

ENHANCING PASTORALIST WOMEN'S KNOWLEDGE OF DANGER SIGNS THROUGH HOME-BASED LIFE-SAVING SKILLS INTERVENTION IN NORTHERN KENYA: A QUASI-EXPERIMENTAL STUDY.

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Keywords Health education; Health promotion; Maternal health; Neonatal health; Rural population

Background: Maternal recognition of obstetric danger signs is crucial for reducing maternal mortality and delays in seeking emergency care. However, there is insufficient knowledge about obstetric danger signs among women in rural Kenya, especially in the hard-to-reach pastoralist communities. This study aimed to determine whether home-based life-saving skills intervention improves knowledge about obstetric danger signs among women in Marsabit County, Kenya.

Methods: We conducted a quasi-experimental study with pre-posttests among 256 pregnant women, allocated to intervention and control groups. The study participants were recruited using purposive sampling based on the eligibility criteria that the pregnancy is less than 16 weeks gestational period and willingness to participate in the study. We used household registers to recruit the participants from the two sub-counties. At baseline, 128 participants were enrolled in each arm of the study while 246 participants were interviewed during the end-line survey with the intervention arm having 126 participants and control groups 120 respectively. In the study, we implemented sensitization of pregnant women of reproductive age on obstetric danger signs and basic life-saving actions as components of home-based life-saving skills intervention. At the same time, the control group continued with routine services. The trained community health volunteers (CHVs) implemented the intervention for nine months. Descriptive statistics was used to analyze demographic data. The chi-square test and Difference-in-Difference analysis were used to compare the intervention's proportion differences and net effect.

Results: At baseline, no significant differences in the knowledge level existed. Proportions of women who were knowledgeable of >3 danger signs increased significantly during pregnancy [(89.7%) vs. (62.5%), $p<.0001$], birth [(86.5%) vs. (75.0%), $p=.022$], postpartum [(92.1%) vs. (74.2%), $p<.000$] and neonatal period [(96.8%) vs. (66.7%), $p<.0001$] in the intervention group than the control group at end-line.

Discussion & Conclusion: These results imply that it is possible to improve knowledge of obstetric danger signs among women from hard-to-reach pastoralist communities as part of home-based life-saving skills interventions. Our work contributes to the United Nation's sustainable development goal 3, which focuses on equity and commitment to reaching people needing health services regardless of where they live and their circumstances.