

# ENVIRONMENTAL AND SOCIAL DETERMINANTS OF HEALTH

## A pilot study screening for spiritual distress in patients at Hospice Africa Uganda

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**Background:** Hospice Africa Uganda (HAU) is a nongovernmental organization that has been a pioneer in African palliative care since 1993. As standard of care at HAU, a patient's spiritual well-being is assessed thoroughly upon admission, but not screened routinely at subsequent visits due to heavy clinical volume and no standardized instrument for spiritual distress. The "Spirit 8" is an eight-question, multiple-choice survey developed by Selman et al. that has shown preliminary utility assessing patients in hospice care in Africa. This study proposed that it would be feasible to use the Spirit 8 as a regular, quantitative screen for spiritual distress in patients cared for by HAU.

**Structure/Method/Design:** Between June 20 and October 21, 2013, the Spirit 8 survey was administered verbally to consenting patients upon admission to HAU. Potential scores range from 8 to 40 with the highest representing the best state of spiritual well-being. Available in English or Luganda, the assessment was repeated at up to four subsequent visits. Based on the interaction, study staff scored patient understanding of the survey on a 5-point scale with 5 representing excellent understanding. Demographic data was collected for each patient.

**Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract):** At the time of data analysis, 81 patients were enrolled on study and completed the assessment at visit 1. Additionally, 44 completed the assessment at visit 2 and 20 at visit 3. At visit 1, the mean Spirit 8 score was 27.20 ( $\pm 6.11$ ) out of 40. Paired *t* tests were used to compare patient scores over time and within certain demographics. No significant difference was found when comparing scores at visit 1 to scores at the second and third visits. Patients who reported having dependents scored 3.2 points higher on average than patients with no dependents ( $P = 0.024$ ). No statistical difference was noted when comparing patients across different demographics (age, gender, HIV status, ECOG score, pain score). Assessment by the study staff of patients understanding of the survey yielded an average score of 4 ( $\pm 0.9$ ) out of 5. Of all the assessments given, 98.1% had all eight questions answered.

**Summary/Conclusion:** The Spirit 8 is a feasible screening tool in clinical practice at HAU. In the 4 months from study initiation to data analysis, more than half of the enrolled patients had completed assessments at multiple visits. The high rate of assessment completion (98.1%) and the study staff's assessment of patient understanding averaging 4 out of 5, both further suggest that the Spirit 8 is an appropriate screening tool for use at HAU. Patient enrollment to  $n = 100$  is ongoing with expected study completion by February 2014.

## Poverty blindness: Diagnosis and treatment of a global disease

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**Background:** Despite the historical and social significance of poverty, both in the United States and around the world, scholars from varied ideological and philosophical disciplines have often observed that its most notable feature is its invisibility. We suggest that poverty is not excluded from view, but rather from consciousness. This lack of consciousness is due to a subjective "poverty blindness" on the part of those who fail to take the poor into account. We introduce this concept of "poverty blindness" as an educational prompt to provoke introspective inquiry about the origins, consequences, and amelioration of material want and inequity.

**Structure/Method/Design:** Based on our personal and professional experiences living and working in El Salvador, we define poverty blindness as a clinical syndrome. We use this clinical approach, first, to facilitate our exploration of the causes, effects, and potential interventions surrounding a complex phenomenon. Second, this approach offers an excellent way to focus attention on the personal embodiment of a broader social issue. Third, given the growing recognition of how social determinants affect health outcomes around the world, we believe this approach will resonate with educators and practitioners in global health.

**Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract):** None

**Summary/Conclusion:** Poverty blindness (PB) and the closely related condition of poverty acuity disorder (PAD) are the principal reasons that affected individuals cannot accurately see the reality of poverty and the human suffering that accompanies it. We review the epidemiology, pathogenesis, clinical features, variant types, physical examination, diagnostic evaluation, differential diagnoses, treatment, and clinical course of these disease entities. We present an educational module aimed at medical students and residents that uses PB and PAD to focus on poverty as a social determinant of health.

## Social capital, faith-based organizations, and Malawi persons living with HIV (PLWH)

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**Background:** Despite decreases in HIV prevalence, Malawi has been the epicenter of HIV/AIDS in sub-Saharan African countries. As of 2011, HIV prevalence in Malawi remained high at 10%. With poor health infrastructure in the rural areas of Malawi, faith-based organizations (FBOs) have been valuable community resources. Social capital is known for its positive effect on health outcomes through building trust and norms, encouraging community engagement and social support within social networks. However, the perceived role of FBOs as social capital in HIV prevention and treatment is not well understood in rural Malawi.

This study explored the perceived role of FBOs by people living with HIV (PLWHA) in HIV prevention and treatment in both rural and suburban Malawian communities. In particular, dynamics of public disclosure of HIV status and provision of support from the FBOs across HIV trajectory have been sought.

**Structure/Method/Design:** Qualitative in-depth interviews were conducted on a convenient sample of 46 PLWHA from five religious denominations in Malawi in 2008. Four researchers analyzed the interviews using Atlas.ti version 6.2. Nan Lin's network theory of social capital guided data analysis.

**Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract):** Seventy-eight percent of the sample was female with a mean age of 38 years old. Seventy-eight percent of the participants were on antiretroviral therapy (ART) at the time of the interviews. The perceived role of the FBOs was described by the following themes: 1) rare disclosure due to HIV-related stigma within the FBOs. Higher stigma was attributable to HIV-related preaching focused on abstinence and vigilance of promiscuity. PLWHA were less inclined to disclose HIV status and sought help within the organizations. 2) Insufficient support from the organizations. Regardless of HIV disclosure status, PLWHA felt the support was limited and impractical. 3) Higher social capital led to better HIV health outcomes. PLWHA engaging community-based organizations (CBO) or HIV support groups beyond the FBOs have a higher rate of disclosure and self-efficacy, as well as perceived lower stigma.

**Summary/Conclusion:** FBOs can contribute to care of HIV by providing HIV-specific support such as stigma reduction, promoting HIV testing and ART, bridging people to HIV support groups or CBOs. Instead of providing direct HIV-related services, organizing and linking people to available community services and resources can expand its role as a valuable social capital in HIV care and treatment in resource-limited settings.

### **A qualitative evaluation of the expanded program on immunization at Saint Mary's Hospital Lacor: Determinants of timely childhood vaccine receipt**

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**Background:** Vaccines are unquestionably the most cost-effective means of reducing childhood mortality, morbidity, and disability, yet delays in vaccine receipt remain consistently high in many parts of the world. Post-conflict settings, such as northern Uganda, represent a unique situation in which the challenges inherent to vaccine delivery in most resource-limited settings are further compounded by years of civil unrest.

**Objective:** In order to better understand factors that correlate with delayed immunization in northern Uganda, a qualitative study was performed to assess barriers and facilitators of vaccine uptake for children.

**Structure/Method/Design:** Parents whose children presented more than 2 weeks late for routine immunization were recruited to take part in a qualitative assessment of barriers to vaccine delivery. A total of 33 interviews were conducted. Data were analyzed using the constant-comparison method.

**Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract):** Interviews revealed that vaccine uptake is influenced by person-based and population-based factors. Among person-level factors, fears regarding vaccine induced harm and low levels of perceived vaccine utility among fathers were found to directly impact individual willingness to take up routine immunization. At the population level, financial constraints, including direct and indirect costs of vaccination, limited infrastructural development and population resettlement were found to directly impact the availability of and accessibility to vaccine services.

**Summary/Conclusion:** This study offers important information regarding the determinants of childhood vaccine receipt in post-conflict, resource-limited settings. Multilevel interventions that address both individual willingness and population factors will be necessary to achieve and sustain improvements in immunization coverage.

### **A lay-person's toxic chemical resource guide**

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**Background:** In spite of a growing recognition of the importance of occupational health and safety in global public health campaigns, there remain few materials accessible to lay workers who handle chemicals on a daily basis. A systematic review of company, government, and nonprofit Material Safety Data Sheets confirm that technical information is generally presented in highly scientific terms that are not accessible to the average worker. Many workers in dangerous work environments (such as those in export processing zones) do not have access to OSH professionals to help them navigate this information. To address this knowledge gap, Hesperian created the Toxic Chemical Resource Guide to provide information that can easily be translated into practical prevention measures. The guide provides safety precautions in easy-to-understand language, and gives sensory descriptions (such as taste, smell, and use) that allow workers to identify unmarked chemicals.

**Structure/Method/Design:** The Toxic Chemical Resource Guide was developed with the aid of toxicologists, chemists, OSH and environmental professionals, and with ongoing feedback from workers and organizers in the field. The charts have been reviewed by 27 experts from 20 organizations in 14 countries. During field tests, reviewers provided a range of feedback about what ought to be included in the charts; some wanted a simple chart which would give workers clues to discern what chemicals they were working with, while others wanted more detailed information about chemicals. Others wanted these charts to contain detailed information on associated chronic and acute hazards commonly experienced by workers.

**Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract):** The final Resource Guide strikes a balance between all of the elements reviewers requested. Because chemicals in manufacturing change often, charts are organized by "family" of chemicals, and are not exhaustive. The information in the Guide includes how to identify the chemical (by quality: color, smell, taste, and by where and how it is used), acute effects by body part; chronic effects; what workers can demand or do if they are at risk of getting exposed (control measure are described in detail in the body of the book as well as in the introductions to the charts); and some possible safer substitutes.

**Summary/Conclusion:** There is a need for occupational health information that can be used by grassroots activists and lay workers. The Resource Guide provides a foundation for advocacy in hazardous working conditions and helps craft demands for alternative chemical usage in the workplace.

### **Interprofessional curriculum on environmental and social determinants of health in rural Kenya: Aga Khan University East Africa-University of California San Francisco Integrated Primary Health Care Program**

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**Background:** The Aga Khan University East Africa (AKU)-University of California San Francisco (UCSF) Integrated Primary Health Care Program (IPHC) is a public-private partnership with