

# **Adapting Antenatal Care in a Rural LMIC During Covid-19: the introduction of a low literacy checklist to mitigate risk for home-based community health workers in rural Guatemala**

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The COVID-19 pandemic is challenging health systems across the world. The potential for devastating consequences in resource limited low-middle-income countries (LMIC) is just beginning to be understood [1]. In the majority of LMIC, maternal healthcare is focused outside a health center through the use of community health workers and birth attendants. These essential workers provide the majority of maternal health care around the globe and are ill prepared for the highly transmissible nature of this novel virus and the consequences for their communities [2]. Little attention has been focused on their training and responsiveness in this pandemic.

Since the emergence of COVID-19, the Guatemala Ministry of Health (MOH) has reported decreased uptake of ANC at clinics and health posts in Sololá, a mainly indigenous region in the Western Highlands of Guatemala, due to both fear of in person contact and limited availability of MOH staff due to COVID infection. This is alarming given that Mayan women living in rural Guatemala have a maternal mortality rate double that of their non Mayan counterparts (163 per 100,000 compared to 78 per 100,000) [3].

Saving Mothers Guatemala has piloted an ANC protocol aimed at safe maternal antenatal care for low literacy community health care workers during this COVID-19 pandemic (Figure 1). A total of 8 traditional birth attendants skilled in ANC delivery were trained in the protocol that was adapted from WHO, CDC, ACOG, and Guatemalan National guidelines and applied to the low resource setting in Guatemala.

Implementation of the training was feasible due to (1) an existing long-standing collaboration between the municipal branch of the MOH in Santiago Atitlan and Saving Mothers Guatemala, a local NGO with vast experience in training traditional birth attendants in basic ANC [4] and (2) the acceptance by the community in receiving essential healthcare during home visits as this mode of healthcare delivery is already integrated within the MOH health system.

The training, which took place over five sessions, addressed two recently recognized barriers for pregnant women accepting ANC in Santiago Atitlan (1) feeling safe having healthcare providers inside their home (2) false information regarding the transmission of COVID-19. The checklist was used to facilitate training and emphasized four major topics to address these barriers; proper risk assessment prior to entering the home, understanding of COVID-19 transmission in pregnancy, infection control for both the healthcare worker and the pregnant woman, and proper use of PPE. Training was both lecture and simulation based in order to assure understanding, especially for novel topics such as appropriate donning and doffing of PPE. Through simulation training the comadronas were observed and evaluated by both Saving Mothers team and their comadrona colleagues. This 360-degree evaluation further reinforced the checklist skills.

Successful training using our low literacy checklist as part of a larger COVID training program is a valuable tool in improving ANC care in LMICs [5]. In the evolving global setting of COVID-19, the low literacy checklist described here allows for ease of PPE execution and reinforcement of infection control.

## Sources

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