**Title:** Innovative community partnership between Community Health Workers (CHWs) and Nurses (CHNs) for strategic health education during follow-up home visits to pregnant women to increase skilled attendant at birth; maternal and newborn outcomes in rural Ghana - **a cluster-randomized control trial protocol**

**Abstract**

**Background:** Skilled attendant at birth (SAB) is a key strategy for improving maternal and newborn health since most of the complications occurring at childbirth could be better managed when the delivery is supervised by a doctor, midwife or nurse. The effect of follow-up home visits to pregnant women by the CHW and CHN on SAB is yet to be evaluated in a trial in Ghana. This trial will determine the effectiveness and cost-effectiveness of a CHW/CHN home visit intervention to pregnant women on increasing SAB and improving birth outcomes for mother and newborn.

**Methods:** Following ethical clearance, we will train CHWs and CHNs to conduct three home visits to pregnant women and one after delivery to provide a package of strategic health education and support for delivery and post-natal care. This partnership is being evaluated through a cluster randomized controlled trial in 32 electoral areas in Ellembelle district of Ghana: 16 will be randomized to receive the CHW/CHN partnership intervention and 16 to the control arm. The CHWs and CHNs will receive technical and financial support throughout the study.

Data on skilled attendant at birth, maternal utilization of safe practices during pregnancy, breast feeding initiation, exclusive breastfeeding, immunization coverage for mother and newborn, maternal deaths and neonatal death rates will be collected on 912 mothers and their babies. The impact of the CHW/CHN intervention on these indicators as well as the cost effectiveness of this innovative community partnership will be reported.

**Keywords:** Community Health Nurse, Community Health Worker, Maternal, Newborn, Supervised delivery, Post-natal, Effectiveness, Cost-effectiveness