program database, data collection, details on existing human resources and infrastructure (e.g. early detection, diagnostic and treatment facilities), health care interventions (e.g. screening rates) and new investments in human resources and cancer health care infrastructure. Outcome measures of evaluation include trends in prevalence risk factors such as tobacco, alcohol consumption, patterns and trends in cancer incidence rates, stage distribution, treatment rates, cancer survival rates and trends in cancer mortality. It is important to emphasize that program monitoring and evaluation are continuous activities that support NCCP implementation on a continuing basis.

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CERVICAL SCREENING-REVISITED

ABSTRACT REFERENCE NUMBER: 352

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Cervical cancer is one of the most preventable human cancers. There are currently two strategies, namely screening and vaccination, for cervical cancer prevention. While screening is a time-tested
approach, human papillomavirus (HPV) vaccination is an emerging method. The success of screening for cervical cancer depends on accurately diagnosing women with cervical intraepithelial neoplasia (CIN) and treating them effectively. Cervical cancer screening can be undertaken by health care providers in every setting and there are several suitable tests available for detecting precursors, which can be treated by safe, effective and acceptable outpatient treatment methods such as cryotherapy, cold coagulation and loop excision. It is critical to complete the entire process of testing, diagnosis, treatment and follow-up care to ensure the success of screening.

Cervical cancer prevention efforts world-wide have so far relied on screening women with conventional cytology. Pap smear programs in developed countries have substantially reduced cervical cancer risk. Cytology involves several critical steps and quality assurance for accurate detection. When these requirements are fulfilled, cytology is moderately sensitive and highly specific in detecting high-grade lesions. In most routine settings, cytology has been shown to be poorly to moderately sensitive, with a vast range in sensitivity (20-70%). The difficulties in providing optimal cytology have prompted the evaluation of alternative screening methods in recent years. HPV testing has clearly a higher sensitivity (pooled sensitivity 90%) but somewhat lower specificity (pooled specificity 88%) than cytology. However it is limited by its current costs, cumbersome procedure and equipment, and there are efforts to develop inexpensive, rapid, yet accurate HPV test formats and tests based on E6 and E7 viral oncogenes to improve specificity and the need for repeat HPV DNA testing. Visual screening tests based on acetic acid (VIA) or Lugol’s iodine (VILI) application have somewhat moderate sensitivity (65-85%) and low specificity (49-86%), but immediate results allow same-session diagnosis and treatment. The current evidence supports the use of VIA and/or VILI in countries where good quality cytology or HPV testing are not feasible and not available. It is important to emphasize that the critical needs for a successful cervical cancer screening include educational activities, adequate human resources for screening, diagnosis and treatment, and information systems to evaluate inputs and outcome in a programmatic context.

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THE PACT MODEL FOR COLLABORATION, PARTNERSHIP AND RESOURCE MOBILIZATION AT THE GLOBAL LEVEL TO FIGHT CANCER

ABSTRACT REFERENCE NUMBER: 353

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INTRODUCTION: The Programme of Action for Cancer Therapy (PACT) was created within the IAEA in 2004 to enable developing countries to introduce, expand and improve their cancer cure and care capacity by integrating radiotherapy into a comprehensive national cancer control plan.

MATERIALS AND METHODS: Working through innovative partnerships with WHO, IARC, UICC, INCTR, ACS, NCI, AXIOS, NFCR, PATH, Best Intl. and others, seven PACT Model Demonstration Sites (PMDS) in
Albania, Ghana, Nicaragua, Tanzania, Sri Lanka, Vietnam and Yemen have been established. PMDS projects address all facets of cancer control by combining the individual strengths and resources of each partner and stakeholder to achieve maximum impact. This integrated approach focuses on building capacity for the long-term sustainability of all relevant services, especially radiotherapy, via timely and balanced investments. It also strengthens the country’s capacity to develop proposals for funding and encourages interested donors to support such efforts.

**RESULTS:** Considerable progress has been recorded so far in terms of cancer control planning and establishing modalities to implement PMDS. More than $24 million has been mobilized in donations and contributions. PMDS have shown the synergies that international partners can achieve working together with national counterparts to advance cancer capacity building. PMDS have helped raise donor and public awareness for future national, regional and global initiatives.

**CONCLUSIONS:** PACT has demonstrated that interagency and public-private partnerships are an effective way of addressing the cancer problem in developing countries.

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**THE PROGRAMME OF ACTION FOR CANCER THERAPY (PACT): TANZANIA EXPERIENCE**

**ABSTRACT REFERENCE NUMBER:** 354

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**INTRODUCTION:** Within the PACT initiative, IAEA, WHO and their partners have launched a PACT Model Demonstration Site (PMDS) in Tanzania to address all facets of cancer control through comprehensive, integrated and multidisciplinary efforts.

**MATERIALS AND METHODS:** PMDS combine the individual strengths and resources of partners and stakeholders to achieve maximum impact on the cancer epidemic. This integrated approach focuses on building capacity for the long-term sustainability of all relevant services, especially radiotherapy, via timely, planned and balanced investments across the system by strengthening the country’s capacity to develop plans and proposals for low-interest loans or bilateral funding.

**RESULTS:** The Ministry of Health and Social Welfare has established a steering committee to develop national cancer control strategies and action plans. PMDS-Tanzania has helped raise donor and public awareness for cancer projects and some already funded. PACT has facilitated the delivery of radiotherapy machines and the long and short-term training of 33 Tanzanian health professionals in all aspects of cancer control. Graduate courses in radiation oncology and medical physics will be offered in Tanzania. As the first PMDS in Africa, Tanzania may potentially serve as a regional training hub on cancer control.

**CONCLUSIONS:** The critical bottleneck to advancing cancer care capacity is education and training of staff in all areas of cancer control and availability of infrastructure. For sustainable cancer care capacity, there must be a dramatic increase in professionals trained locally or regionally, who remain within their home countries. Locally-tailored cancer control programmes, expanded diagnostic and treatment facilities and modern IT tools are required across Africa to fight cancer comprehensively.
“SINGLE VISIT” APPROACH TO CERVICAL CANCER PREVENTION

ABSTRACT REFERENCE NUMBER: 355

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INTRODUCTION: Cervical cancer burden is highest in low and middle income countries that have 80% of the 471,000 new cases a year worldwide, resulting in 300,000 deaths a year. Less than 5% of these women will ever have offered a screening test in their lifetime, because of the prohibitive costs of setting up a wide coverage population based conventional cytology screening program.

MATERIALS AND METHODS: Cervical Cancer Screening is designed to identify women with pre-invasive lesions (CIN) that when treated with local ablative or excision procedures will prevent progression of CIN to invasive cervical cancer. Over the past decade, several investigators have evaluated alternative screening tests that include Visual Inspection with Acetic Acid (VIA), or with Lugol’s Iodine (VII) have test performance results of sensitivity 70-90% and specificity 40-90%.The test results of VIA and VII are available immediately and treatment with Cryotherapy (cure rate 80-90%) or Loop excision procedure (cure rates of 90-96%) can be offered as “single visit” and follow up scheduled. Evidence is from several demonstration programs.

CONCLUSION: For countries in low and middle income “single visit” cervical cancer screening has been tested and found acceptable to women and health care providers. The low specificity can result in false negative cases that may be over treated and therefore continued training to correctly identify inflammation, HPV, ectropion and polyps is essential.

THE MY CHILD MATTERS PROGRAM

ABSTRACT REFERENCE NUMBER: 356

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Until recently, care of children with cancer has been largely neglected in low and middle income countries. An estimated 160,000 new cases of cancer are diagnosed annually worldwide in children under 15 years of age and the majority are living in such countries. The My Child Matters (MCM) program was launched by the UICC in partnership with Sanofi-Aventis to fund and mentor projects
aimed at developing pediatric cancer services in resource-constrained settings. The program began in 2004 and a baseline status of pediatric oncology in the first ten countries supported by the MCM program has already been published (R.C. Ribeiro et al. Lancet Oncol 2008; 9:721-729). To date, MCM spans 33 projects in 21 countries. A 2009 call for projects plans to add an additional ten projects in 5 new countries. The key to the success of the program is support of local project champions through international expertise and mentoring together with the grant award. An initial evaluation of project outcomes has been presented (PROC AM SOC Clin Oncol 2007; 25:532s, Abstract 9526). An evaluation of current program status will be given.

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**PEDIATRIC ONCOLOGY IN DEVELOPING COUNTRIES**

**ABSTRACT REFERENCE NUMBER:** 357

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Tumors in children represent less than 2% of all tumors, but they are particularly important in the developing countries. First of all, in most of these countries the median age of the population is around 15-18 years and therefore pediatric tumors represent in absolute numbers a very important reality. Moreover, pediatric oncology is the field in which the difference in outcome between developed and developing countries is most marked and impressive. In the developed world at least around 80% of children with tumors can be cured today, while the cure rate in the developing countries varies from 5 to 25%. It has therefore been calculated that more than 100'000 children per year die who could be saved if there would be the minimal conditions for treating them appropriately. Pediatric oncology is also different from the situation in adults, since there is almost no prevention (besides vaccination against HBV to prevent hepatocellular carcinoma). Also particular efforts will be needed in the developing countries in order to avoid the fact, that too many cases are diagnosed much too late. For these reasons the UICC has decided that pediatric oncology should be one of its first priorities, which led to the launch and development of the My Child Matters program, which has been very successful. Details of the program and first evaluation about its impact will be presented.

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**CANCER REGISTRIES: WHAT IS THE FUTURE?**

**ABSTRACT REFERENCE NUMBER:** 358

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Cancer registration has a long history, serving initially to delineate patterns of cancer in different populations, and later developing a more diverse role within research into cancer cause and prevention. Registries have been increasingly recognised as important surveillance instruments, for defining priorities, setting targets, and evaluating outcomes in cancer control programmes. This role is especially valuable where there are no valid alternative sources of information, such as vital statistics, that can (at least in part) be used for these purposes, as in most low and middle income countries. Although cancer registration is sometimes perceived as a difficult or costly enterprise, this misconception probably arises from transfer of experiences in affluent health service settings. Sentinel cancer registries, providing information on, as a minimum, incidence and extent of cancer in a defined population, can be run for the cost of a few thousand US dollars (plus some professional commitment). Since no there are no realistic alternative mechanisms for surveillance and monitoring of cancer incidence, stage, and outcome, expansion of the limited registry network in Africa is highly desirable, as is a commitment to improvement in quality. This is a field in which the case for technology transfer is evident, and could be highly cost-effective. Networking of cancer registries within Africa, as has occurred elsewhere, would also serve to raise awareness and quality.

HISTORY AND CURRENT STATUS OF CANCER REGISTRATION IN AFRICA

ABSTRACT REFERENCE NUMBER: 359

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Cancer registration began early in Africa, with data from the 1950s from South Africa, Mozambique, Uganda and Nigeria appearing in Volume 1 of Cancer Incidence in Five Continents. Unfortunately, development thereafter was slow, and by Volume 5 of the same series, which included data from the late 1970s and early 80s, there was no African representative. Since then there has been a slow and steady spread cancer registries on the continent. At present, there are 49 cancer registry members of the International Association of Cancer Registries (IACR) in 29 countries, covering some 12-13% of the population of the continent. A few of these are known to be inactive, however, and a more accurate estimate of functioning registries is around 45 registries in 24 countries. Not all of these registries can produce accurate data on cancer incidence, however, either because of incomplete coverage or uncertainty about populations at risk. There were only 6 African registries contributing data to Cancer Incidence in Five Continents volume VIII (1993-97) and five in volume IX (1998-2002). To date, only two registries in sub-Saharan Africa have published data on survival at the population level. Nevertheless, population coverage, even if incomplete, provides much more useful appraisal of the cancer profile than do the oft-cited case series from hospitals, or pathology laboratories. Increasing commitment to cancer
registration in Africa by national and international agencies is evident in recent years, and will hopefully bear fruit in the near future.

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SURGICAL MANAGEMENT OF CERVICAL CANCER IN AFRICA

ABSTRACT REFERENCE NUMBER: 360

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INTRODUCTION: In Africa the majority of patients with cervical cancer are not diagnosed, diagnosed in late stages where effective and curative treatment is not possible and often are not palliated well. While the world is moving to eradicate cervical cancer, the focus in Africa must be on earlier diagnosis and more effective treatment of this disease.

THE ROLE OF SURGERY: In early stage disease radical surgical removal is curative for the majority of patients. Surgery can therefore play a pivotal role to save lives of women in Africa on condition that the disease is diagnosed early and that safe surgery is available. Methods to improve the availability of diagnostic and surgical services should receive attention. Improved screening facilities will reveal more early stage tumors as will improved primary health care service. Secondary and tertiary medical centers in Africa should identify and fund candidates to receive training in advanced gynecologic oncology surgery. Neo-adjuvant therapies followed by surgery can also increase the number of patients who can benefit from surgery. This approach has a high treatment cost and high morbidity, while survival benefit is limited. In Africa the focus should be on surgery for large volume early stage disease rather than on strategies to minimize surgical morbidity for small tumors. We should also focus on the interplay between this disease and immunodeficiency.

CONCLUSION: Surgery can play a major role in the treatment of cervical cancer in Africa as it is still the most cost-effective treatment available. Improvements in diagnosis and availability of surgery are relatively cheap and can save many lives even in remote areas. Additionally, safe surgery is already more widely available than radiation facilities.

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THE BURDEN OF DEATH AND DISEASE FROM TOBACCO USE

ABSTRACT REFERENCE NUMBER: 361

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Tobacco use will kill nearly six million people worldwide during 2009. Many millions more will become ill due to their tobacco use. Considered together, these deaths and illnesses will cause significant economic hardship not only for the tobacco users themselves, but also for their families, employers, and communities. This presentation will briefly review both the global, and the Africa-specific, burden of death, disease, and economic disruption due to tobacco use, taking into account the changing patterns of global tobacco use, especially as the multinational tobacco companies move their focus from the high-income nations to the low- and middle-income nations, particularly those in Asia and Africa.

EVALUATION OF QUALITY OF PAIN ASSESSMENT AND CONTROL IN PALLIATIVE CARE BY HEALTH CARE WORKERS: A CASE OF 55 CANCER AND HIV/AIDS PATIENTS & 40 HEALTH WORKERS IN ZOMBA DISTRICT, MALAWI, AFRICA

OBJECTIVES: Three specific objectives were looked at: To assess and evaluate the quality of pain care in terminally ill patients at St. Luke’s and Zomba Central hospital (SUBSTUDY I). To assess if a numerical rating scale (NRS) is used to assess pain (SUBSTUDY II) and to assess whether the WHO analgesic ladder (1986) and its principle drugs are applied in pain control by health workers (SUBSTUDY III).

SETTING: At Zomba central hospital (ZCH, Non palliative care unit) and St. Luke’s mission hospital (with palliative care unit established in 2004).

METHODOLOGY: The study was conducted from June – September 2005. Study participants were randomly selected from medical ward of HIV/AIDS and Cancer clinic at Zomba central hospital (ZCH) and St. Luke’s ART and Palliative care clinic. After selection, patient aged less than 13 years were excluded because the pain rating being studied was not appropriate for children. All nurses and clinicians working at St. Luke’s hospital and medical ward at ZCH were invited to complete a questionnaire.

RESULT: 55 patients completed the study. 54% (n = 30) had Neuropathic pain while 27% (n = 15) reported Somatic pain and 9% (n = 5) had complex combined pain. NRS was used in 84.5% (n = 47). Of the 47 rated by NRS 53.2% (n = 25) scored 1/5 at their third visit indicating quality pain control. 63.6% (n = 35) indicated that they had satisfactory pain control as opposed to 36.4 % (n = 20) of respondents who were not satisfied. 34/40 health worker completed the questionnaire only 35.3% (n = 12) were aware of the WHO analgesic ladder while 64.7% (n = 22) didn’t know of it at all. 41.2%
(n = 14) admitted they didn’t know what to do for a patient with chronic pain. However 76.5% (n = 26) knew and accepted that some pain is not physical so the approach should be different with non physical pain

CONCLUSION AND RECOMMENDATIONS: The study demonstrated a high rate of poor pain control among health workers in ZCH and St. Luke’s hospital. It also showed a significant lack of knowledge among health workers in two institutions concerning poor quality of pain assessment, treatment and control. Knowledge and skill training on pain treatment, assessment and control is therefore recommended in both organizations.

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CERVICAL CANCER PREVENTION IN HIV SEROPOSITIVE WOMEN

ABSTRACT REFERENCE NUMBER: 363

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HIV infection is associated with higher and more rapid progression rates of cervical neoplasia. HIV seroprevalence in Zambia ranks as one of the highest in the world, its adult HIV rate estimated to be 16%, and in the capital city of Lusaka, 22%. Furthermore, >50% of its infected adults are women. As HIV seropositive women live longer as a result of increasing access to ART, it is incumbent to consider their other important health needs, of which cervical cancer prevention is one of the most important. We integrated a ‘screen-and-treat’ cervical cancer prevention program within the infrastructure previously developed through a HIV/AIDS care and treatment program in Lusaka, Zambia. We maximized population coverage, applied locally appropriate screening approaches, and monitored outcomes. For a brief period, we provided services exclusively for women with confirmed HIV infection, reflecting the funding support from the President’s Emergency Plan for AIDS Relief (PEPFAR). However, as demand increased, we began enrolling those who were reportedly HIV seronegative or had not yet tested. This offered an important service to the broader community of at-risk women and also avoided stigmatizing those who might be inadvertently identified as HIV-infected simply because they wished a cervical cancer screen. We will discuss some of the outcomes of our strategy to develop an alternative infrastructure for cervical cancer prevention in a resource-constrained environment.
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THE EAST AFRICA INTERNATIONAL EPIDEMIOLOGIC DATABASES TO EVALUATE AIDS (IEDEA) CONSORTIUM: A PROSPECTIVE EPIDEMIOLOGIC PLATFORM TO INVESTIGATE KAPOSI’S SARCOMA IN THE ERA OF ANTIRETROVIRAL THERAPY

ABSTRACT REFERENCE NUMBER: 364

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In sub-Saharan Africa, the intersection between the HIV epidemic and underlying endemic infection with Kaposi’s sarcoma-associated herpes virus infection has resulted in Kaposi’s sarcoma (KS) becoming, according to most accounts, the most common malignancy in the region. Fortunately, the advent of antiretroviral therapy (ART) in Africa now offers hope that KS incidence may diminish. However, there are few epidemiologic platforms in Africa to accurately study KS incidence in the ART era. To address this limitation in research infrastructure, the US National Cancer Institute has joined in sponsoring the IeDEA project. IeDEA consists of seven regional consortia across four continents. Each region is charged with pooling data from many large clinic-based cohorts of HIV-infected patients across the region with the goal of providing more generalizeable inferences and investigating diseases which are too uncommon to study in single centers. In East Africa, a major focus of IeDEA is to perform rigorous epidemiologic research on KS. To achieve this, a three-prong strategy has been launched targeting patients, providers, and pathologists. For patients, education has started to increase KS awareness and early self-detection. For providers, education in the differential diagnosis of KS has been provided as well as training in skin punch biopsies. For pathologists, adjudication of readings by US-based pathologists has occurred with eventual provision of enhanced reagents. With over 40,000 patients (and growing) under prospective observation, East Africa IeDEA is well positioned to first understand the impact of ART on KS and later to serve as an epidemiologic platform for other malignancies.

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CAN WE CONSTRUCT A HEALTH ECONOMIC CASE FOR INVESTMENT IN CANCER CONTROL?

ABSTRACT REFERENCE NUMBER: 365

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INTRODUCTION: Cancers are responsible for 7% of global disease burden and are underdiagnosed and undertreated in resource-poor settings. About one-quarter of cancer burden is from tobacco, but treatment options are limited. Stomach and liver cancers account for 11% and 9% of cancer disease burden, and there are few effective treatments.

MATERIALS AND METHOD: Using methods of generalized cost-effectiveness analysis, we discuss cancers for which there are treatment and preventive interventions suitable for widescale use in developing countries: colorectal, breast and cervical cancer. For conciseness, we focus on an African region of high child and adult mortality. However, cost-effectiveness results can differ across regions and relative cost effectiveness changes with local epidemiology and costs.

RESULTS: Colorectal cancer offers population level primary prevention through increased consumption of fruits and vegetables (I$ 44k/DALY), although screening and removal of polyps is more cost-effective. Once-lifetime screening offers similar cost effectiveness to more frequent screening. Treatment, or treatment plus screening, offers more benefit at comparable cost. Adding primary prevention increases benefit. At around $1 1k/DALY, breast-cancer (BrCa) treatment is very cost-effective. Adding stage IV treatment and/or screening saves more lives, suggesting that comprehensive BrCa control is an attractive package in resource-poor settings. An effective cervical cancer (CVC) vaccine exists but has a prohibitive price. A very low-cost vaccine would be very cost effective. Treatment alone is more effective and slightly more costly.

CONCLUSIONS: Cancer interventions are cheap, cost effective and suitable for widespread implementation in resource-poor settings. Prevention and treatment is usually better than either alone. Cost effective primary prevention remains elusive.

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IDENTIFICATION OF POTENTIAL EARLY BIOMARKERS AND CHEMOPREVENTIVE AGENTS FOR PANCREATIC CANCER

ABSTRACT REFERENCE NUMBER: 366

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Pancreatic cancer has one of the highest mortality rates of any malignancy. Treatment of this cancer has not advanced much in many years, mainly attributed to the lack of early diagnosis and effective chemopreventive or chemotherapeutic treatments. Results from our studies demonstrate the potential of NAD(P)H: quinone oxidoreductase 1 (NQO1) expression as a biomarker for pancreatic cancer. In a rat cellular transformation model, higher levels of enzyme levels were found in transformed cells compared to the non-tumorigenic levels. The significance of this potential biomarker was examined in human pancreatic tissue. Higher levels of NQO1 expression were demonstrated in pancreatic adenocarcinomas compared to those in nontumorous tissues from non-smokers and in smokers and pancreatitis tissues compared to non-smokers. Up-regulation of the heterogeneous nuclear ribonucleoprotein A1/B1 (hnRNP) is also a potential candidate for early screening for pancreatic cancer. An increase in expression of hnRNP was found overall in smokers when compared to non-smokers who quit and was higher in
female smokers compared to female non-smokers. Higher levels of expression were also shown in human pancreatic adenocarcinomas and pancreatic tumor cell lines. A normal primary pancreatic cell line did not express hnRNP. Induction of NQO1 has provided an indicator of chemopreventive potential of a variety of agents in several tissues. We examined the effect of several dietary agents on NQO1 expression in pancreatic tumor cells. These agents, including sulforaphane, resveratrol, cafestrol, and indole-3-carbinol, were found to increase NQO1 expression, suggesting chemopreventive potential for pancreatic cancer. Identification of reliable biomarkers and development of effective chemopreventive strategies for pancreatic cancer are critical.

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NATIONAL CANCER CONTROL PLANNING (NCCP)

ABSTRACT REFERENCE NUMBER: 367

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INTRODUCTION: Planning integrated, evidence-based and cost-effective interventions throughout the cancer continuum is the most effective way of reducing both the incidence of cancer as well as the consequent suffering caused to patients and their families. Civil society can play a critical role in developing effective partnerships to take on the responsibility of cancer planning.

METHODS:
-- Use a collaborative workshop and dedicated materials to introduce participants to the concept of NCCP
-- Present an overview of the global need for NCCP
-- Use health economics to inform decision making using HPV as an example
-- Advocate for implementation of those plans
-- Encourage sharing best–practice with countries starting their planning process
-- Generate a current situation-analysis of NCCP in Africa

RESULTS:
-- Understanding of success, opportunities and gaps in comprehensive planning
-- Creation of dedicated and collaborative materials for NCCP
-- Evaluation and monitoring of the needs and gaps in participating countries using two questionnaires sent to participants; one ahead and one following the NCCP workshop at AORTIC 2009:
  a) Questionnaire prior to the workshop (pre-registration process): survey of those countries with existing plans and plans in development.
  b) Questionnaire after the workshop: evaluation of the lessons learned and assessment of the motivation to continue/begin plan.

Results of Questionnaire a) will be presented during the oral presentation (abstract 134) on NCCP and cervical cancer.
CONCLUSION: The momentum exists to share success and best practices and addresses gaps in comprehensive planning, financing and implementation of national cancer control programmes.

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CHALLENGES IN THE DELIVERY OF EFFECTIVE THERAPY TO CHILDREN WITH CANCER IN AFRICA

ABSTRACT REFERENCE NUMBER: 368

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Childhood cancer is a curable disease in more than 70% of cases. The survival rate has increased dramatically over the last 20-30 years with new chemotherapy drugs, specialised oncology teams, detection in early phases of disease. In the developed world, cancer affects one child in 600 and it remains the second most common cause of death in children. Not the same situation is described in Africa. Data on cancer incidence in Africa is missing. Africa’s population has risen now to more than 1 billion with a predominant young population below the age of 15 years in most of the countries.

More than 80% of childhood cancer occurs in Africa where the average life expectancy is only 48 years and where more than 80% of Sub Saharan population is living on a less than 2$/day. However the 53 countries on the African continent need to cope with a burden of serious other diseases such as HIV and Aids, tuberculosis, malnutrition, chronic diseases. Childhood cancer does not represent a priority for the governments in most of these countries despite the fact that the cure is achievable.

Most families do not have the financial means to pay for the cost of treatment and the governments do not offer free access to cytostatics. The cost of treatment for cancer in Africa is considerably less than in the developed world however it remains prohibitive for almost all patients.

A series of strategies have been identified: increasing awareness of childhood cancer symptoms, establishing permanent ties with strong units for training and support, identifying “champions” in all African countries.

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KAPOSI SARCOMA: A TALE OF TWO VIRUSES

ABSTRACT REFERENCE NUMBER: 369

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Kaposi Sarcoma was first described in Europe in 1872 and in Central Africa in the 1960s. It heralded the onset of HIV in the United States in 1981. Human Herpes Virus -8 was identified in 1994 and was subsequently found to be the aetiologic factor involved in the development of KS.

KS is one of the commonest malignancies in Sub-Saharan Africa and the most frequent AIDS-defining malignancy occurring worldwide. The incidence declined rapidly in Europe and the United States due to antiretroviral therapy and HIV prevention programs. In Africa in 2007 there were approximately 22 million people living with HIV; however antiretroviral cover for persons who required it ranged between 20 and 36%. HHV-8 is endemic in Africa with seroprevalence rates in excess of 50% in some areas.

This review aims to present recent findings regarding the pathophysiology of KS, and describe the clinical and histological subtypes found. The interaction between HIV and HHV-8 in the pathogenesis of AIDS-related KS will be explored. We will attempt to elucidate the viral genes and signalling pathways involved in the transformation of HHV-8 infected endothelial cells. Oncogene products have been identified which may provide targets for future chemotherapeutic agents.

An overview of the clinical and radiological aspects of KS and the role of chemotherapy and radiotherapy in the management of KS will be presented. We will look at cost-effective strategies for use in resource-constrained areas as well as state of the art therapies employed elsewhere.

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FIGHTING THE STIGMA AND SILENCE OF CANCER

ABSTRACT REFERENCE NUMBER: 370

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INTRODUCTION: Around the world, the stigma and silence associated with cancer persists as a result of myths and misinformation and a lack of awareness and resources. This stigma often acts as a barrier to preventative services, early diagnosis and treatment and cancer control overall. Advocacy efforts provide an avenue to empower people to share their stories and join in the fight against cancer. These efforts can have a profound effect on both the development of new resources and the utilization of existing resources.

MATERIALS AND METHODS: The LAF conducted public opinion research and a media audit in 10 countries around the world in order to better understand how cancer is perceived and portrayed. Multiple questions were posed to test public perceptions of cancer, individual familiarity with cancer and beliefs in the stigma associated with cancer. Additionally, the LAF convened the LIVESTRONG...
Global Cancer Summit in August 2009. Delegates from over 65 countries participated and shared their commitments to the fight against cancer.

**RESULTS:** Results of the public opinion research, media audit and delegate surveys reveal that the stigma associated with cancer is widespread and affects efforts in all countries. The results also point to specific opportunities for the advocacy community to engage and help reverse this trend.

**CONCLUSION:** There are significant opportunities to improve awareness and reduce the stigma associated with cancer around the world.