

Outcomes & Evaluation: The study found that risk factors for CM are the presence physical and psychological abuse during the mother's childhood, being Afro-Colombian, a lower education level, a lower wealth index are all risk factors that would increase the likelihood of CM. Physical and psychological IPV are mediating variables which strongly increase the risk of CM; however, the effect of sexual IPV was not statistically significant. Protective factors are increased age and being Native Colombian.

Going Forward: This study only considers child maltreatment from the perspective of physical punishment, without considering psychological or emotional forms of punishment. Other factors, like employment status, should be taken into account due to possible confounding effects. Further analysis should include these factors into the final outcome. In Colombia, prevention strategies and effective interventions designed to decrease the incidence of CM should target Afro-Colombian women and populations with low education levels and wealth indices. By offering care and support to women who are victims of physical and psychological IPV in developing countries would not only decrease the disease burden caused by IPV but also diminish their risk of perpetrating violent acts toward their children.

Funding: Ruth Crawford Mitchell Memorial Nationality Room Scholarship, Dean's Summer Research Program at UPSOM.

Abstract #: 02NCD018

Evaluation of a community health worker intervention to improve adherence to therapy for non-communicable disease in Chiapas, Mexico

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Background: Noncommunicable diseases such as diabetes and hypertension are leading causes of morbidity and mortality in Mexico. Community health workers are potentially effective in the care of these patients, but data regarding their effectiveness in the developing world are severely lacking. Our study aims to assess improvements in hemoglobin a1c, blood pressure, and adherence to therapy among diabetic and hypertensive patients after a community health worker intervention in rural Mexico.

Methods: *Compañeros en Salud* is a non-governmental organization operating in Chiapas, Mexico, and planned to introduce community health workers as an adjunct to routine care by a physician at every-three-month intervals in four rural communities. All adult patients on daily therapy for type 2 diabetes mellitus or hypertension were approached for verbal consent. Data collection utilized an observational stepped-wedge design, taking advantage of the programmatic plans of *Compañeros en Salud*. At baseline and every three months, just prior to implementation of community health workers in a new community, study investigators assessed adherence to medication, hemoglobin a1c, and systolic blood pressure among all study participants. The study was approved by the Partners Human Research Committee and by the Ethics board of Tecnológico de Monterrey Medical School.

Findings: 121 diabetic and / or hypertensive patients were enrolled during baseline data collection. At baseline, the range of average hemoglobin a1c in the four study communities ranged from 8.7% to 11.5%. Average baseline systolic blood pressure ranged from 132

mmHg to 149mmHg. Adherence to daily therapy was defined as self-report of taking medications in all of the preceding 5 days (5-day recall). Average baseline adherence to therapy by 5-day recall ranged from 41% to 82% across communities. Hypertensive patients who were adherent using 5-day recall had significantly improved systolic blood pressure as compared to those reporting non-adherence (difference in means 14mmHg, $p < 0.01$). At this time, community health workers have been introduced to three of four communities. The stepped-wedge design will allow for within-and-between-community comparisons of all endpoints. Preliminary results will be available February 2015, after community health workers have been operating in all communities for at least 3 months.

Interpretation: There is room for improvement in adherence to therapy and measures of disease control among patients with non-communicable disease in rural Chiapas receiving routine care by a physician, and community health workers may serve as a useful adjunct. Though there are no validated measures in this setting for measurement of adherence to therapy, 5-day recall correlates well with disease control. Through thoughtful collaboration, a high-quality evaluation of a programmatic implementation of a community health worker intervention is possible even in challenging rural settings naïve to medical research.

Funding: This project was supported by a grant from the Harvard Global Health Institute Graduate Research Fellowship.

Abstract #: 02NCD019

Creating and implementing low literacy cancer education materials: bridging the gap in sub-Saharan Africa

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Program/Project Purpose: Global Oncology (GO) is a non-profit community of professionals and student volunteers helping global partners alleviate suffering through providing the highest quality cancer care. In January 2013, GO established a partnership with Queen Elizabeth Central Hospital (QECH) in Blantyre, Malawi. In June 2013, GO initiated the development of cancer educational materials for QECH's low-literate patient population, in collaboration with THE MEME Design in Cambridge, MA. The materials were completed in May 2014 and piloted in Malawi and Rwanda in June-September 2014. Through this project, GO aims to improve psychosocial support services and patient adherence in resource-limited settings.

Structure/Method/Design: Cancer care providers at QECH identified a need for educational materials for their low-literate patient population. In order to develop a clinically relevant and culturally appropriate product, GO is working with MEME, QECH, Partners In Health (PIH) in Rwanda, and has consulted with experts throughout Boston and sub-Saharan Africa. In addition to developing the materials, GO and its partners are investigating ways to integrate the booklets into clinical protocols as a platform to better engage patients and families in the treatment process.