Harnessing the role of community volunteers for maternal and newborn health in a context of workforce shortage: findings from a baseline assessment in Rural Sierra Leone

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Background: Low utilization of prescribed maternal, newborn and child health (MNCH) services result from supply- and demand-side barriers, which are not mutually exclusive in their cause or effect. Health workforce capacity is one common predictor of the availability and utilization of quality MNCH services. With a Skilled-Birth-Attendance coverage of 42% and one midwife per 1000 population, Sierra Leone qualifies for World Health Organization (WHO)'s definition of "critical shortage", yet new policies exclude Traditional birth attendance (TBAs) from the health system. This paper discusses the potential of harnessing the strategic position of TBAs to address barriers to health services utilization.

Methods: We used findings from a baseline assessment that was conducted to guide our intervention design. The intervention, Essential Newborn Care Corps (ENCC), trained and rebranded TBAs as maternal and newborn health promoters (MNHPs) who provide health promotion services and referrals. A survey was conducted among 795 pregnant women and women with live births in the preceding 12 months with questionnaire exploring interactions of women, during their pregnancy; delivery and postnatal periods, with both formal and informal aspects of the health system.

Findings: Nearly half of women interviewed saw TBAs during pregnancy. During these encounters, they were advised on birth preparedness, especially regarding financial plans (89%) and transportation (15%). The TBAs also assessed women for headaches (64%), swelling of feet and limbs (64%), and bleeding (60%), and referred women with danger signs to a health facility. About half of women with live births were visited by TBAs after delivery. Out of these, 10% and 87% were referred to a health facility for newborn danger signs and for PNC, respectively. More than 80% of those referred sought skilled care at a facility.

Interpretation: TBAs are trusted community members who continue to influence the decisions, behaviors and health of pregnant women and new mothers by engaging in activities such as home visits, assessment of maternal and neonatal well-being, detection of danger signs, provision of guidance on birth planning, and referrals for care by professional personnel. Thus, their integration into health workforce strategies can be galvanized, particularly in rural, hard-to-reach areas.

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Designing and implementing an in-situ emergency obstetric and neonatal care (EmONC) simulation and team-training curriculum for midwife mentors to drive quality improvement in Bihar, India J. Dyer¹, S. Cohen², A. Christmas³, P. Spencer¹, J. Taylor¹, H. Frank⁴, J. Sterne¹, D. Walker⁴; ¹Pronto International, Seattle, WA, USA, ²University of Utah, Salt Lake City, UT, USA, ³Pronto International, Patna, Bihar, India, ⁴University of California, San Francisco, San Francisco, CA, USA

Background: It is estimated that the maternal mortality ratio (MMR) in Bihar, India is 208 per 100,000 live births. To address this high rate, PRONTO International and UCSF have partnered with CARE India to integrate simulation and team training into a mobile nurse-midwifery mentoring program. The intervention is being implemented in 320 primary health clinics and 56 district hospitals in Bihar between 2015 and 2017. The simulation-based curriculum was designed for nurse midwife mentors to promote quality improvement in dealing with maternal and neonatal emergencies.

Methods: To provide midwife mentors with training activities at each facility, PRONTO International and UCSF developed a comprehensive modular curriculum package.

Findings: The new mentoring curriculum is comprised of 31 EmONC simulation scenario guides, 17+ lesson plans, and 15 teamwork activities tailored to the Bihar context. Midwife mentors can select components of the curriculum package over nine-weeks of training at each facility, tailoring activities to local specific needs. The midwife mentor led curriculum emphasizes highly-realistic simulation using the PartoPantsTM birth simulator, facilitated video-guided debriefing and team training exercises. Mentor training included sessions in adult-learning theory, simulation facilitation with in-situ simulation and video-guided debriefing, and facilitating teamwork activities. To date, 115 mentors have been trained. All daily mentoring activities are tracked information is provided on frequency and duration (time spent in minutes) on each curriculum component.

Interpretation: Comprehensive EmONC mentoring simulation and team-training curricula can be adapted and used in limited-resource settings. The challenges of developing curriculum relevant and impactful in this specific cultural and environmental context will be discussed. Successes and challenges in mentors' usage of the curriculum will also be addressed.

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Improving quality of obstetric and neonatal care through midwife mentoring and simulation training in Bihar, India: mentor knowledge assessments

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Background: An estimated 300,000 maternal deaths and 2.9 million neonatal deaths occur worldwide each year. PRONTO International developed and implemented an emergency obstetric