

Structure/Method/Design: This is a mixed methods study that will involve data collection through social media, specifically pictures and 2-minute video clips, a short demographic survey and photo narrative from youth aged 18 to 30 in Nigeria.

Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract): Results from initial study on the impact of globalization on youth in Nigeria by the author has shown that globalization processes affect youth positively and negatively. Findings from this study will provide further illustration and context of this impact.

Summary/Conclusion: This mixed-methods, mixed-media, and multi-disciplinary study will provide results from one of the initial studies on the impact of globalization on youth in Nigeria using social media.

Factors influencing compliance to prevention of mother-to-child transmission guidelines in Western Kenya

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Background: Prevention of mother-to-child transmission (PMTCT) guidelines in Kenya requires all pregnant HIV-infected women be provided with highly active antiretroviral therapy (HAART) or ARV prophylaxis unless they opt out. We assessed the level of compliance to PMTCT guidelines and factors influencing compliance by health care providers

Structure/Method/Design: Compliance was measured using chart audits of 200 HIV-infected pregnant and postpartum women between November 2012 and June 2013. Factors associated with compliance were explored through 32 in-depth interviews with staff directly involved in PMTCT across 22 government facilities in western Kenya.

Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract): Although providers were knowledgeable about PMTCT and had high levels of professional confidence, compliance to guidelines was suboptimal and resulted in increased odds of MTCT. Chart audits showed that where MTCT occurred, providers were more likely to have failed to follow guidelines for prescription of ART for mothers [OR, 8.61; 95% CI, 2.8-26.2] and infants [OR, 3.92; 95% CI, 1.1-13.6], HIV counseling [OR, 3.94; 95% CI, 1.27-12.20], and timely provision of ARVs [OR, 2.97; 95% CI, 1.38-6.31]. Providers did not comply due to perception that 1) clients were in early gestation period (<28 weeks), 2) known HIV-infected women had less MTCT risk, 3) newly diagnosed women were more likely to opt out of PMTCT interventions. Providers attributed MTCT to client behavior citing reasons such as spousal influences, non-adherence to prescribed interventions, transport cost to health facilities, and stigma and disclosure dynamics. As a response to the client behavior, providers felt they lacked skills to convince women to take ARVs, felt demoralized, delayed providing PMTCT interventions, or simply did nothing. Systemic factors such as lack of privacy due to work-space challenges, language barriers during counseling, and increased workload linked to low staff numbers were cited as hampering guideline compliance. Fear of team alienation and strong group pressure was a key motivation to manage HIV-infected women well so as to avoid the ripple effect of discrimination at facility and personal level.

Summary/Conclusion: Client and provider behavior interact with health-system factors in a complex way to influence MTCT. To

address the problem of suboptimal guideline compliance, particularly, at the roll out of Option B+, it is important to understand unique contextual factors and how they affect the performance of providers implementing PMTCT.

Quality of life of HIV patients 2 years into treatment in a community-based antiretroviral therapy program in western Uganda

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Background: Objectives:

The aim of this study was to examine changes in the health-related quality of life (HRQOL) outcomes of patients in a community-based antiretroviral therapy (CBART) program in western Uganda, 2 years after the initiation of treatment.

Structure/Method/Design: A culturally adapted version of the MOS-HIV survey was administered to patients in the CBART program at baseline, after 1 year and after 2 years of treatment. Complementary clinical data was also collected at these times.

Changes in physical health (PHS) and mental health (MHS) summary scores were assessed and their associations with patient characteristics were examined.

Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract): Preliminary analysis suggests that the gains in PHS and MHS made during the first year of treatment have been maintained between throughout the second year of treatment as well. Further subgroup analysis is being carried out to examine associations between key demographic characteristics and changes in HRQOL. The influence of clinical factors, such as viral suppression, are also being examined.

While PHS and MHS both increased significantly overall during the first year of treatment, there was a proportion of patients who experienced either no change or a decrease in HRQOL during the first year of treatment. Associations between magnitude and direction of changes during the first and second year of treatment are also being examined.

Summary/Conclusion: The improvements in HRQOL show that CBART programs in rural Uganda can both provide positive treatment outcomes, and maintain them over time. However, improvements were not universal, and some patients continued to struggle despite improved clinical improvements. HRQOL surveys can be useful in identifying these patients, who may require additional support. Understanding the ongoing challenges of CBART patients is important for program planning, in order to better meet local needs.

Relationship among dietary patterns, apolipoproteins, C-reactive protein, and other lipids in adult populations in four cities of the Southern Cone of Latin America

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Background: In the last decades, there has been a nutrition transition in Latin America to diets with higher total caloric intake and lower consumption of vegetables, cereals, and fruits. An unhealthy dietary pattern affects plasma levels of apolipoprotein (Apo) AI, Apo B, and C-reactive protein (CRP), which are independently associated with the incidence of coronary heart disease and stroke. There is no

data regarding these biomarkers in relation to dietary patterns from the Southern Cone of Latin America. Therefore, the objective of this study is to analyze these biomarkers in relation to our traditional dietary patterns.

Structure/Method/Design: CESCAS I study is an observational prospective cohort study with a multistage probabilistic sample of 7600 participants from general population of four sites in Argentina, Chile and Uruguay. We conducted a cross-sectional analysis in a randomly selected subsample of 988 subjects. Subjects with previous cardiovascular events or under lipid-lowering agents were excluded. Diet was assessed using a previously validated 126-item food frequency questionnaire. We used a factor analysis to derive the major dietary patterns by gender. Linear regression models were used to examine the associations among Apo AI, Apo B, CRP, and other lipids (dependent variables) and quartiles (Q) of dietary pattern scores (independent variables). Linear trends tests were conducted to assess the associations with multiple regression analysis.

Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract): The population sample included 418 men and 570 women. The “prudent pattern” (PP) was characterized by intake of fruits, vegetables, low-fat dairy products, whole cereal, fish, and seafood. In men, higher scores of PP (Q4) showed a significant reduction in mean adjusted values of Apo B (−9.29 mg/dL), total cholesterol (TC) (−22.4 mg/dL), low-density lipoprotein (LDL) (−19.0 mg/dL), high-density lipoprotein (HDL) (−3.3 mg/dL) compared to the lowest scores (Q1). In normal-weight subjects, higher scores of PP also reduced CRP levels (−3.12 g/L). In women, higher scores of PP showed significant reduction in Apo B (−6.51 mg/dL), TC (−14.4 mg/dL) and LDL (−11.3 mg/dL). The “Western-like pattern” (WLP) was characterized by intake of meat, processed foods, pizza, empanadas, sweets and desserts, refined grains, vegetable oils, and other fats. In men, higher scores of WLP showed a trend to increase LDL (+27.1 mg/dL) while in women they showed a trend to increase values of triglycerides (+27.1 mg/dL, $P = 0.08$), LDL (+7.4 mg/dL), and TC (+9.2 mg/dL). Apo AI level was not associated with any dietary pattern.

Summary/Conclusion: Prudent dietary pattern was associated with a healthier lipid profile in both genders and better inflammatory profile in normal weight men, while the WLP showed a trend to increase plasma lipids, especially in women.

Developing a breast cancer knowledge assessment tool for health care workers in Ibadan, Nigeria

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Background: Breast cancer is the most common cancer affecting women, and in the developing world, late-stage diagnosis contributes to significant morbidity and mortality. Previous research in Ibadan, Nigeria on social factors contributing to late-stage diagnosis revealed that many patients received inappropriate medical treatment at the community level. Our research sought to assess the level of knowledge about breast cancer among a range of medical practitioners.

Structure/Method/Design: Many of the established knowledge assessment instruments from the United States focused on mammography screening, which was not applicable in this setting, so we conducted focus groups, as we developed our own tool. Our

questionnaire was designed to assess knowledge of symptoms, risk factors, treatments, and local cultural beliefs about breast cancer. Focus groups were conducted with health care workers from multiple tiers of the health care system to ensure that the topics covered in the questionnaire were comprehensive. The focus groups were audio-recorded and facilitated by experienced public health researchers. They were analyzed thematically.

Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract): Seven focus groups were conducted each consisting of three to eight participants from a single professional group. Participant groups were tertiary hospital physicians, general hospital physicians, primary health care center nurses, general hospital nurses, traditional birth attendants, community pharmacists, and traditional herbalists. The discussions revealed baseline knowledge of breast cancer symptoms across multiple tiers of the health care system, as well as a general awareness of the types of treatment available. Variation in knowledge level was seen most strongly in discussion of risk factors and etiology for breast cancer. All participants regardless of training were aware of the trend of late-stage diagnosis and had many insightful comments as to the causes for it including specific cultural beliefs. New topics raised in focus group discussions were added to the questionnaire.

Summary/Conclusion: Many existing breast cancer awareness tools have been developed for an American context with a focus on mammographic screening, and this cannot be applied to a low- or middle-income context where such screening is not widespread. Additionally, cultural beliefs may act as significant barriers to care and are location specific. Now that we have developed a relevant questionnaire we will begin recruiting 500 health care workers to complete it. Once we have captured the current level of knowledge we can design educational programs that fit the specific needs of each professional level. Greater knowledge among community health care workers has the potential to reduce time to referral and effective care at a tertiary medical center for Nigerian breast cancer patients.

Association of alcohol consumption and breast cancer risk among women in three sub-Saharan African countries

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Background: Alcohol drinking is linked to a risk of women’s breast cancer. However, there is little knowledge about alcohol consumption and its relationship to breast cancer among African women.

Structure/Method/Design: We conducted a case–control study among 2139 women with invasive breast cancer and 2590 controls in Cameroon, Nigeria, and Uganda from 1998 to 2013. A structured questionnaire was used to collect detailed information on alcohol drinking. Alcohol consumption was defined as having ever consumed alcoholic beverages at least once a week for a continuous 6 months or more. Alcohol contents in different types of drinks were quantified and converted to amount of pure ethanol. Multivariate logistic regression analysis was used to estimate adjusted odds ratio (aOR) and 95% confidence interval (CI).

Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract): The prevalence of alcohol consumption among women in Cameroon, Nigeria, and Uganda were 42.6%, 6.6%, and 46.1%, respectively. Women with breast cancer were more likely than