

Effect of Mobile Phone Text Message Reminders on Adherence to Routine Prenatal Iron/Folic Acid Supplement among Pregnant Women: A Pilot Study

Authors : Nneka U. Igboeli, Maxwell O. Adibe

Abstract : Iron and folate supplementation in pregnancy are important interventions that prevent maternal anaemia and fetal anomaly. Thus, daily oral doses of iron and folic acid are recommended throughout pregnancy as part of antenatal care. However, low adherence has been a major drawback leading to low effectiveness of these programs. The effect of mobile text message reminders to pregnant women to take their routine medications on adherence was evaluated in this study. The first 100 women who consented to the study were recruited and randomized to either receive a text message reminder on adherence to routine medications or not. Adherence was assessed using the 8-item Modified Morisky Adherence Scale (8-MMAS). The folders of successfully recruited women were tagged with the a study number assigned to each of them. The womens' phone numbers were collected and these were used to send text messages reminders on adhering to routine drugs only to women in the intervention group. The text messages were sent three times per week for a period of four weeks with an adherence reassessment at the one month follow-up antenatal visit for recruited women. At one month follow-up, the lost to follow-up were 6 (16%) women for the intervention group and 17 (34%) for the control group. The across group mean difference in adherence score was 0.07 (-0.96 - 1.10) at baseline and 0.3 (-0.31 - 0.92) after intervention, both insignificant at $p > 0.05$. The within group change were increases of 0.58 (0.00 - 1.16) ($p = 0.05$) from baseline for the intervention group and a 0.35 (-0.51 - 1.20) ($p = 0.395$) for the control group. Non-significant increase in adherence scores were recorded for both groups. However, the increase in adherence scores of women in the intervention group was greater and may be potentially transformed into more positive results if the study period is increased with possibly reduced study drop-outs shows great promise for more positive results.

Keywords : adherence, mobile phone, pregnant women, reminders

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