



## Urban Health Bulletin: A Compendium of Resources

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### Introduction

The Urban Health Bulletin is compiled by USAID's Environmental Health Program and is a periodic update of USAID as well as non-USAID studies and reports that focus on a range of urban health issues. This first issue provides citations and abstracts to 10 studies. Links to the full-text and/or author email addresses are included when available. We welcome your comments and suggestions to make the Bulletin more useful to you and please send your email address if you would like to receive notices of future Urban Health Bulletins.

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### Recent USAID Sponsored Reports

- [The Urban Health Project for Five Disadvantaged Neighborhoods of Metropolitan area of Port-au-Prince](#) (pdf, full-text). by K. Tuli. Child Survival and Grants Program, 2006.

Two survey questionnaires were designed, the first for mothers with children 0-11 months of age and the second for those with children 12-23 months. Two modules were included in both questionnaires (demographic information and management of childhood illness). The questionnaire for mothers with children 0-11 month also included modules on maternal and newborn care and nutrition. The one for mothers with children 12-23 months contained modules on water and sanitation, HIV/AIDS and other sexually transmitted infections.

- [Urban health and care-seeking behavior: a case study of slums in India and the Philippines](#). (pdf, full-text). by M. Islam, M. Montgomery & S. Taneja. PHR Plus, 2006.

This report examines the health needs and care-seeking behavior of poor slum residents in two Asian cities – Indore, India and greater Manila, Philippines. The centerpiece of the study is a qualitative investigation set in four slums in Indore and two slums in greater Manila, where in-depth interviews of slum residents and health care providers were carried out. The topics covered in the research include general health-seeking behavior and self-efficacy, family planning, maternal health, child health, tuberculosis, domestic violence and alcohol abuse, and environmental health and hygiene.

### Recently Published Journal Articles

- *Child Care Health Dev.* 2007 Mar; 33(2):117-25.

#### **Maternal cultural participation and child health status in a Middle Eastern context: evidence from an urban health study.**

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**Background:** The negative effect of poverty on child health has been well established. However, rapid urbanization in developing countries prompts new research questions relating to socio-cultural practices and other related variables in these settings.

**Objective:** To examine the association between maternal cultural participation and child health status in impoverished neighbourhoods of Beirut, Lebanon.

**Methods:** A cross-sectional survey of 1241 mothers with children aged less than 5 years was conducted from randomly selected households in three impoverished neighbourhoods of diverse ethnic and religious make-up. The outcome variable was child health status (good/bad) as assessed by the mother. Maternal variables, including cultural participation, education, demographic and environmental/structural factors, were studied. Descriptive statistics and bivariate associations were provided using Pearson's chi-square tests. Unadjusted and adjusted odds ratios were then obtained from binary logistic regression models.

**Results:** Two indicators of maternal cultural participation, namely watching entertaining television and attending movies/art exhibitions, were found to be significantly associated with child health status after controlling for other risk factors. The quality of water, the quality of local health services and maternal education were also significantly associated with child health status. Household income, child gender and household dampness had no significant association with child health status in this context.

**Conclusion:** Maternal cultural participation was a significant predictor of child health status in impoverished urban communities. Improving child health through culturally focused interventions for mothers, especially in deprived areas, may be greatly important.

- *Econ Hum Biol.* 2007 Jan 12,

#### **Urban land rights and child nutritional status in Peru, 2004.**

Vogl TS. Department of Economics, Harvard University, United States.

Advocates of land-titling programs in developing countries posit that these programs lead to a multitude of benefits, including health improvements. This paper presents the results of a child health survey of several Lima communities after various time exposures to Peru's urban land-titling program.

The results provide suggestive evidence that improved property rights increase children's weight but not their height, which is consistent with previous work on the topic. However, titles also appear to raise children's risk of being overweight or obese, implying that the observed weight gain is not necessarily an improvement in nutritional status.

- *Trop Med Int Health.* 2006 Dec; 11(12):1858-67.

#### **Uncovering and responding to needs for sexual and reproductive health care among poor urban female adolescents in Nicaragua.**

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**Background:** To meet the needs of female adolescents from low-income urban areas for sexual and reproductive health (SRH) care, vouchers providing free-of-charge access to SRH care at 19 primary care clinics were distributed in Managua, Nicaragua. These vouchers substantially increased the use of services, demonstrating that many adolescents are willing to use such

services, if readily accessible. The voucher redemption made it possible to identify the nature of existing, but largely unmet, needs for SRH care.

**Method:** The medical files from 3301 consultations with female adolescents were analysed using descriptive statistical methods and multiple logistic regression.

**Results:** Female adolescents presented SRH problems that merited medical attention. The mean number of problems presented was 1.5 per consultation: 34% of the vouchers were used for contraceptives, 31% for complaints related to sexually transmitted infection (STI) or reproductive tract infection (RTI), 28% for advice/counselling, 28% for antenatal check-up and 18% for pregnancy testing. A new category of health care users emerged: sexually active girls who were neither pregnant nor mothers and who sought contraceptives or STI/RTI treatment. Contraceptive use doubled among the sexually active non-pregnant voucher redeemers. Consultation with a female doctor younger than 36 years was associated with a higher chance of having contraceptives prescribed.

**Conclusion:** Accessible and appropriate SRH care has the potential to make an important contribution to the increased contraceptive use, decreased risk of unwanted teenage pregnancies and decreased prevalence of STIs/RTIs among underserved adolescents. Once adolescents access the services, providers have a crucial role in ensuring current and continuing needs are met.

- *Health Aff (Millwood)*. 2007 Mar-Apr; 26(2):474-82.

#### **Poor health kills small business: illness and microenterprises in South Africa.**

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Small businesses contribute almost 50 percent of total employment and 30 percent of gross domestic product in South Africa, but the impact of poor health and AIDS on these businesses is poorly documented. Using three waves of longitudinal data from predominantly African neighborhoods in peri-urban Durban, South Africa, this project investigates the connections between the health of the owner of a micro- and small enterprise (MSE) and the MSE's growth, survival, or exit. The results show that poor baseline health and declines in health over time are both significantly associated with subsequent business closure.

- *Eur J Clin Nutr*. 2007 Feb 14

#### **Effects of bovine serum concentrate, with or without supplemental micronutrients, on the growth, morbidity, and micronutrient status of young children in a low-income, peri-urban Guatemalan community.**

Begin F, Santizo MC, Peerson JM, Torun B, Brown KH. The Micronutrient Initiative, Africa.

**Objective:** To determine the effects of dietary supplements containing bovine serum concentrate (BSC, a source of immunoglobulins) and/or multiple micronutrients (MMN) on children's growth velocity, rates of common infections, and MN status. Design: Randomized, controlled, community-based intervention trial.

**Setting:** Low-income, peri-urban Guatemalan community. Subjects: Children aged 6-7 months initially. Interventions: Children received one of four maize-based dietary supplements daily for 8 months, containing: (1) BSC, (2) whey protein concentrate (WPC, control group), (3) WPC+MMN, or (4) BSC+MMN.

**Results:** There were no significant differences in growth or rates of morbidity by treatment group. Children who received MMN had lower rates of anemia and (in the group that received WPC+MMN) less of a decline in serum ferritin than those who did not, but there were no differences in other biochemical indicators of MN status by treatment group.

**Conclusions:** MMN supplementation reduced anemia and iron deficiency in this population, but the MMN content and source of protein in the supplements did not affect other indicators of MN status, growth or morbidity.

- *Health Policy. 2007 Feb 19*

**Comparison of mosquito control programs in seven urban sites in Africa, the Middle East, and the Americas.**

Impoinvil DE, Ahmad S, Troyo A, Keating J, Githeko AK, Mbogo CM, Kibe L, Githure JI, Gad AM, Hassan AN, Orshan L, Warburg A, Calderon-Arguedas O, Sanchez-Loria VM, Velit-Suarez R, Chadee DD, Novak RJ, Beier JC.

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Mosquito control programs at seven urban sites in Kenya, Egypt, Israel, Costa Rica, and Trinidad are described and compared. Site-specific urban and disease characteristics, organizational diagrams, and strengths, weaknesses, obstacles and threats (SWOT) analysis tools are used to provide a descriptive assessment of each mosquito control program, and provide a comparison of the factors affecting mosquito abatement.

The information for SWOT analysis is collected from surveys, focus-group discussions, and personal communication. SWOT analysis identified various issues affecting the efficiency and sustainability of mosquito control operations. The main outcome of our work was the description and comparison of mosquito control operations within the context of each study site's biological, social, political, management, and economic conditions. The issues identified in this study ranged from lack of inter-sector collaboration to operational issues of mosquito control efforts.

A lack of sustainable funding for mosquito control was a common problem for most sites. Many unique problems were also identified, which included lack of mosquito surveillance, lack of law enforcement, and negative consequences of human behavior. Identifying common virtues and shortcomings of mosquito control operations is useful in identifying "best practices" for mosquito control operations, thus leading to better control of mosquito biting and mosquito-borne disease transmission.

- *Trop Med Int Health. 2007 Feb 5*

**Tuberculosis in intra-urban settings: a Bayesian approach.**

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**Objective:** To model the effect of socio-economic deprivation and a few transmission-related indicators of the tuberculosis (TB) incidence at small area level, to discuss the potential of each indicator in targeting places for developing preventive action.

**Methods:** Ecological spatial study of TB incidence in Olinda, a city in the north-east of Brazil, during the period 1996-2000. Three socio-economic indicators (mean number of inhabitants per household; percentage of heads of household with <1 year's formal education; percentage of heads of households with monthly income lower than the minimum wage) and two transmission-

related indicators (number of cases of retreatment; number of households with more than one case during the period under study), all calculated per census tract, were used. We adopted four different full hierarchical Bayesian models to estimate the relative risk of the occurrence of TB via Markov chain Monte Carlo.

**Results:** The best specified model includes all the selected covariates and the spatially structured random effect. The gain in goodness-of-fit statistic when the spatial structure was included confirms the clustered spatial pattern of disease and poverty. In this model, the covariates within the non-zero credibility interval were the number of persons per house, the number of cases of retreatment and the number of households with more than one case (all with relative risk  $\geq 1.8$ ) in each census tract.

**Conclusions:** The possibility to estimate in the same framework both the contribution of covariates at ecological level and the spatial pattern should be encouraged in epidemiology, and may help with establishing Epidemiological Surveillance Systems on a territorial basis, that allows rational planning of interventions and improvement of the Control Programme effectiveness.

- *Int J Tuberc Lung Dis.* 2007 Jan; 11(1):65-71.

### **Developing a socio-economic measure to monitor access to tuberculosis services in urban Lilongwe, Malawi.**

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**Objectives:** To develop locally appropriate measures of poverty for the National Tuberculosis Programme (NTP), Malawi, and to assess access to tuberculosis (TB) services by different socio-economic groups by establishing a socio-economic profile of current TB patients

**Design:** A quantitative proxy measure of poverty was developed through regression analysis of data from the 1998 national Malawi Integrated Household Survey. A qualitative assessment of poverty was conducted in poor and non-poor settlements in urban Lilongwe to identify key indicators of socio-economic status. Both quantitative and qualitative indicators were used to assess the socioeconomic status of 179 TB patients who participated in a cross-sectional survey.

**Findings:** The proxy measure of poverty and the qualitative indicators demonstrated similar ability to measure the poverty status of patients. The poverty head count among patients using the quantitative and qualitative indicators were 78% and 70%, respectively. Geographical analysis showed that 60% were from non-poor areas and only 15% (26/139) were from squatter settlements.

**Conclusion:** This study established a strategy for monitoring access to TB services using a proxy measure of poverty and qualitative indicators. This is a vital first step in developing an evidence base for pro-poor equitable TB services.