obtaining an appropriate interpreter. Many of the adult participants preferred an internet-based video interpreting service over in-person interpreters because of increased dialect options, as well as shorter wait times. Although traditional medicines and healing techniques were used in refugee camps and occasionally in Indianapolis, most Burmese place trust with western medicine and report valuing and complying with physician recommendations. Many have a basic understanding of good health practices and the causes of illness. This is seen most consistently in the adolescent groups.

Interpretation: Overall, Burmese Chin have adapted to their new home. Although they experience common frustrations with the healthcare system, these frustrations were exacerbated by long waits for an interpreter. Resources, such as a phone or video-based interpreter, are available in most health care facilities and preferred by the Burmese. More research is needed to better understand the challenges of the Burmese population residing in the United States.

Funding: AAP Resident CATCH Grant: McHenry

Abstract #: *02SEDH025*

Household and individual risk factors for anemia in children in East Africa

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Background: Anemia affects 45% of preschool children worldwide, with an even higher prevalence in low and middle-income countries, despite nutritional interventions and iron supplementation. The contribution of household factors to anemia is less well described. To further evaluate the effect of household and individual risk factors for anemia, we analyzed data from the four East African countries that performed hemoglobin testing during the most recent administration of the Demographic and Health Surveys (DHS 2010-2011).

Methods: We analyzed data from 14,718 children age 6 to 59 months in Tanzania, Rwanda, Uganda, and Burundi. A household survey was administered to an adult respondent, and anthropometry and hemoglobin testing were conducted on children after parental consent. We performed univariate analyses and multivariate logistic regression using survey procedures in SAS 9.4. We grouped risk factors as follows: demographic (age, sex), socioeconomic (wealth index, maternal education level, number of household members), water/sanitation (use of shared toilet facilities, unimproved toilets, lack of clean drinking water, unsafe stool disposal), nutritional (height-for-age [HAZ], weight-for-age [WAZ], a low iron-diet, premature intake of cows' milk), recent illnesses (diarrhea, bloody diarrhea, or fever in the past 2 weeks), and prophylactic measures (iron supplementation in the last week, deworming in the last 6 months, bednet usage). We constructed multivariate models within each risk factor category to identify factors that were most predictive of anemia, and then included these factors in our final model.

Findings: The mean hemoglobin among tested children was 11.2 (SD 1.8); 60% of children had at least mild anemia (Hb < 11) and 19% at least moderate anemia (Hb < 10). Significant protective factors in the final multivariate model included older age (OR 0.97 per month [95% CI 0.96, 0.97]), female sex (OR 0.82 [0.75, 0.91]), and deworming treatment (OR 0.82 [0.73, 0.90]). Factors that increased risk of moderate/severe anemia included the lowest wealth quintile (OR 1.24 [1.04, 1.48]), number of household members (OR 1.05 per person [1.03, 1.06]), unimproved toilets (OR 1.49 [1.31, 1.69]), unsafe stool disposal (OR 1.17 [1.03, 1.33]), and fever in the past 2 weeks (OR 1.52 [1.37, 1.70]). Use of mosquito net was paradoxically associated with anemia (OR 1.38 [1.24, 1.53]), perhaps related to a higher prevalence of malaria in areas where bednets are used.

Interpretation: Together with personal characteristics, household, environmental, socioeconomic, and prophylactic factors are associated with anemia among young children in East Africa. Given the effects of anemia on development and on the outcomes of childhood infections, programs that focus on economic development, improved sanitation, treatment for worms, and prevention of malaria are urgently needed.

Funding: PPM is supported by NIH grant 1 F32 HL124951; PLH is supported by NIH grant 5 K24 AT003683.

Abstract #: *02SEDH026*

Impacts and challenges of Community Health Planning Services (CHPS) facilities in rural Ghana

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Background: In 2012 and 2013, the University of Utah School of Medicine and the Barekuma Collaborative Community Development Program (BCCDP) built three Community Health Planning Services (CHPS) compounds in the villages of Barekuma, Worapong, and Abira. The CHPS facilities were built to help redirect the need for basic health services from regional facilities and bring basic preventive and curative care to communities, as well as improve health equity by removing financial and geographic difficulties to primary healthcare. In order to assess the impacts and challenges of the CHPS compounds in these communities, we conducted a cross-sectional qualitative study to explore demographic composition of and the attitudes and opinions of CHPS utilizers.

Methods: Members of the community who had and had not accessed the CHPS compound were interviewed in either English or Twi using a structured questionnaire with open- and close-ended questions. Interviews were audio recorded and transcribed and analyzed using standard qualitative techniques. Written or verbal consent was obtained by participants. The interview time averaged 5 minutes; time spent in each community averaged 3 hours; and 339 interviews were conducted in this manner. The study was approved by the IRBs of the University of Utah and Kwame Nkrumah University of Science and Technology.

Findings: Compared to participants that have not accessed the CHPS compounds, participants that have accessed the CHPS were more likely to be female, are older, and have more children. They are less likely to have attended high school, and more likely to have received no education. Users of the CHPS compound have an average of 2.31 visits per user, and have been going to the CHPS compound for an average of 6.22 months. The most common services sought by users were "healthcare", "pediatrics", and "general sickness". The most common services users wanted added were "admissions", "electricity or improved lighting", "increased medications", and "more nurses". Over half of participants identified malaria as their biggest healthcare concern, while 9.64% of participants identified fevers and gastrointestinal problems as concerns and a quarter of participants did not indicate any healthcare concerns.

Interpretation: It is not surprising that respondents who did not access CHPS were younger, more frequently male and did not have children, as this demographic group is generally healthy and less likely to seek healthcare. Respondents who did access CHPS typically returned for another visit. There remains some confusion within the community about the role of CHPS in the community with respondents often requesting advanced health services beyond the scope of CHPS. These preliminary results suggest the CHPS compounds will be utilized by community members but that the public would benefit from education on how CHPS fits into and complements the larger health system.
Funding: None
Abstract #: *02SEDH027*

A follow up study of patients affected with silicosis in Sri Lanka

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Program/Project Purpose: Silicosis is one of the oldest known occupational pulmonary diseases. It is caused by inhalation of tiny particles of silicon dioxide in the form of unbound crystalline silica. Inhalation of crystalline silica is associated with many debilitating pulmonary diseases. Three main clinical syndromes have been described namely chronic, accelerated, and acute silicosis. Silicosis is also associated with increased risks of lung cancer, mycobacterial infection, autoimmune disorders, airflow obstruction, and chronic bronchitis. The silica industry is rapidly expanding in Sri Lanka, as the country is a major exporter of silica as powdered quartz which contains more than 95% of silica. Studies done with regard to follow up patterns of silicosis in Sri Lanka are scarce. Therefore, the study aimed at identifying the demographic data and the follow up pattern of the patients with silicosis. The overall goal of the study was to implement necessary protective measures in preventing silicosis.
Structure/Method/Design: The study cohort consisted of seven patients diagnosed with silicosis, who presented to the respiratory unit teaching hospital Kandy in year 2005. All were self reported patients. Demographic data and clinical history including a detailed occupational history were taken using a questionnaire. Erect poster anterior chest radiographs were obtained silicosis was diagnosed using the International Labor Organization criteria. All patients underwent high resolution computerized tomography of chest and pulmonary function tests. All were investigated for tuberculosis. Patients were followed up regularly with regard to development of complications.
Outcomes & Evaluation: All patients were females. The mean age of patients was 41.5 years (SD 5.38). One patient had an exposure to silica of 11 years prior to developing symptoms while other patients had an exposure less than 3 years. Mean duration of exposure was 3.6 years (SD 3.3). The patients' degree of exposure to silica was graded according to work category. Accordingly 5 patients had heavy exposures while 2 had medium exposure. The patients who were heavily exposed had accelerated silicosis with rapid progression of the disease and died within 5 years of presentation. One with medium exposure acquired tuberculosis twice in the follow up period of 9 years and resulted in acquiring progressive massive fibrosis. The other patient's clinical course was complicated with tuberculosis and bronchiectasis.
Going Forward: The patients who had lesser degree of exposure had survived longer. Pulmonary fibrosis and bronchiectasis were more marked in them. Patients with heavy exposures had poor prognosis. This emphasizes the fact that protective measures at working places are h
Funding: There was no funding for this study.
Abstract #: *02SEDH028*

Cultural barriers to seeking care in Ethiopia: A review of the literature

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Program/Project Purpose: Ethiopia has very high maternal mortality ratio of 676/100,000 live births and low institutional delivery by skilled birth attendants only 10% women delivered in the health facility. Despite the government's efforts to improve maternal health in the country, health service utilization is unacceptably low. The Maternal and Child Health Integrated project (MCHIP) funded by USAID, supported the government of Ethiopia to increase use and coverage of high impact maternal and newborn interventions. MCHIP conducted a literature review to identify cultural practices, beliefs and perceptions that influences a woman's decision to seek facility- based care.
Structure/Method/Design: This literature review included both published and unpublished literature, collected from internet sources and digital copies of library documents. A total of 322 published and unpublished documents were collected for review. A two-stage process was used to select relevant articles for review. First, abstracts were reviewed and superficially scanned for relevance. Second, a detailed analysis of the quality of each article was performed.
Outcomes & Evaluation: According to the literature, many studies indicate that cultural beliefs about maternal health and illness can prevent women from utilizing modern health care. In some cases, they believe that illness is a punishment from God or that the outcome of pregnancy is predetermined by God. Many women have negative perception to health facilities on their cleanliness, equipment quality or availability, provider competence, or behavior. The literature also reveals that, in some communities, women have specific childbirth preferences that lead them to opt for home delivery. Most women prefer the privacy that a home delivery provides, being in the presence of relatives, and delivering in a supported sitting position. In some religious communities, prayer and herbal solutions are used as a primary response to birth complications. Program interventions MCHIP integrated the findings from the literature review to its service quality improvement approach and introduced the concept of Respectful Maternity Care to health facilities. Following these, health facilities started to maintain privacy, allowed birth companion into labor, support birth position of choice, included important cultural aspects like coffee/porridge ceremonies, religious blessings of facilities and arrange post-natal room with bathroom. As a result, these health facilities showed marked increment in institutional delivery from a baseline of 8.6% to 31%, first ANC visit from 63% to 82%. Similarly fourth antenatal care (ANC) visits increased from 5.9% to 21%.
Going Forward: The choice of where to give birth involves a complex balance between freedom of choice, control of the process and the outcome, and important traditional norms associated with the birthing process. Incorporating known preferences into facility-based deliveries during the birthing continuum of care are important factors.