

and nutritional supplementation. The effect of these centers on child development outcomes are unknown.

Methods: We conducted 255 in-home surveys across eight communities in Estancia from September 2015 through February 2016. Two of the eight communities surveyed had CDH-sponsored CICD's. We collected the following information: sociodemographic including factors influencing poverty; food security using the Latin American and Caribbean Household Food Security Scale, which incorporates food availability, access, and allocation of food within the household to estimate vulnerability (ELCSA has been internally and externally validated across Latin America); dietary diversity using a 22-item food frequency questionnaire adapted to the local diet; child development using Ages and Stages (available in Spanish and validated in low and middle-income countries), and child anthropometric data (weight, length/height). Using SPSS software, we analyzed the impact of early child development centers on nutritional status and achieving age-appropriate developmental milestones.

Findings: Children attending CICD's had statistically significantly better communication scores, fine motor skills, social interaction skills, and problem solving. There was no association between attending CICD's and improved gross motor skills. Additionally, children who attended CICD's appeared to have improvement in their weight-for-age Z-scores.

Interpretation: Children who attended CICD's in Estancia, El Salvador had better nutritional status and developmental measures than those who did not attend. The dual focus of the CICD's on nutrition and early stimulation/education may provide a useful model for mitigating the effects of poverty on child development and nutritional outcomes in rural El Salvador and similar settings.

Source of Funding: Harvard Medical School Scholars in Medicine Program.

Abstract #: 2.007_PLA

Evaluation of the Health Impact of a Water, Sanitation and Hygiene Intervention in Mugombwa Refugee Camp

M. TatabMentan¹, S. Marquez², G. Hamra³, A. Asmare⁴, N. Ugabinema⁵, B. Nsanzumuhire⁵, G. Gitau⁵; ¹Drexel University Dornsife School of Public Health, Philadelphia, PA, USA, ²Drexel University, Philadelphia, USA, ³Drexel University Dornsife School of Public Health, Philadelphia, USA, ⁴World Vision Ethiopia, Addis Ababa, Ethiopia, ⁵World Vision Rwanda, Kigali, Rwanda

Background: Globally, refugees constitute approximately 32% of “forcibly displaced” persons. Water, Sanitation, and Hygiene (WASH) interventions are of high importance in emergency situations because of the health impact of poor water, sanitation, and hygiene practices. In 1994, 42,500 deaths of Rwandese refugees in the Democratic Republic of Congo were caused by water-related parasites. Health outcomes in these situations can be improved by increasing access to clean water, adequate water supply, access to sanitation facilities and improved hygiene practices. Studies have shown that WASH interventions can decrease the incidence of diarrheal disease by 15%-50%. Currently, 70,711 refugees are in emergency situations in Rwanda. Gihembe, Kigeme, Kiziba,

Mugombwa, Mahama, and Nyabiheke are refugee camps in Rwanda where displaced persons are hosted. Presently, 8,492 refugees live in Mugombwa refugee camp. This camp has undergone a water, sanitation, and hygiene intervention organized by World Vision Rwanda. This intervention was designed to increase access to clean water, sanitation facilities and improve hygiene practices at the individual, household, community and institutional level. The purpose of this study was to evaluate the health impact of a WASH intervention in Mugombwa refugee camp in Rwanda.

Methods: This study used a mixed methods approach consisting of twenty survey questionnaires, ten key informant interviews and two focus group discussions to examine the health impact of this WASH intervention on the incidence of diarrheal disease.

Findings: Study findings indicated that all of the participants had access to clean water in the camp. Participants also reported practicing proper hygiene at critical points. Health center data showed that the overall incidence of diarrhea had decreased in the camp. Damaged water pipelines, insufficient access to soap for handwashing were identified as barriers faced by refugees living in the camp.

Interpretation: Study findings suggested that refugees living in Mugombwa have access to an improved water source, an adequate water supply, and sanitation facilities. These results also indicated that hygiene promotion initiatives have affected hygiene practices of these refugees. These findings were useful in identifying factors such as water pipeline issues, a limited supply of soap, socio-cultural norms that influence water supply, sanitation and hygiene practices of these refugees.

Source of Funding: Dornsife Global Development Scholars Program.

Abstract #: 2.008_PLA

Transforming Global Health Education with the Utilization of Simulations and Workshops

M. Mankbadi¹, A. Sterling¹, S. Du², A. Diaz¹, P. Patel¹, M. McGee¹, V. Vudatha¹, E. Wellings¹, N. Spitzer¹, B. thiel¹, J. Simms-Cendan¹; ¹UCF College of Medicine, Orlando, USA, ²UCF College of Medicine, Orlando, Florida, USA

Program/Project Purpose: Previous studies have investigated the utilization of the IFMSA (International Federation of Medical Students' Associations) model, the Latin American SOCEM (Sociedades Científicas de Estudiantes de Medicina) model, and curriculum changes as a method to addressing education on global health topics, particularly neglected tropical diseases (NTDs). However, little has been done on the integration of simulations and workshops in graduate education as a means of addressing the knowledge gap in global health education. While these issues may be encountered by students in future clinical settings they are currently rarely encountered in the United States. As such, the skills necessary for these situations are not a part of the fundamental medical education.

For the past 6 years the global health organization at UCF College of Medicine, MedPACt, has held an annual global health conference. All of these conferences have included an element of simulation education. Here, we present a variety of simulations in