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### Integration of health education into a school curriculum in rural India: an evaluation of challenges faced

*B. Cheung, S. Browne, K. Shih, B. Smith, M. Smith, D. Raff, V. Kapoor; The University of British Columbia, Vancouver, BC, Canada*

**Program/Project Purpose:** In 2008, the Global Health Initiative Spiti Valley Project collaborated with Munsel-ling School in India's Spiti Valley to develop a health education curriculum. Spiti Valley is restricted by geographic and environmental conditions and is inaccessible for most of the year. The region is highly underserved with limited access to healthcare and education. The curriculum was first delivered in 2009 with revisions in 2010 and 2015. After 7 years, this resource has yet to be integrated into the government-mandated curriculum at Munsel-ling. This has been acknowledged and the Spiti Valley Project began to evaluate the challenges hindering curriculum implementation and proposed potential solutions.

**Structure/Method/Design:** The curriculum was delivered in 2009. In 2010, it was discovered that teachers were unable to accommodate the material into the course load. The Students' Health Council (SHC) was developed to address the need for pedagogical sustainability. The SHC consisted of senior students who would be taught the curriculum to teach to younger students. In 2013, a narrative voice project determined the relevance of the curriculum in the community's health priorities. In 2015, Munsel-ling requested a more comprehensive curriculum detailing learning objectives, lesson plans, competency goals, and assessment activities. Despite these changes and revisions, the curriculum has not been implemented.

**Outcome & Evaluation:** The narrative voice project revealed that the community valued the curricular content. Interviews with the school director, principal, and teachers revealed operational challenges to implementing the curriculum. Issues affecting curriculum integration include: lack of infrastructure in leaders' roles resulting in the disbandment of the SHC, miscommunication regarding program leadership, inability to incorporate the curriculum into a packed curriculum, inconsistent schedules, student and teacher absenteeism, overworked or disinterested staff, and concurrent projects that were considered higher priorities: water purification and sanitation.

**Going Forward:** We will endeavor to better understand the challenges and continue to make suggestions. Structurally, solutions include developing well-described roles and setting dates for teaching. However, solutions go beyond leadership responsibilities: the location of Munsel-ling results in a constant shortage and quick turnover of teachers. Ultimately, the curriculum needs to be integrated by the school itself and its success requires further buy-in by teaching staff into the curriculum.

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### Affordable technology for saving maternal and infant lives: moving on with solutions

*R. Cyan<sup>1</sup>, H. Hussain<sup>2</sup>, I. Shebki<sup>3</sup>, Z. Ishaq<sup>3</sup>, T. Khan<sup>3</sup>, R. Rothenberg<sup>1</sup>; <sup>1</sup>Georgia State University, Atlanta, GA, <sup>2</sup>Khyber Medical University, Peshawar, Pakistan, <sup>3</sup>Affordable Technology for Saving Maternal and Infant Lives Project Team, Lahore, Pakistan*

**Background:** Pakistan loses mothers and neonates because of low utilization of skilled birth attendants (SBA) and is among the six countries that contribute half of the global maternal-infant mortality. Lady Health Workers (LHWs), placed in most villages to foster behavior change, have struggled to increase utilization of SBAs. We employ an affordable tool to focus their services and to achieve rapid, effective adoption of lifesaving healthcare with an anticipated increase of SBA from 60% to 80%.

**Methods:** We recorded health messages linked to progression through pregnancy and 6 months postpartum that are delivered in female voices directly to the pregnant woman by cellphone, costing \$6.98 per annum. By providing health information across low literacy and social barriers, we seek to optimize the services of LHWs and achieve rapid, effective behavior change. The intervention is being implemented in a cluster randomized controlled trial with 1,556 women enrolled during the first trimester of pregnancy by household visits in 411 villages in two districts of Pakistan. The trial has five arms to test the effectiveness of higher versus lower frequency of messages, messages timed with progression of pregnancy and messages linked with small financial incentives. A concurrent intervention provides health literacy support to LHWs. The primary outcome is adoption of intrapartum care with SBAs; the secondary outcomes are health literacy scores, and the health outcomes of mother and infant.

**Findings:** The baseline health literacy assessment showed low recognition of complications requiring emergency obstetric care (<30%) for both pregnant women and LHWs. The use of antenatal care was 72%. Twenty-five percent had suffered serious complications in previous pregnancies and only 61% delivered under care of SBA.

**Interpretation:** We will present early results from the ongoing trial and a discussion of health literacy as a mediator for maternal and infant health outcomes, enabling navigation through complex health systems. We will also present results of the effect of health literacy on women's empowerment within the traditional households for seeking appropriate and adequate healthcare. This approach, designed for adoption "on the ground," is replicable and scalable in different social and cultural environments.

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### Preconception risk factors and attitudes about reproductive planning in women of reproductive age in the Dominican Republic

*Aparna Dandekar<sup>1</sup>, Wendy Gomez<sup>2</sup>, Junil Rodriguez<sup>2</sup>, Suzanne Bentley<sup>3</sup>; <sup>1</sup>Department of Family Medicine, Arnholt Global Health Institute, Icahn School of Medicine at Mount Sinai, New York,*