

# Effectiveness of Antenatal Health Education via Mobile Phone Calls Among Women Seeking Antenatal Care Services in Kisii County, Kenya

## Abstract

Knowledge of antenatal care is important in reducing maternal mortality and morbidity. Mobile phones have demonstrated an increase in the use of antenatal care services. However, few studies have indicated the effectiveness of health education on antenatal care via mobile phone calls. In this study, we aimed to evaluate the effectiveness of health education on antenatal care provided through mobile phone calls among pregnant women in Kisii County, Kenya. A total of 160 pregnant women up to 26 weeks of gestation were recruited for the study from 16 sub-county health facilities (clusters) in Kisii County. The women were enrolled in their first visit and followed up until delivery. The sub-county health facilities were randomly assigned to either intervention or control arms. The intervention involved giving health education on antenatal care through mobile phone calls. All the participants in both study arms received routine antenatal care. However, those enrolled in the intervention sites additionally received health education through mobile phone calls. The primary outcome measure was antenatal care knowledge scores. Baseline and end-of-study questionnaires were used to collect data. Women in the intervention group scored highly in antenatal care knowledge post-intervention as compared to those in the control group, 7.87 (SE of the difference = 0.68,  $p$ -value < 0.001, 95% CI (6.53–9.20)). Health education delivered through mobile phone calls has great potential in improving antenatal care knowledge.