

(75% case; 74% control), most patients (60% case response; 44% control response) report that they do not know the etiologies. About 50% of total participants report that they have no available resources for information about breast cancer. Other results reveal that participants occasionally or frequently have conversations about health and wellness with their family members (86% case response, 83% control response) and a self reported family history of cancer is comparable to that of the global percentage (8% case, 14% control). 86% of cases have shared their breast cancer diagnosis with at least one family member.

The Likert-Scale component reveals that both the cases and controls share similar sentiments about the perceptions of genetic risk and understanding family history. This denotes, that whether a woman is directly, indirectly, or not at all affected by breast cancer, it is the cultural contingencies that shape ones experience and interaction with breast cancer in Ibadan, Nigeria.

Abstract #: 2.067_NEP

Higher levels of education mitigate the relationship between perceived stress and common mental disorders among women in rural India: results of a cross-sectional study

N. Fabey¹, A. Soni², J. Allison², J. Vankar³, A. Prabhakaran³, T. Moore Simas⁴, N. Byatt⁴, A. Phatak³, E. O'Keefe⁴, S. Nimbalkar³; ¹Des Moines University, Des Moines, Iowa, ²University of Massachusetts, Worcester, Massachusetts, ³Pramukhswami Medical College, Gujarat, India, ⁴Boston University, Boston, Massachusetts

Background: Common mental disorders (CMD) are a constellation of mental health conditions that include depression, anxiety, and other related non-psychotic affective disorders. The WHO ranks CMD as the leading cause of disease burden in India among women in the 15 - 44 year age group. Qualitative explanatory models of mental health among reproductive-aged women in India reveal that distress is strongly associated with CMD. The relationship of perceived stress and CMD might be attenuated or exacerbated based on an individual's sociodemographic characteristics. Identification of these attributes and the mechanisms through which they could mitigate the relationship of high perceived stress and CMD holds promise for developing new strategies to promote mental health in rural India.

Methods: Cross-sectional survey of 700 women from rural Gujarat, India. CMD status was assessed using Self-Reported Questionnaire 20 (SRQ-20). Factors associated with CMD were evaluated using multivariable logistic regression. Effect modification for the relationship of perceived stress and CMD based on age, education, income, and marital status was assessed using interaction terms and interpreted in terms of predicted probabilities.

Findings: 663 women were in the analytic cohort with roughly one in four screening positive for CMD (23.7%). Poor income, low education, food insecurity, and recurrent thoughts after traumatic events were associated with increased risk of CMD. Perceived stress was closely associated with CMD status. Higher education attenuated the relationship between high levels of stress and CMD (82.3%, 88.8%, 32.9%; p-value for trend: 0.03). Increasing income and age attenuated the link between moderate stress and CMD.

Interpretation: Our findings suggest a high burden of common mental disorders among reproductive-aged women from rural

western India. Higher education, age, and income may provide resources to women to cope with stress. Women with increased age and income are able to manage moderate stress, but high stress might overwhelm their coping mechanisms. Future efforts to improve mental health in rural India should focus on preventing CMD by enhancing rural women's self-efficacy and problem-solving capabilities to overcome challenging life events and stressors, thereby reducing the risk of CMD.

Funding: Institutional travel grant.

Abstract #: 2.068_NEP

Orthopedic care capacity assessment and strategic planning in Ghana: mapping a way forward

B.T. Stewart^{1,2,3,4}, A. Gyedu^{2,3}, G. Tansley⁵, D. Yeboah^{2,3}, F. Amponsah-Manu⁶, C. Mock^{1,7,8}, W. Labi-Addo^{9,10}, R. Quansah^{2,3}; ¹Department of Surgery, University of Washington, Seattle, WA, USA, ²School of Medical Sciences, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana, ³Department of Surgery, Komfo Anokye Teaching Hospital, Kumasi, Ghana, ⁴Department of Interdisciplinary Health Sciences, Stellenbosch University, Cape Town, South Africa, ⁵Department of Surgery, Dalhousie University, Nova Scotia, Canada, ⁶Department of Surgery, Eastern Regional Hospital, Korforidua, Ghana, ⁷Harborview Injury Prevention & Research Center, Seattle, WA, USA, ⁸Department of Global Health, University of Washington, Seattle, WA, USA, ⁹Eastern Regional Health Directorate, Ghana Health Service, Ministry of Health, Korforidua, Ghana, ¹⁰St. Joseph Orthopaedic Hospital, Korforidua, Ghana

Background: Orthopedic conditions incur more than 52 million disability-adjusted life years annually. This burden disproportionately affects low- and middle-income countries, which are least equipped to provide orthopedic care. We aimed to assess orthopedic capacity in Ghana, illustrate population-level spatial access to orthopedic care, and identify hospitals that would improve access to care most if their capabilities were improved.

Methods: Seventeen orthopedic resources were selected from the World Health Organization's *Guidelines for Essential Trauma Care*. Direct inspection and structured interviews with hospital staff were used to assess resource availability at 40 hospitals countrywide. Cost distance analyses were used to map population-level potential spatial access to orthopedic care. We identified facilities for targeted capability improvement that would have the greatest impact population-level spatial access to care using location-allocation modeling.

Findings: Orthopedic care assessment demonstrated marked deficiencies. Some deficient resources were low-cost (e.g. spinal immobilization, closed reduction capabilities, prosthetics for amputees). Several factors contributed to resource non-availability, namely equipment absence, technology breakage, and lack of training. User fees for orthopedic implants were often prohibitively expensive for patients in need. Population-level spatial access to basic (i.e. closed reduction, traction), intermediate (i.e. fixation), and advanced (i.e. spine, pelvis, or hand surgery) orthopedic care within two hours was: 74.9% of Ghanaians [uncertainty interval (UI) 70.8–77.3%]; 74.6% (UI 69.9–77.1); and 59.4% (UI 50.0–68.3), respectively. Building basic orthopedic capacity at 15 target hospitals would improve spatial access to basic care from 74.9 to 83% of Ghanaians