

**Methods:** Gestational age at the time of the earthquake was calculated from 1,158 deliveries in one private hospital in Bantul District between August 2005 and April 2007. The prevalence of pre-term birth, post-term birth, premature rupture of the membranes (PROM), low birth weight (LBW), and mode of delivery were counted.

**Results:** When the earthquake occurred, 40.7% patients already had delivered (Group A), 16.6% were in the first trimester of pregnancy (Group B), 14.8% were in the second trimester (Group C), 10.6% were in the third trimester (Group D), and 13.7% were not pregnant (Group E). There was no significant difference in age and parity among those five groups. Before the earthquake, the prevalence of pre-term birth, post-term birth, PROM, and LBW were 9.8%, 5.2%, 17.3%, and 12.8%, respectively. Following the earthquake, the highest prevalence of pre-term birth and PROM was in Group E (13.9% and 17.1%, respectively). The highest prevalence of post-term birth was in group D (6.6%). Low birth weight was the highest in Groups C and E (14.7%). Induction was the most common method of delivery in Group D (24.4%).

**Conclusions:** There were some differences in the prognosis of pregnancy outcomes along with the gestational age when the earthquake occurred. Pregnant women must be cared for based on these differences in order to prevent negative pregnancy outcomes.

**Keywords:** disaster; disaster health; gestational age; pregnancy; pregnancy outcomes; Yogyakarta earthquake

*Prehosp Disast Med 2009;24(2):s163*

### (J106) Unique Health Effects of Terrorist Attacks on the Pregnant Female

Michael J. Reilly; David S. Markenson

New York Medical College, Center for Disaster Medicine, Valhalla, New York USA

**Introduction:** Pregnant females are uniquely vulnerable to morbidity and mortality associated with trauma and from secondary exposure to environmental agents during and following a terrorist attack. For clinicians and emergency management planners, there are several specific considerations for pregnant victims of terrorist events in the planning and response phases of a terrorist event.

**Methods:** A review of scientific, medical, and academic literature pertaining to women and terrorist activities was performed. In addition, government reports and media accounts of terrorist attacks where women were directly or centrally involved as perpetrators were collected and reviewed. Common elements, themes, and similarities were analyzed by the investigator to determine trends in injury patterns, distribution of exposed individuals, and the acute and long-term health effects associated with the gravid female and her unborn child.

**Results:** Several causes of morbidity and mortality among pregnant females and their unborn children as the result of terrorist attacks were discussed in the literature. Physical trauma, toxic inhalation effects, bioterrorism considerations, and psychosocial impacts were among those discussed most often. The disaster epidemiology associated with these health events is described, as well as the strate-

gies for prevention and clinical management of this unique group of victims.

**Conclusions:** A greater understanding of the types of hazards and exposures which may affect a pregnant woman or her unborn child during or following a terrorist attack can assist in developing plans for medical counterterrorism. This epidemiological information can benefit both clinicians and emergency planners in anticipating the potential health and medical needs as well as planning for potential protective actions that can be implemented before or immediately following a terrorist incident.

**Keywords:** health effects; pregnancy; terrorist attacks; vulnerability; women

*Prehosp Disast Med 2009;24(2):s163*

## Oral Presentations—Burns

### Preparing for Burn Disasters: Effectiveness of Statewide Training

Rhonda L. Williams;<sup>1</sup> Gary D. Jost;<sup>1</sup> Sheila M. Knoefel;<sup>1</sup> Ruth Wetta-Hall<sup>2</sup>

1. Via Christi Regional Burn Center, Wichita, Kansas USA

2. University of Kansas School of Medicine—Wichita, Wichita, Kansas USA

**Introduction:** The Preparing for Burn Disasters program was developed to provide training to healthcare professionals who respond to disasters. The goals were to improve patient morbidity and mortality and to increase the likelihood of positive outcomes following burn disasters. Presented over a span of three years, the curriculum emphasized the challenges that a community-wide, multidisciplinary team faces when responding to burn and fire disasters with multiple victims.

**Methods:** Twenty-one, one-day conferences were held. Participants completed a pre-test at the beginning and a post-test at the conclusion of each conference. Questions correlated to the objectives of the didactic portion of the conference. Questions measuring self-rated ability and confidence in burn injury management also were included. Knowledge items were compared pre- to post-test, while self-rated ability and self-rated confidence were compared using paired-samples *t*-tests.

**Results:** There were a total of 845 participants. Analysis showed improvement in knowledge items, ranging from 10% improvement to nearly 70% improvement. *T*-test analyses found statistically significant ( $p < 0.001$ ) increases in both the self-rated ability and self-rated confidence of the participants.

**Conclusions:** Based on the overall results, the training program appears to be useful and effective in changing the participants' knowledge, ability, and confidence when faced with multiple burn victims. A drawback is that participants often do not have the opportunity to put their new knowledge into practice on a regular basis, whereby losing a component of their confidence and/or ability. An effort is in progress to provide further burn-related disaster training that is accessible to participants for review.

**Keywords:** burn disaster; disaster health; education; knowledge; preparedness; training

*Prehosp Disast Med 2009;24(2):s163*