

ber of participants that have worked with emergency government organizations is 55% (39–61%). A total of 59% (51–68%) of the material was new to them, while 74% (69–91%) of the material was applicable to their work setting.

**Conclusion:** Even for experienced hospital personnel, a majority of the HOPE course material was new and applicable in their current work setting. There is great country-dependant variability in regards to prior emergency response work and hospital preparedness participation.

**Keywords:** assessment; education; disaster management; hospital; preparedness; Southeast Asia

*Prehosp Disast Med* 2005;20(3):s123–s124

## Free Papers—Theme 16: Public Health 2

### Food Security and Anthropometry following One Year of Food Assistance in Palestinian Territories

G. Greenough,<sup>1</sup> Z. Abdeen,<sup>2</sup> R. Qasrawi<sup>2</sup>

1. Center for International Emergency, Disaster & Refugee Studies, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland USA

2. Nutrition and Health Research Institute, Al Quds University, Israel

**Objective:** After the 2002 study revealed a high prevalence of global acute and chronic malnutrition (GAM and GCM, both defined as  $<-2$  z-score) in the Gaza Strip, a massive food assistance effort took place. One year later, the current study was conducted to assess whether that effort has led to any improvements, and gauge how well assistance was targeted. The study concluded that the major problems with food access in the West Bank and Gaza Strip were financial, rather than physical, and could be quantified and linked to anthropometric measurements. **Methods:** A random sample of 2,486 households was selected using a two-stage design stratified by urban, non-urban, and refugee camp households and weighted by population between the West Bank and Gaza Strip. Weight, height, and age of the members of the households were measured. There were a total of 3,089 children, ages 6–59 months. Household respondents also were surveyed regarding the level of food assistance and quantifiable indicators of food security and household coping mechanisms, which could be cross-tabulated with the prevalence of GAM (weight for height ratio) and GCM (height for age ratio).

**Results:** The short-term indicator of GAM was 3.1% in the West Bank and 3.9% in the Gaza Strip, both of which had improved since 2002. The long-term indicator of GCM was 9.2% in the West Bank, statistically up from 2002, and 12.7% in Gaza Strip, statistically down from 2002. Level of employment was the major indicator of food insecurity, while decreasing household food consumption and buying food on credit were the major coping strategies.

Physical barriers, such as curfews and checkpoints, were not factors for food access. Households with employment  $<20$  hours per week were statistically more likely to have

children with GAM and GCM (chi square = 5.25,  $p \leq 0.025$ , and chi square = 15.3,  $p \leq 0.001$ , respectively). Households decreasing food consumption more than once per week were more likely to have children with GCM (chi square = 6.84,  $p \leq 0.05$ ). Food assistance was not well targeted: 52.8% of West Bank households with employment of  $<20$  hours per week were not receiving food assistance, compared to 26.6% of similar Gaza Strip households; 69.7% of West Bank and 19.8% of Gaza Strip households which decreased food consumption more than once per week were without food assistance; a nearly similar percentage of households who purchased food on credit more than once per week did not receive food assistance. There was a statistically non-significant trend for GAM and GCM to occur in households receiving food assistance.

**Conclusions:** Financial access to food and subsequent coping strategies during a chronic conflict affects the nutritional status of preschool children. Linking nutritional and food security indicators can guide food assistance programming.

**Keywords:** anthropometry; assistance; food; food security; Gaza Strip; malnutrition; West Bank

*Prehosp Disast Med* 2005;20(3):s124

### Disaster Intervention: Long-Term Follow-Up in Armenia

L.M. Najarian; V. Labruna; A.K. Goenjian; D. Pelcovitz  
New York University School of Medicine, New York, New York USA

A devastating earthquake struck Armenia on 07 December 1988, killing 50,000 people and leaving 500,000 homeless. Disaster intervention and humanitarian aid from around the world during the first two years followed a traditional course of providing acute medical care, shelter, and reconstruction. The shifting world political scene, with the crumbling of the Soviet Union (of which Armenia was a member at the time), created a familiar situation for the country. Once again, it was at the crossroads of international politics for various reasons. First, it was at war with neighboring Azerbaijan over Nagorno-Karabagh, an historic Armenian enclave; second, it experienced a material blockage of humanitarian aid by neighboring Turkey; and third, Armenia was caught in the middle of controversy about transporting oil from the Caspian Sea to the Mediterranean Sea. These successive traumas led to a program of continuing long-term disaster intervention by diasporan Armenians from around the world after the initial wave of help for the earthquake was over.

This presentation describes how the initial mental health team from the United States provided crisis intervention, training, and research that later developed into a model for delivering mental health services to the entire country. The time-limited model of crisis intervention developed in the earthquake zone in Armenia is described, and the authors explain how it was adapted to treat victims following the World Trade Center attack in New York City on 11 September 2001. The results of two current studies in Armenia will be discussed. One study includes follow-up data on long-term benefits of the brief crisis interven-