

Background: Demographic and socio-demographic factors such as place of residence, maternal age, educational attainment, occupation, parity, house-hold wealth and religion are critical determinants of healthcare utilization. We examined socio-demographic determinants affecting child health service utilization in urban Ethiopia to support recommendations for policy makers and public health managers.

Methods: Using the 2011 Ethiopian Demographic and Health Survey (2011 EDHS) data, we investigated factors determining health service utilization (treatment seeking behavior for childhood illnesses and vaccination) and socio-demographic demographic factors such as maternal age, maternal educational attainment, and household wealth using descriptive statistics.

Findings: Among Ethiopian urban children age 12-24 months, 63% received the recommended three doses of DPT vaccine; 44% of urban children under 5 years of age with a fever or cough received appropriate treatment and 51% of the children with diarrhea were treated with oral rehydration salts (ORS) or recommended home fluids. Slightly more male children received medical treatment (56% for diarrhea and 43% for fever or cough) compared to females (44% and 32%) respectively. Maternal education and household wealth are shown to be the most important determinants of health care seeking for childhood illnesses and vaccination. The proportion of children who received DPT3 vaccination increased as maternal education and household wealth increased. Much higher proportion of children (78%) who are born to women who attended higher education received DPT3 than children born to women of no education (37%). Almost all (94%) children born to the wealthiest quintile households received DPT3 compared to only 42% of children in the poorest quintile. Maternal education and household wealth influence decisions to seek health care for childhood illnesses in urban Ethiopia. Much higher (86%) of urban children born to highly educated women receive ORS or recommended home solution for diarrhea compared to only 34% of children born to women without primary education. The relationship between education and fever treatment was not as large: nearly half (45%) of children born to highly educated mothers received treatment for fever or cough compared to children born to mothers with no education (34.5%).

Interpretation: In urban Ethiopia, inequalities in wealth and education are shown to affect child healthcare utilization. Health programs in urban Ethiopia should focus on the poor and less educated segment of urban population in order to improve child health outcomes.

Funding: No funding was obtained.

Abstract #: 01SEDH012

“Rather than talking in Tamil, they should be talking to Tamils”: Sri Lankan Tamil refugee readiness for repatriation

Abstract opted out of publication.

Abstract #: 01SEDH013

Building partnerships for trans-disciplinary global health research: the caribbean consortium for research in environmental and occupational health

W. Hawkins¹, D. Mans², M.Y. Lichtveld¹; ¹Tulane University School of Public Health and Tropical Medicine, New Orleans, LA/US, ²Anton de Kom University of Suriname, Paramaribo, SR

Program/Project Purpose: The Caribbean Consortium for Research in Environmental and Occupational Health (CCREOH) was established in September 2012. The overall aims of CCREOH is to characterize key environmental and occupational health (EOH) risks associated with gold mining-related mercury contamination, pesticide use in agriculture, and indigenous nutraceutical contamination to inform a gap- and opportunities assessment of relevant environmental policies; to create a sustainable public health and EOH network to serve as the trans-disciplinary research and training hub for CCREOH; to develop a trans-disciplinary research roadmap to guide the consortium’s EOH research leveraging all consortium partner assets; and to develop a capacity building portfolio including a regional EOH training program to successfully implement the priority areas articulated in the CCREOH research roadmap.

Structure/Method/Design: The overarching goal is to address high-priority EOH risks in Suriname and those common to the increasingly vulnerable Caribbean region while preserving the unique assets, health, and cultural traditions of indigenous and other health disparate populations. CCREOH’s investigator team is indicative of its trans-disciplinary research portfolio, bringing together an array of scientists from biology to epidemiology including toxicology and medicine. CCREOH builds on the existing partnerships between the Anton de Kom University of Suriname, Faculty of Medical Sciences, Tulane University, School of Public Health and Tropical Medicine, and the Caribbean Public Health Agency. Partner countries include Trinidad and Tobago, Guyana, and northern Brazil. Currently, research is exploring the antiproliferative effects of medicinal plants, analyzing pesticide residues in frequently consumed vegetables and fruits, as well as the role pesticides play as an effector in suicide attempts and successful suicides, and evaluating the data derived from preliminary environmental and occupational health policy assessments in partner countries.

Outcomes & Evaluation: Plant extracts inhibited the cell growth and may interfere with certain aspects of angiogenesis. Initial pesticide analysis revealed levels of endosulfan that exceeded maximum residual levels. Community health workers (CHW) successfully designed and pilot tested text messages regarding the use, storage and disposal of pesticides. Policy assessments showed a disconnect between increased development in agriculture and mining and lack of environmental health safeguards; a lack of science-driven EOH policies to protect public health; and an exponential increasing NCD burden in growing health disparate communities.

Going Forward: Studies to assess plant extracts for capacity to form capillaries as well as potential anti-oxidant properties are in preparation. Continued EOH assessments will include historical deposition of mercury and expanded pesticide analysis on agricultural products. Additional CHWs will be trained. A regional dietary assessment tool will be developed to ascertain potentially contaminated food intake. A priority is a proposal submission for a full GEOHealth research and training hub.

Funding: Fogarty International Center of the NIH under Award Numbers R24TW009570 and R24TW009561.

Abstract #: 01SEDH014

Livestock production and antibiotic resistant pneumonia in the elderly population of the United States

K. Howell¹, G.A. Beresin², G. Jeffries³, A. Liss¹, E. Naumova¹; ¹Tufts University Department of Civil and Environmental Engineering, Medford, MA/US, ²ASPPH/ US EPA, Cincinnati, OH/US, ³Gerald J. and