

there was no relationship between disability perception and diagnosis or gender.

**Methods:** With a mixed method design, team members interviewed clients using the WHO Disability Assessment Schedule (DAS) 2.0 to quantify self-perception of disability and a researcher-designed Home Observation Data (HOD) Form to describe client environments. Using consecutive sampling, thirty-five potential participants were screened by phone and 31 were interviewed, based on inclusion/exclusion criteria. Twenty-eight clients fully met the criteria at the time of the initial in-person client encounter. Researchers analyzed the data using quantitative methods for the DAS summary scores, with two non-parametric tests to consider scores and client-related factor relationships. Qualitative methods consisted of HOD theme analysis.

**Findings:** Complete DAS key question data were available for 12 female and 16 male clients. Fifteen had non-hemorrhagic cerebrovascular accidents and 13 had other neurologic conditions, mainly spinal cord injury. Analysis of data supported the hypothesis that clients perceived moderate to severe levels of disability. There was one client with no perceived disability, one at the extreme level, and 16 at the moderate to severe levels. There was no relationship with diagnosis or gender. Environmental barriers within homes and surroundings appeared to play a major role in home and community reintegration for those clients with continuing physical challenges to their mobility and function.

**Interpretation:** This small-sample study verified the hypothesis that clients perceived moderate to severe levels of difficulty post rehabilitation discharge. The research results documented the situation at one point in time, verified the literature for similar clients in less-resourced countries, provided programming considerations for Kachere staff with future clients, and supported potential use of the WHO DAS 2.0 for similar research applications. Study limitations included the small sample size and selection convenience, use of a client self-assessment tool with subjectivity from personal and experiential factors. They restrict population generalizability based on the results beyond the focus of this study. The strengths of this study were the integration of the literature with rehabilitation center need, replicable design, use of an interprofessional team approach for the environmental assessment, and the research findings' implementation potential.

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**Abstract #:** 02SEDH012

### Gender sensitivity in health service provision in Afghanistan from 2012-2013

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**Background:** Afghanistan ranks 147 out of 148 on the Gender Inequality Index and has historical exclusion of women from health care under the Taliban rule (Malik, 2013). Afghanistan had a Maternal Mortality Ratio of 1,600 maternal deaths per 100,000 live births and pregnancy and childbirth accounted for half of all deaths in women of childbearing age (UNICEF, 2002). Objective was to study the association between gender and quality of service provision in under-5 patients by assessing the affect of sex of health worker, sex of patient, and sex of caretaker on quality of client counseling and client satisfaction. When looking at provider-patient interaction, we expect male caretakers provide better quality care to male patients, female patients receive poorer quality care, and the presence of a male caretaker improves quality of care received.

**Methods:** A cross-sectional analysis was done for under-5 patients using secondary data collected with the National Health Services Performance Assessment (NHSPA). Data was drawn from a stratified sample of 25 facilities per province, with random sampling of patient and providers. 3516 under-five patients were interviewed and observed. Data is from all 34 provinces in Afghanistan. Main Outcomes of Interest The three primary outcomes of interest were patient satisfaction and perceived quality of care, client counseling and total time spent in consultation. Institutional Review Board obtained by Johns Hopkins Bloomberg School of Public Health. Analysis A multiple logistic regression investigated the association between sex of patient, sex of health worker, and sex of caretaker with each quality outcome.

**Findings:** Patients accompanied by a male caretaker were more likely to have high quality client satisfaction (OR: 1.35, CI: 1.07-1.69, P=0.010). Client satisfaction was not affected by sex of patient or health worker. Male patients were 27% more likely to receive high quality client counseling (OR: 1.27, CI: 1.06-1.52, P=0.008). Client counseling was more likely to be high quality with male health workers (OR: 3.55, CI: 3.53 2.04-6.10, P < 0.001). Health workers were 22% more likely to spend quality time with male patients compared to female patients (OR: 1.22, CI: 1.02-1.48, P=0.033).

**Interpretation:** Results from study illustrated a gap in literature related to the quality of care provided in post-conflict settings as well as room for improvement as the MoPH begins its efforts to address a deep seated problem of gender inequality. Results illustrate that gender continues to affect quality of service provided. The scope of this study was limited to the interaction at time of service provision. Education and socioeconomic factors may be included in future studies to understand issues of access to facility by gender.

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### Delivering healthcare to the refugee population in Pittsburgh

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**Background:** The University of Pittsburgh General Internal Medicine – Montefiore Clinic (GIMO) is an academic hospital-based resident and faculty clinic which serves a growing population of Bhutanese, Iraqi, and Sudanese refugees settled in Pittsburgh. Refugee patients are screened for communicable and non-communicable diseases according to CDC recommendations, however management of refugee health conditions has not been well characterized. Refugee patients experience numerous barriers to care including transportation, financial, language, and cultural. Identifying the health needs and barriers to care experienced by refugees in the U.S. is key to improving the quality of care provided to this vulnerable population. Aims This study aims to identify baseline characteristics and to prioritize health needs of refugees at the GIMO clinic - specifically: 1. What are the demographic and health characteristics of this group? 2. How does visit frequency and follow-up change through this group's immigration cycle? 3. How well is preventative care addressed in this group?

**Methods:** The GIMO clinic maintains a database of refugees in EPIC, the electronic medical record utilized for usual patient care. This study is a cross-sectional analysis based on chart review of existing records of refugee patients seen between January 2008 and

December 2014. We report descriptive statistics, including: - Time from US arrival to first clinic visit - Visits in the first six months of arrival - Number of patients who continue care at the clinic one year after immigration - Hemoglobin A1C, Blood pressure, BMI, Cholesterol, HDL, LDL, Triglyceride - Positive PPD prevalence, number initiated on INH therapy - B12 level, Vitamin D level - Colonoscopy, mammograms, cervical cancer screening, influenza vaccination

**Findings:** The GIMO patient panel includes approximately 500 refugees, averaging 11 patients weekly. Chart review of 74 refugee patients revealed that 43% (n=32) are males and 57% (n=42) are females, with a mean age of 49.6 years (SD 18.0). Mean BMI of 25.4 (SD 4.9). Of the 74 patients, 36 (49%) obtained a hemoglobin A1c on the initial visit to screen for diabetes. The mean hemoglobin A1C was 6.3 (SD 1.3). Most refugee patients were not up to date on preventative measures including mammograms, Pap smears, and colonoscopy. Additional chart review is in progress.

**Interpretation:** A significant percentage of our patient population was diabetic or pre-diabetic. In addition, we found that our refugee patient population is older and not current on preventative measures. Based on our findings, we hope to implement interventions that address the barriers to effective preventative health care. Future areas of study include depression, PTSD and somatization disorder. These disorders are increasingly recognized in our refugee population, and further research is needed to target development of screening tools and referral mechanisms to improve care for this vulnerable group.

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### Parenting styles and emerging adult drug use in Cebu, the Philippines

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**Background:** Illicit drug use is a global public health concern and adolescence is a period of vulnerability. Methamphetamine use, in particular, is of concern in Southeast Asia. Parenting styles can influence adolescent substance use but little is known about the applicability of findings from Western parenting styles literature to other cultures. We assessed associations between offspring-reported parenting styles, at age 18 and offspring-reported drug use three years later in Cebu, Philippines. We hypothesized that the permissive and authoritative parenting styles would be associated with a reduced odds of drug use while the authoritarian and neglectful styles would be associated with an increased odds of drug use.

**Methods:** We used data from 2002 and 2005 rounds of the Cebu Longitudinal Health and Nutrition Survey (CLHNS) in the Philippines. The sample included 1,723 offspring (2002 mean age  $\pm$ SD = 18.2  $\pm$ 0.40) who reported mothers' and fathers' parenting styles in 2002 and their own lifetime drug use in both 2002 and 2005. Logistic regression models assessing odds of drug use by age 21, given reported parenting style, were adjusted for 2002 risk behaviors, adolescent characteristics, and parent/household characteristics.

**Findings:** At age 21, 39.7% of males and 5.1% of females reported having tried drugs. The most commonly reported drug was shabu (methamphetamine) followed by marijuana. As compared with the permissive style, authoritative mothering was associated with a decreased odds of boys having tried drugs by age 21 (OR = 0.53, 95% CI 0.29, 0.97) and neglectful fathering was associated at a trend level with an increased odds of boys having tried drugs by age 21 (OR = 1.70, 95% CI 0.95, 3.04).

**Interpretation:** Many emerging adults in this setting reported having used drugs, particularly methamphetamine, a dangerous drug with high abuse potential. Authoritative mothering was associated with reduced risk of drug use while neglectful fathering was associated with increased risk. These results are similar to Western findings indicating that the authoritative style is optimal for offspring mental health and substance use outcomes. As this was an observational study, there is always the risk of unmeasured confounders and residual confounding. We were also only able to report results for the boys in our sample due to the limited number of adolescent girls who reported having used drugs. Findings underscore the importance of both mothers' and fathers' parenting in efforts to prevent drug use in Filipino youth and add to the literature on cross-cultural variability in parenting styles.

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### The impact of maternal age at marriage on malnutrition of hospitalized children in Dhaka, Bangladesh

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**Background:** Childhood malnutrition is a worldwide health problem that continues to cause numerous deaths in children under five years of age without any significant improvement for last several decades, especially in south-east Asia. This study focuses on understanding more about the maternal and childhood characteristics associated with malnutrition of children under five (1-59 months) at the Dhaka Hospital of the International Centre for Diarrhoeal Disease Research, Bangladesh (icddr,b) in Dhaka, Bangladesh. Specifically, we asked if younger maternal age at marriage, younger current age of the mother, and lower birth order relates to more severe malnutrition in hospitalized children.

**Methods:** A total of 135 subjects were enrolled in this cross sectional study according to eligibility criteria: children 1-59 months admitted to the short stay, long stay, malnutrition, and intensive care units of icddr,b between July 8-August 6, 2013. The study was approved by Stanford University Research Compliance Office and icddr,b Research Review Committee and Ethics Review Committee. After patient's mother signed informed consent, information was collected through translated interviews with the mothers and electronic medical records. Responses were recorded on secure REDcap database. Weight for age Z score,  $Z < -2$  (underweight), was the primary measure of malnutrition used for data analysis. With SAS Enterprise Guide 6.1, Pearson's correlation, Fisher's Exact test and exploratory analysis were conducted.

**Findings:** Data analysis shows no statistically significant relationship between maternal age at marriage of the mother or current age of the mother and the child's malnutrition level. However, this study