Structure/Method/Design: This pilot study measured burnout rates of 34 health care providers from four different sites in areas affected by the Tohoku earthquake and the subsequent nuclear disaster. We interviewed caregivers about topics of concerns and asked them to self-administer two questionnaires: Maslach Burnout Inventory for Human Services (MBI-HS) and General Health Questionnaire (GHQ12). Previously validated cutoffs were used to identify high levels of burnout and psychiatric distress, as well as qualitative answers from interviews.

Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract): With a response rate of 94.4%, themes listed by respondents during the interviews were concern for children (47.1%), frustration with the inability to eat and share homegrown or local vegetables (55.9%), and having sleep difficulties (44.1%). We found 58.8% of respondents to have signs of emotional exhaustion, 14.7% with depersonalization, 94.11% with low or medium personal accomplishment, and 55.9% with evidence of psychological distress. Comparing year-old GHQ12 scores done at the same sites, the score remained unchanged (4.63 vs. 4.24; P = 0.74).

Summary/Conclusion: Local caregiver mental health has not improved even 2 years after the disaster, and many are showing signs of burning out. Over half are emotionally exhausted and in psychological distress, experiencing symptoms themselves, and burdened with concerns, which strongly suggest that conditions are not improving. Radiation problems have worsened the stress, anxiety, workload, and recovery process of the caregivers, provoking higher burnout rates. Long-term psychological support and improvement in caregiver work conditions are essential to maintain sustainable care in rebuilding disaster-stricken areas in Fukushima.

#### Global mental health: The view from Albania

R.L. Mueller; Indiana University, Department of Applied Health Sciences, Bloomington, 1N/US

**Background:** Albania, which endured one of the most harshly authoritarian regimes of any country in the socialist bloc, has been a major destination for foreign, particularly European, aid since its democratization in 1992. In this presentation, I consider the paradoxical consequences of European infuence on Albanian mental health sector reforms.

Structure/Method/Design: The following results are drawn from a larger qualitative study on the variety and quality of available institutional and community-based mental health services in Albania. It was carried out in central Albania (Elbasan, Korce, Tirane) between June 1 and September 1, 2013. Information was collected through 44 semi-structured Albanian and English-language interviews with mental health professionals, family caregivers, and advocates identified via snowball sampling. 30+ additional hours of participant-observation were completed with psycho-social staff and consumers at the Sadik Dinci Psychiatric Hospital in Elbasan, Albania.

Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract): Mental health system reform in Albania has largely attempted to recreate European mental health infrastructure locally. Unfortunately, this system is functioning well below its intended capacity in the Albanian context. The network of Community Mental Health Centers—based on the Italian model—is a particularly stark illustration of the ways "innovative" services in Albania replicate treatment as usual: a top-down, medical model which disempowers the consumer. Paradoxically, it appears that Europe-driven aid and initiatives have stunted local capacity. As European investment and the physical presence of foreign advisors decreases, Albania's most

fragile service sector lacks the tools and experience to sustain reforms and continue to improve upon them.

Summary/Conclusion: Albania's geographical and cultural proximity to Italy, a leader in community mental health services and social inclusion initiatives, should be an overwhelming positive for the country. Unfortunately, the partial implementation of progressive models of care has led to poor consumer outcomes. Lessons for global mental health professionals include the need for initial needs assessments that consider whether intended reforms can be fully implemented and, if not, how the impact of partial implementation might be maximized through specific initiatives.

### Policymaking process of a maternal near-miss surveillance model in Colombia: Local effects of global policies generated by an epistemic community

M. Ronderos¹, C. Quevedo¹, K. Ariza², J.M. Rodríguez², M.A. Matallana², J.M. Trujillo², A. Beltran², R.E. Peñaloza²; ¹Pontificia Universidad Javeriana Bogotá, Departamento de Medicina Preventiva y Social, Bogota D.C/CO, ²Pontificia Universidad Javeriana Bogotá, CENDEX, Bogota D.C/CO

Background: In 2005, the Colombian Ministry of Health (MoH), concerned with slow progress toward the MDG target to reduce maternal mortality by 2015 initiated the implementation of an Extreme Maternal Morbidity Surveillance Model (EMMSM). In 2013, we undertook an evaluation of this process at the request of an international agency (IA) and the MoH. This paper describes the policymaking process and possible unintended local effects.

Structure/Method/Design: Descriptive study with mixed-methods data analysis. Data were collected through structured questionnaires and semi-structured interviews with the main actors at the national level, in 8 departments, 8 municipalities, 12 tertiary-level hospitals, and 6 health insurance organizations. Grounded in the theory of epistemic communities, we analyzed both the documents and actors discourses to reconstruct the policy process from conception to inception into the National Public Health Surveillance System (NPHSS).

Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract): We identified three stages of policymaking: 1) 2005-2007: Colombian gynecologists develop a model built on the maternal "near-miss" concept proposed by gynecologist in the UK in 1990 and set forth by WHO in 2004 as "near-miss audits." 2) 2007-2010: The model is piloted in 15 tertiary-level hospitals by the MoH in association with an IA. 3) 2011-2013: "Extreme Maternal Morbidity" (EMM) is made notifiable to the NPHSS by secondary and tertiary-level hospitals. Obstetricians at pilot hospitals perceive the model improved the quality of obstetric care in their institutions, however, they recognize that most EMM cases arrive in critical condition and many lack adequate antenatal care and/or care in their first institution of contact was deficient. While tertiary-level hospitals have increased their obstetric Intensive Care Units capacity, two Departments have closed several primary care facilities. Municipal and Departmental maternal health programs were found to be understaffed and poorly financed.

Summary/Conclusion: The maternal "near-miss" approach initiated by the gynecologists' epistemic community and fostered by international agencies for inception as national policies, when introduced into the Colombian context of market-driven health services and weak primary care systems, may have contributed to drive high technology-based obstetric care in tertiary-level hospitals. This may be having unintended effects on equity in access to quality

Annals of Global Health 233

obstetric care: the lives of women requiring emergency obstetric care who acces tertiary-level hospitals in major cities will probably be saved, not so the lives of those with limited acces to this institutions due to geographic, economic, or cultural barriers.

# Portable ultrasonography enhances diagnostic capability in the Peruvian Andes

M. Subrize<sup>1</sup>, A. Fuller<sup>1</sup>, B. Hong<sup>1</sup>, R. Cunningham<sup>2</sup>, G. Coritsidis<sup>3</sup>; <sup>1</sup>Stony Brook University School of Medicine, Stony Brook, NY/US, <sup>2</sup>Stony Brook University Hospital, Radiology, Stony Brook, NY/US, <sup>3</sup>Elmhurst Hospital, Critical Care Medicine, Elmhurst, NY/US

Background: A Promise to Peru, Inc. coordinates an annual medical mission to the Sacred Valley region of Peru, providing medical and ophthalmological care, as well as cataract surgery. Diagnoses during the general medical clinic have been limited due to lack of radiological and laboratory access. There has been an increase in the use of portable ultrasound in underdeveloped settings for reliable imaging. In 2013, for the first time two portable ultrasound units were brought to improve diagnostic capabilities. The aim of this study was to elucidate the diagnostic impact of portable ultrasonography in a rural clinic setting.

Structure/Method/Design: We reviewed patient charts from 2012 and compared diagnoses to those of patients in 2013, when ultrasonography was employed. Portable ultrasound was utilized in patients with abdominal complaints at the physician's discretion. Those patients with diagnoses of gallstones, gallbladder polyps, and cholecystitis were grouped into a category of gallbladder disease. Patients under 18 were excluded.

Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract): In 2012 and 2013, respectively, 277 and 209 charts were collected and reviewed with 107 (38.6%) and 66 (31.5%) patients presenting with abdominal complaints. Both groups had similar average age (42 vs. 45 years) and gender (70% female) distribution. 36 patients were examined with portable ultrasound in 2013. The diagnosis of gallbladder disease increased from 2% to 12% (P < 0.01); unknown diagnoses decreased from 28% to 12% (P = 0.02). Patients who underwent ultrasonography had a high prevalence (25%) of hepatic steatosis. Nonspecific diagnoses such as gastritis were reduced from 48 (45%) in 2012 to 25 (38%) in 2013, but this finding was not significant.

**Summary/Conclusion:** Use of portable ultrasonography increased the diagnostic power of our medical mission. Ultrasonography allowed for a significant increase in the accurate diagnosis of gall-bladder disease and hepatic steatosis. The improved overall diagnostic rate will enable future missions to better direct treatment and local referral, improving the long-term impact of our mission.

## The capacity building of the Peoples Institution to close the sustainability gap in the child survival project in Bangladesh

A.T. Talens<sup>1</sup>, N.L. Tenbroek<sup>2</sup>, K. Daring<sup>2</sup>, S. Sackett<sup>1</sup>, G. Kreulen<sup>1</sup>; <sup>1</sup>World Renew, Grand Rapids, MI/US, <sup>2</sup>World Renew, Dhaka/BD

Background: World Renew implemented a child survival project (CSP) in the resource-poor district of Netrokona, Bangladesh with high maternal/child mortality, inadequate health facilities/services with low accessibility, and substantial geographical and cultural barriers to health. The goal was to develop sustainable, effective

community ownership and governance of local health through establishment of a delivery platform for essential interventions to meet the coverage and equity needs of this hard-to-reach population of 20,000 people.

Structure/Method/Design: Community-based capacity building grounded on appreciative inquiry principles were used to establish and strengthen civil society organizations (CS0s) called People's Institutions: 1) To have the central role in selecting and providing supportive supervision to a corps of community health volunteers that provided health promotion and counseling to pregnant women in multiple settings. 2) To advocate with government and health facility personnel for policy change and health service improvements. 3) To self-measure and track progress in achieving sustainability using Child Survival Sustainability Assessment (CSSA) indicators plotted on a "Road to Capacity" chart.

Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract): Significant improvements occurred in health outcomes that reached/surpassed national averages: Delivery by skilled birth attendants increased from 21% to 95% (DHS 29%); the proportion of mothers receiving four prenatal visits increased from 6% to 86% (DHS 21%) and two-doses of TT increased from 62% to 98% (DHS 90%); and mothers' knowledge of pregnancy danger signs rose from 31% to 100% (DHS 50%). Infant and young child feeding practices improved from 14% to 80% (DHS 81%) and complete immunization rates from 32% to 96% (DHS 82%). The CSSA-based sustainability indicators tracked by PIs showed marked improvement: health outcome increased 45%, health services 79%, community capacity 54%, enabling environment 85%, organizational capacity 78%, and organizational viability 60%.

Summary/Conclusion: The success of our community-based CSO capacity building using appreciative inquiry demonstrates that community members have the capability to develop the capacity to identify, prioritize, and solve their own health delivery problems. The developed capacity contributes to enhanced performance of the CSO and improved health outcomes that are expected to be sustained over time.

# Economic benefits of implemented water interventions in the developing world: A qualitative study in Kitui, Kenya

T.R. Zolnikov; North Dakota State University, Developmental Science, Fargo, ND/US

Background: Sub-Saharan Africa is a developing world subject to the residual effects of chronic poverty. Poverty contributes to adverse health effects; crowded households; lack of resources and finances for water, food, school fees, clothing, permanent housing structures or other necessities. One priority public health intervention addresses the basic need of providing access to water. Communities with nearby access to safe drinking water alleviates adverse health effects, but may have additional outcomes. Current research is limited on the economic advantages from implemented water interventions.

Structure/Method/Design: A qualitative phenomenological approach used 55 semi-structured interviews to understand economic experiences among primary water gatherers and their families after implemented water interventions in a community. This study took place throughout the historically semi-arid eastern region in Kitui, Kenya, where community members have been beneficiaries of various water interventions.