

WOMEN'S HEALTH IS GLOBAL HEALTH – ISSUES ACROSS THE LIFESPAN

Lessons from Central America: Technology Training for Maternal Health Project Development in Low- and Middle Income Countries

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Program/Project Purpose: The MundoComm project, funded in 2015 by the United States National Institutes of Health Fogarty International Center, builds upon a 17-year partnership among researchers in the US, Costa Rica, and the Dominican Republic. Its goal is to develop an innovative training program to enhance the ability of community-based teams in Latin America to use Information Communication Technology (ICT) to improve maternal health. Progress in reducing maternal mortality has stalled or worsened in Latin America, despite overall health improvements in child health. ICTs technological innovations are evidence-based strategies to impact maternal mortality.

Structure/Method/Design: Faculty from the United States, Costa Rica, and the Dominican Republic trained 3 community based public health teams over a one-year period. The teams mentored course of training and follow-up included interactive on-line modules, and two in-person week-long “short courses” in Costa Rica. Team goals were to develop and test an innovative ICT project to address a local maternal health problem. A “collaboratory” environment provided ongoing mentoring and support. Summative and formative evaluations aided in assessment of the training model (content and platforms), leading to lessons learned in curriculum development, engagement, and evaluation of progress.

Outcome & Evaluation: Three teams (Costa Rica, Dominican Republic, and Honduras) completed two short courses and online training in bioethics, ICT options for maternal health improvement (e.g., Epi-Info, Cloud Computing, social networking), and project planning. Evaluation of the 12 participants indicated general satisfaction with the course elements (content and platforms), and increases in knowledge across content areas. MundoComm demonstrated the feasibility of recruiting and training public health teams across Central American countries to generate ICT-based projects to address local maternal health problems. Better practices for online, team-based and in-person trainings were developed to engage, track and evaluate learners. Team building strategies facilitated institutional capacity building, and are sustainable (e.g., robust despite turnover).

Going Forward: A one year post-training follow-up survey and 2 year site visit will assess retention of skills and barriers and facilitators of project implementation.

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Uptake of Antenatal Care, and its Relationship with Participation in Health Services and Behaviors: An Analysis of the Poorest Regions of Four Mesoamerican Countries

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Background: Antenatal care (ANC) is intended to identify high risk pregnancies, bring women into the health system, and educate them about when to return. Though poor women have a heightened need for ANC and are least likely to receive it, there is a concerning dearth of evidence detailing whether those who receive care are more likely to return for other maternal and child interventions. This analysis is the first to examine the relationship between ANC uptake and later uptake of health interventions.

Methods: With informed consent, we surveyed 4,844 women in Honduras, Guatemala, Mexico (state of Chiapas), and Nicaragua regarding the uptake and timing of ANC for their most recent delivery in the last two years. We conducted logistic regressions, controlling for demographic, household, and maternal characteristics, to understand the relationship between uptake of ANC and later participation in the continuum of maternal and child healthcare.

Findings: Uptake of four ANC visits varied by country from 17.0% in Guatemala to 81.4% in Nicaragua. In all but Nicaragua, ANC was significantly associated with in-facility delivery (Guatemala OR = 5.28, CI = 3.62-7.69; Mexico OR = 5.00, CI = 3.41-7.32; Honduras OR = 2.60, CI = 1.42-4.78) and postnatal care for infant (Guatemala OR = 4.82, CI = 3.21-7.23; Mexico OR = 4.02, CI = 2.77-5.82; Honduras OR = 2.14, CI = 1.26-3.64), but did not have any positive relationship with immediate or exclusive breastfeeding, or uptake of modern family planning methods postpartum, which may be more strongly determined by cultural influences. Only in Honduras and Chiapas was receipt of ANC associated with uptake of postpartum care for the mother (Honduras OR = 4.02, CI: 1.42-11.39; Mexico OR = 4.59, CI: 1.59-10.84). Nicaragua was the only country where uptake of four ANC was associated with child vaccine compliance for age (OR = 2.64, CI: 1.30-5.36).

Interpretation: Our results demonstrate that uptake of the WHO-recommended four ANC visits has limited effectiveness on