

Background: Mobile health (mhealth) as is in western countries can be of importance in Uganda particularly in reaching the semi urban and rural pregnant women with timely information. Attention should be given to most basic of mHealth tools like Short Message Services (SMS) towards improving Maternal and Child Health. This is a study on the responsiveness of pregnant women (16 – 40 years) to short message service alerts on danger signs during pregnancy in and around Ssonde, Goma Sub County – Mukono municipality.

Objectives: This study will establish: 1) proportion of pregnant women who learnt one or more danger sign(s) after receiving danger signs SMS alerts, 2) what danger sign (s) were significantly learnt by pregnant women, and 3) statistical difference between the mean number of known and unknown danger signs after using SMS alerts in and around Ssonde village.

Methodology: Upon consent a baseline questionnaire I was verbally administered to pregnant women, aged 16 years – 40 years, in and around Ssonde Village of Goma Sub County in Mukono district. The pregnant women, meeting the inclusion criteria, received study or control group SMS alerts. These were then followed up with questionnaire II via phone call six weeks later.

Results: Questionnaire II was responded to by 53% after danger signs SMS alerts. The data obtained was both qualitative and quantitative. This data was analysed by SPSS 23.78% of questionnaire II study group respondents were able to learn one or more danger signs as compared to 35% in the control group. The study group significantly learnt four danger signs: bleeding ($p = 0.001$), blurred vision ($p = 0.044$), Abdominal pain ($p = 0.001$) and less or no fetal movement ($p = 0.001$). There was statistically significant difference in mean number of known danger signs between receiving or not receiving danger signs SMS alerts among pregnant women in and around Ssonde village. (mean = 3, SD = 1.1 and $p = 0.001$).

Conclusions and Recommendation: These results underline the vast opportunities for even basic mobile health solutions like SMS. Combined with other interventions that reach pregnant women with timely information SMS platforms would significantly contribute to improving MCH. The recommendation is that danger signs SMS alerts should be used to educate pregnant women across Uganda. This should start with those attending health centers in the semi urban and rural areas. Complete records including partner's telephone contacts should be taken during registration for antenatal care. It serves to educate key decision makers within the communities leading to faster and

informed response to danger signs.