

Kampala and part of Wakiso districts and included children (0–14 years) and adolescents (15–19 years). The data was analysed using SPSS.

Findings: A total of 752 patients, 71.7% (n=539) were children (0–14 years) and 29.3% (n=213) were adolescents (15–19 years) diagnosed with cancer between January, 2009 and December, 2014. Among the children, Hodgkin lymphoma was 21%, 12% Kaposi Sarcoma, 9% nephroblastoma, 7% retinoblastoma, 11% unspecified malignancies and 40% others. Among the adolescents, 20% were Kaposi Sarcoma, 18% Non-Hodgkin lymphoma, 8% Hodgkin lymphoma, 7% Hodgkin Lymphoma, 6% Chronic Myeloid leukaemia and 41% other malignancies.

The age adjusted incidence per one million of childhood malignancies were; Non-Hodgkin Lymphoma (26), Kaposi Sarcoma (14.95), Nephroblastoma (9.2). Age Adjusted Incidence Rate of adolescent malignancies were; Kaposi Sarcoma (10.05), Non-Hodgkin Lymphoma (4.31), Hodgkin lymphoma (3.59).

Retinoblastoma and nephroblastoma were found in only children.

Interpretation: Among the children, the findings from this study differed from that in countries outside Africa. Haematological malignancies, solid tumors brain tumors were the most common cases of childhood and adolescent cancers. In Kenya and Rwanda, the most common were Non-Hodgkin lymphoma, leukaemia, Kaposi Sarcoma and nephroblastoma respectively.

Among the adolescents, the incidence was quite similar to those in Countries outside Africa, with Non-Hodgkin Lymphoma being the most common. The trends of adolescent cancers in Uganda were quite similar to those in other African countries although Kaposi Sarcoma was the most incident which was not the case with other African countries. In Zimbabwe, leukaemia, osteosarcoma, Non-Hodgkin lymphoma and Kaposi sarcoma had the highest incidence rates.

Source of Funding: Self funded.

Abstract #: 1.003_NCD

Identifying Optimal Waist Circumference Cut-off Points for Central Obesity in Indigenous Guatemalans

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Background: Risk factors for Cardiovascular Disease (CVD) are now increasingly prevalent in developing countries. The International Diabetes Federation (IDF) has recommended ethnic specific waist circumference (WC) thresholds, 90 cm for men and 80 cm for women from Central and South America based on limited data while the AHA and WHO recommends 102 and 88 cm. We aimed to identify the optimal WC cut off points to predict different CVD risk factors in an indigenous population in Guatemala as an alternative and more cost-effective method to assess risk in a resource limited setting.

Methods: We conducted a secondary analysis of data from a representative sample of an indigenous Guatemalan population (n=350).

ROC curve analysis was performed to define optimal WC cut points to identify ≥ 3 risk factors for men and women. Multivariate logistic regression was used to assess the ability of the newly defined cut points to predict the presence of individual and ≥ 3 risk factors. We then compared the performance of the newly defined cut points to the IDF and WHO cut points for central obesity in our population.

Findings: Out of 350 subjects, 276 had complete data to be included in the analysis. Optimal cut-off points for central obesity were 81 cm for men and 83.5 cm for women. The newly defined cut-offs performed significantly better (AUC 0.77 and 0.68) than the WHO (AUC 0.51 and 0.60) and IDF (AUC 0.60 and 0.62) definitions for central obesity. Accuracy was 76.92% and 66.67%, versus 53.85% and 59.69% for WHO, 61.54% and 59.60% for IDF for men and women respectively. Odds ratios of association between the different cutoff points and ≥ 3 CVD risk factors were, 5.854 (3.368,10.175) for our new cut-off point vs 2.245 (1.240,4.069) the WHO and 3.476 (1.870,6.462) for the IDF cut-off points.

Interpretation: Our new cut-off points for central obesity are better predictors of CVD risk factors than the ones recommended by the IDF and WHO when applied to an indigenous population in Guatemala. Validating and applying these new cutoffs to other indigenous populations in Latin America have potential CVD prevention value.

Source of Funding: None.

Abstract #: 1.004_NCD

Awareness and Health-seeking Behavior of Urban Residents for NCD in Ethiopia

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Background: In Ethiopia, a double burden of disease is already emerging at the early stage of the epidemiological transition, with a mix of persistent, emerging, and re-emerging infectious diseases and increasing prevalence of chronic conditions and injuries. The aim of this study was to assess the knowledge of and attitudes toward health care services and the current practices in healthcare related to NCD services in urban settings where JSI's Strengthening Ethiopia's Urban Health Program is being implemented.

Methods: This is a mixed cross-section study that was conducted in cities and towns in five regional states and two city administrations in Ethiopia with the aim of exploring and understanding community awareness, knowledge, attitudes, and current use of health services.

Findings: The findings of this study show that about 79% of the respondents had heard about NCDs. The most commonly cited NCDs constituted hypertension (74%), diabetes (73.4%), and cancer (35.5%) among others. However, the community's level of awareness about the risk factors associated with NCDs was dangerously low: dietary problems (49.9%), overweight and obesity (40.4%), physical inactivity (32.4%), and substance abuse including alcohol and tobacco (30.5%). Surprisingly, only 25% of the respondents who heard about NCDs received medical checkup in the last

six months before the date of data collection. Respondents identified lack of knowledge about NCDs, low physical activity and exercise, cost and unavailability of drugs, poor habit of regular checkup, preference to traditional treatments for NCDs, the need for specialized care at hospitals, lack of early diagnosis and prompt treatment and concern about the side effects of the drugs to be taken over a longer or life long period as the main barriers to healthy lifestyle and NCD related facility based service seeking.

Interpretation: A community-based health education program through the existing Urban Health Extension Professionals would be a practical way to increase the level of awareness about NCD within the communities. Mass media should be used for promotion of NCD prevention and control and focus on the benefits of healthy diet, physical exercises, and regular health check-ups, and the harmful effects of alcohol, cigarette smoking, and use of addictive substances.

Source of Funding: USAID through JSI/SEUHP.

Abstract #: 1.005_NCD

Evaluation of Enhanced Kampala Advanced Trauma Course at Mulago Hospital, Uganda: A Mixed Methods Study

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Background: Preventable death and disability due to traumatic injury is increasing in Uganda. The Kampala Advanced Trauma Course (KATC) was established to address the gaps in knowledge and skills of med/surg interns when managing trauma patients in low resource settings. This three-day course is mandatory for interns in the medical/surgical rotation at Mulago Hospital and a new scenario-based moulage component is being integrated into KATC. This is the first study that aims to determine students' immediate knowledge retention as well as describe perceptions of course strengths, weaknesses, and clinical feasibility.

Methods: This mixed methods study, conducted at Mulago National Referral Hospital and Makerere University in Kampala, Uganda, used convenience sampling to recruit enrolled med/surg interns (students, n=14) and KATC experts (facilitators, n=4). We administered pre and post-tests, student evaluation surveys, and conducted eight focus groups surrounding the May 2016 KATC. Students were excluded for failure to attend the entire course or to take both standardized tests. KATC experts were included if they facilitated one moulage scenario. Written consent was obtained and ethical approval was obtained from University of California, San Francisco and Mulago Research and Ethics Committee. We analyzed quantitative data using medians and Wilcoxon Signed Rank Test to evaluate students knowledge retention and KATC evaluation. We used a deductive approach and Framework Analysis to create a code matrix for the qualitative data.

Findings: No significant knowledge retention was found when comparing standardized test data. However, median student evaluation scores were positive across all 13 KATC sessions. Qualitative data also showed that KATC and moulage components were well received. Students and facilitators identified strengths of the course

including the emphasis on practical skills, perceived applicability, and engaging teaching style. Improvement areas were also highlighted, including time constraints and lack of materials to guide students after the course completion.

Interpretation: The enhanced course model is feasible to maintain and the scenario based moulage engaged students and facilitators. KATC has valuable clinical applicability for trauma care in low-resource settings. KATC can be improved using our findings, such as re-evaluating the standardized pre and post-test design. Research into clinical utilization is recommended next. Limitations of this study include small sample size and lack of control group.

Source of Funding: UCSF.

Abstract #: 1.006_NCD

Social Determinants of Depression in the Caribbean: A Systematic Review

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Background: Depressive disorders is the largest contributor to years lived with disability in the Caribbean, adding >900 in 2013. Depression is a risk factor for suicide and increased adverse outcomes of acute and chronic illnesses. Social inequalities influence the occurrence of depression. Yet little is known about the social inequalities of this condition. In support of the 2011 Rio Political Declaration on addressing health inequities, this article presents a systematic review of the role of social determinants on depression and its adverse outcomes in the Caribbean.

Methods: Eight databases were searched for observational studies reporting associations between social determinants and depression frequency or outcomes. Based on the PROGRESS-plus checklist, we considered 9 social determinant groups for 5 depression endpoints, totalling 90 possible ways ('relationship groups') to explore the role of social determinants on depression. Studies with >50 participants conducted in Caribbean territories between 2004 and 2014 were eligible. The review was conducted according to STROBE and PRISMA guidelines. Results were planned as a narrative synthesis, with meta-analysis if possible.

Findings: From 3,951 citations, 55 articles from 46 studies were included. Most were classified as serious risk of bias. Fifty-seven of these relationship groups were reported by the 55 included articles, leaving 33 relationship groups (37%) without an evidence base. Most relationships were reported for gender, age, residence, marital status, and education. Depression and its outcomes were more common among females (except suicide which was more common among males), middle adolescents and young adults, and those with lower levels of education. Marriage emerged as both a risk and protective factor for depression score and prevalence, while several inequality relationships from Haiti were in contrast to typical trends.