INFECTIOUS DISEASES OLD AND NEW — IMPLICATIONS FOR GLOBAL HEALTH

Community Members' Perceptions of Tuberculosis (TB) Stigmatization in Rural Maharashtra, India

S. Tilekar[1], D. Rajaput[1], B. Varghese[1], **L.L. McCreary**[2]; [1]Bel-Air College of Nursing, Panchgani, India, [2]University of Illinois at Chicago, Oak Park, IL, USA

Background: India has the world's highest burden of TB, reflecting the resurgence of TB due to HIV/TB comorbidity. Stigmatizing attitudes among the general public are a barrier to public health measures to control the spread of TB. This study describes rural Maharashtra adults' perceived TB-related stigmatization in their communities.

Methods: A cross-sectional descriptive survey design was used. The World Health Organization 11-item "TB Knowledge, Attitudes and Practices Survey" was translated from Spanish to English to Marathi and administered face-to-face in rural communities with active TB cases. Content validity and cultural appropriateness for Maharashtra were established by a panel of nursing faculty. In addition to demographic variables, 11 items measured perceived TB stigmatization using a 5-point Likert-type scale, e.g. "Some people feel uncomfortable to be close to those that have tuberculosis" or "Some people prefer that those who suffer from tuberculosis should not live in the community."

Findings: The survey was completed by 402 rural adults ages 18-70 (M=34.8±11.82); 69.9% were females; 53.3% had primary education or less. The stigmatization scale had high reliability (α = .934). The mean stigmatization score was 3.02±1.056. There was a trend for women to have higher scores (p = .056). Scores did not relate to marital status or occupation (whether employed, student or homemaker). Age had a curvilinear relationship: 28% of those in the middle category, ages 31-49, had high scores, versus 38% of others. Multiple regression examining the effects of gender, marital status, age and occupation explained less than 2% of the variation in perceived stigmatization.

Interpretation: Rural adults report that stigmatization of TB exists in their communities. Older and younger adults perceive higher stigmatization than those ages 31-49, who may have grown up viewing TB as relatively rare and treatable, before the resurgence of TB that accompanied the rising HIV incidence in India. Because stigmatization poses a barrier to community members' willingness to be tested and treated for this communicable disease, public health nurses and other providers need to address community TB stigmatization. Knowledge of the specific stigmatizing attitudes held in communities can inform development of effective interventions.

Abstract #: *2.001_INF*

Current Nutritional Status does not Modify the Malaria-Anemia Relationship in Young Children: A Cross-Sectional Study in Five Sub-Saharan African Countries

S. McCuskee[1], E.B. Brickley[2], A. Wood[3]; [1]Stanford University, Stanford, California, USA, [2]Dartmouth College, Hanover, USA, [3]University of Cambridge School of Medicine, Cambridge, United Kingdom

Background: Anemia is a multifactorial and prevalent condition, particularly in children under age 5 in sub-Saharan Africa. Public health policy aimed at addressing anemia requires evidence on its modifiable risk factors. Malaria infection and nutritional status and their potential interaction have been suggested as risk factors by previous literature, but these studies have largely lacked the power to detect effect modification and compare different country contexts.

Methods: This population-based cross-sectional study used Demographic and Health Survey data from Burkina Faso, Cameroon, Côte d'Ivoire, Mozambique, and Rwanda to assess associations and interactions between malaria, nutritional status (as indicated by height-for-age and weight-for-height), and hemoglobin or clinical anemia as outcomes. Within-country multiple linear regression on hemoglobin, logistic regression on anemia and multi-level regression allowing for geographic clustering were conducted. Multilevel linear regression was used to combine country data (N=21003), maximising the study's power to detect effect modification.

Findings: Malaria was a statistically and clinically significant predictor of hemoglobin and anemia. Results were broadly consistent in all countries, although variation was observed in effect sizes for malaria which may be attributable to variations in anemia prevalence. Malaria infection predicted a mean change in hemoglobin of -0.826 g/dl (95% confidence interval: -1.18, -0.467) across all considered countries. Height-for-age and weight-for-height were statistically significant predictors of hemoglobin and anemia but had clinically unimportant effect sizes. The combined-country analysis did not detect effect modification by malaria infection of nutrition's effect on hemoglobin.

Interpretation: This study provides support for malaria as an important predictor of anemia in young sub-Saharan African children, across varying transmission, sociodemographic, and health systems contexts. It provides little evidence for any effect of nutritional status or effect modification which would be significant clinically or for public health. Although they do not prove causality, these results underscore the continuing importance of malaria as a predictor of anemia and the critical role of evidence and context in global public health.

Abstract #: *2.002_INF*

Investigating the Role of Stigma on Fertility Desire among HIV-positive Women in Bangkok, Thailand: A Qualitative Study

N. Mehta[1], J. Ho[2], P. Boonsuk[3], A. Sohn[3]; [1]University of California, San Francisco, San Francisco, California, USA, [2]APCASO, Asia Pacific Council Of Aids Service Organizations, Bangkok, Thailand, [3]TREAT Asia, Bangkok, Thailand

Background: The Thai Ministry of Public Health is committed to reaching the United Nations' goal of zero new HIV infections, zero