

Degree and Field of Study (2016):

Global Health and Population

Organization	Project Abstract
Harvard School of Public Health	<p><b>Poverty From Health: A Quantitative Analysis of the Impoverishing Effect of Out of Pocket Medical Payments</b></p> <p>The disease-poverty trap has engendered concern over both the economic and health consequences of out-of-pocket health spending. In low- and middle-income countries, health expenditures are mostly out of pocket and constitute significant portions of household spending. Public sector care providers often charge user fees to generate revenue; perceived quality problems in public facilities compel households to seek care in the more expensive private sector; and insurance coverage is low. The need for significant out-of-pocket health care payments threaten affordability and access to healthcare while impacting household economic stability and well-being. Effective measurement and monitoring of this type of economic burden is therefore necessary to inform the proper design and financing of health systems. This project attempts to quantify the effect of out-of-pocket healthcare payments as they relate to poverty across a sample of national and household-level expenditure data from 36 low- and middle-income countries. The aim is to characterize the impoverishing effect of these payments in a novel way by quantifying the number of people living in poverty in a given country that are poor due to out-of-pocket expenditures—a way to understand how much of a household’s poverty might be a consequence of healthcare spending.</p>
Healthy Kids/Brighter Future	<p><b>Evaluation of a School health program in Lusaka, Zambia</b></p> <p>I worked in Lusaka, Zambia running an evaluation of a school health intervention.</p>
PSI/Myanmar	<p><b>Internship with PSI-Myanmar</b></p> <p>My summer internship was with Population Services International (PSI) at their Myanmar headquarters in Yangon. PSI has an expansive public health program in Myanmar, which it has implemented over the last 20 years. The focus of PSI/Myanmar’s work has largely been in HIV, reproductive health, maternal and child health, TB, and malaria. PSI/Myanmar utilizes social marketing and social franchising techniques to provide products and services in these health areas to at-risk populations throughout the country. My scope of work during this summer internship consisted of two main projects: 1) Analysis of the effectiveness of using performance-based incentives to motivate community health workers (CHWs), and 2) Baseline analysis and write-up of a maternal, neonatal, and child health (MNCH) household survey.</p>

Harvard School of Public Health	<p><b>DETERMINANTS OF NUTRITION KNOWLEDGE AMONG HEALTHCARE PROVIDERS AND FAMILIES IN INDONESIA</b></p> <p>Healthcare provider knowledge of maternal and young child nutrition practices is important both to effectively implement nutrition interventions as well as to communicate their knowledge to families. In Indonesia this knowledge is critical in order to improve poor nutritional outcomes such as stunting, which affects over a third of children under five years old. This study examines the associations in nutrition knowledge between different provider cadres and families; identifies key determinants of healthcare provider nutrition knowledge; and explores whether this knowledge is effectively communicated to families with young children in Indonesia. I utilize cross-sectional data from a baseline evaluation of a large-scale nutrition intervention to conduct a correlational and regression analysis focusing on one cadre of healthcare providers and caregivers of children under three years old. I find there are weak associations in the knowledge scores of different healthcare provider cadres living in the same geographic regions. Basic education is by far the strongest predictor of healthcare provider nutrition knowledge, while training and supervision had significant but weak associations with knowledge. The number of ante-natal care visits was the strongest predictor of caregiver knowledge after controlling for education, indicating that healthcare utilization may be an important source of nutrition knowledge. These results can be used by the implementers of the nutrition intervention to strengthen the program's effectiveness.</p>
Action Against Hunger	<p><b>Nutrition in Cambodia</b></p> <p>I worked with Action Against Hunger, preparing a report on wild foods and malnutrition.</p>
ESRI	<p><b>Internship with ESRI</b></p> <p>My program does not have a formal practicum. To fulfill the internship requirement I worked with ESRI over the summer.</p>
Tula Salud	<p><b>Qualitative Research on Community Health Worker Motivation in Alta Verapaz, Guatemala</b></p> <p>I spent the summer conducting focus groups and interviews with community health workers working in Alta Verapaz, Guatemala. The purpose of this research was to inform a randomized trial that was being planned to examine the intrinsic motivation of CHWs in the area and look at the effect of text messages on performance.</p>
Center for Mental Health and Law	<p><b>Psychosocial barriers to employment for persons with mental disabilities</b></p> <p>My project was a qualitative study that uncovered the psychosocial barriers to employment for persons with mental disabilities at the Hospital for Mental Health in Gujarat, India. We conducted semi-structured interviews of male patients in the outpatient ward of the hospital, and obtained consent only from those patients that the referring psychiatrist deemed capable of providing consent. In total, we interviewed 33 male patients and used three separate questionnaires (one for those who were currently employed, one for those who had their employment discontinued, and one for those who were never employed) based</p>

	on employment status.
none	<p><b>Master's Thesis titled "Early-life predictors of child cognitive, motor and socioemotional development in Dar es Salaam, Tanzania"</b></p> <p>During the spring of my second year I was enrolled in GHP 299 and wrote my Master's thesis under the guidance of Professor Chris Sudfeld and Professor Wafaie Fawzi. To inform this work I spent the summer between my 1st and 2nd year in Dar es Salaam, collecting data for the thesis. This was a very valuable experience as I got to be involved in the research from data collection through data cleaning, analysis and interpretation.</p>
Mil Milagros, Inc	<p><b>Process Evaluation of Mil Milagros, A School-feeding NGO in Guatemala</b></p> <p>The thesis presents a literature review and a process evaluation using focus groups and interviews for Mil Milagros, a non-profit organization in Sololá, Guatemala. The process evaluation portion aims to determine differences across the four communities in which Mil Milagros was serving in 2015 with goals to see if programs are operating as intended and to articulate possible attributable factors to any differences in changes in stunting across the communities when a quantitative evaluation is conducted. Through observations, informal and formal interviews, and focus groups with mother volunteers who implement the programs, the process evaluation looks at differences in operations, volunteer motivations, unmet needs, challenges, unexpected benefits and consequences of the programs, satisfaction of programs, and community relationships. Focus groups and baseline observations and quantitative data (height and weight) were also conducted in schools to which Mil Milagros intended to expand. Quantitative data in these schools may be used as comparisons to Mil Milagros's students in summary statistics and quasi-experimental evaluation design plans to follow. Qualitative methods were employed to assess whether the needs in these schools matched the intended goals of Mil Milagros's programming, and to gain a sense of the political climate, community relationships, and other external programs affecting school operations.</p>
Africa Centre for Health and Population Studies	<p><b>An exploration of domestic violence and HIV/AIDS prevalence in KwaZulu-Natal</b></p> <p>I conducted a literature review of the relationship between the high domestic violence rate in rural KwaZulu-Natal and equally high prevalence rate of HIV/AIDS, working under the guidance of Dr. Till Baernighausen, Postdoc Guy Harling, and with the aid of a few SD students from HSPH. I also accompanied the Demographic + Surveillance Area (DSA) teams to the field to contribute to data collection (collected in both English and Zulu). Further analysis of my findings was conducted in the fall semester in the HIV Interventions course taught by Till Baernighausen.</p>
Africa Centre	<p><b>The Impact of the HIV Counselor Redeployment Policy on HIV Testing in South African Public Primary Care Clinics</b></p> <p>Background: In settings such as KwaZulu-Natal, South Africa, an area with both a high HIV burden and severe health worker constraints, lay counselors have played a critical role in the provision of HIV testing</p>

	<p>and counseling services as well as adherence counseling. At the end of 2014, the KwaZulu-Natal Department of Health announced the phasing out of the cadre of lay counselors, with the stated aim of retraining and identifying new careers for these individuals. / In the uMlalazi municipality, where Médecins Sans Frontières (MSF) works in collaboration with the local Department of Health in delivering HIV treatment, lay counselors stopped working at 9 clinics in two waves: Jan 5th, 2015 (CW1) and June 15th, 2015 (CW2). This stepwise counselor redeployment provides an analytical opportunity to examine the impact of this change in health worker capacity on the total number of clinic-based HIV tests. / Methods: We used clinic-level fixed effects analysis with data on monthly HIV testing rates from the national South African electronic HIV treatment records system (TIER.net) from August 2014 - December 2015. Clinic-level fixed effects and monthly dummies allowed us to account for confounding variables at the clinic-level, and trends in HIV testing by calendar time, respectively. / Results: We observed over 26,000 tests. Following CW1, the monthly average of HIV tests decreased 18% and following CW2 the monthly average decreased a further 12%. After controlling for clinic-level fixed effects and months, we found that having one fewer counselor is associated with 28 fewer tests per month (95% CI: 22.19 to 34.37). / Conclusion: These findings suggest that the counselor redeployment substantially decreased clinic-based HIV testing. If these findings are representative of the experience province-wide, they illustrate the need to supplement testing efforts with additional training and funding.</p>
<p>FXB Center for Health and Human Rights</p>	<p><b>The right to health for people living with HIV/AIDS: An analysis of Legal Activism in Colombia</b>  Conducted a study on legal activism in Colombia from the movement of people living with HIV/AIDS. Went to Bogota in January and conducted qualitative interviews (n=45). Wrote my thesis from the project.</p>
<p>IFORD</p>	<p><b>Is knowledge enough? Sexual and reproductive health knowledge and practices among adolescents/youth in Cameroon</b>  The primary sexual and reproductive health problems among adolescents in Cameroon are unplanned pregnancies, unprotected sex, and a lack of sexual health knowledge during their first sexual relation. Consequently, the government of Cameroon is preparing to tackle adolescents' lack of sexual and reproductive knowledge by investing a significant amount of resources into a comprehensive school-based sexual education curriculum. This study analyzes the relationship between sexual and reproductive health knowledge, age of sexual debut, age at first pregnancy, and unintended pregnancies among adolescents and youths in Cameroon. We found found that among females, SRH knowledge was significantly correlated with age of sexual debut (<math>\beta = -0.26</math>; <math>p = .04</math>) and age at first pregnancy (<math>\beta = -0.41</math>; <math>p &lt; .01</math>). When stratified by gender and age group, the association between SRH knowledge and age at first pregnancy was significantly associated in the opposite direction (<math>\beta = 0.67</math>; <math>p &lt; 0.01</math>) among females aged 15-19. SRH knowledge was not significantly correlated with any outcome for males in the fully adjusted models that were stratified only by gender. However, the fully adjusted models stratified by gender and age group demonstrated that SRH knowledge was significantly correlated with age of sexual debut (<math>\beta = 0.47</math>; <math>p &lt; 0.01</math>) among males aged 15-19. Although the relationship between SRH knowledge, age of sexual debut, age at first pregnancy, and unintended pregnancy varied depending on gender and age</p>

	<p>group, our findings are promising in regards to the impact increasing SRH knowledge could have on males and females aged 15-19. The potential exists for policymakers and program implementers to maximize the impact of increased SRH knowledge as a preventive tool if they target quality sexual education interventions at younger adolescents.</p>
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