

## ABSTRACT

**Background:** Maternal and child mortality is of public health concern. Most of these deaths occur in rural communities of developing countries. About half of these deaths occur in sub-Saharan Africa. Technology for maternal and child health (T4MCH) is an intervention introduced to assist in increasing MCH services utilization in some health facilities across Ghana. The objective of this study was to assess the impact of T4MCH on Maternal and Child Health (MCH) services utilization at the Sawla-Tuna-Kalba District in the Savannah Region of Ghana.

**Method:** A quasi-experimental study with a retrospective review of records of MCH services of 469 women (263 in intervention and 206 in the control) who attended antenatal services in some selected health centers in the Savannah region, Ghana. Data extraction was done via a data extraction tool and analyzed in Stata version 15.  $\chi^2$  / Fisher's exact test was used in determining the association between the socio-demographic characteristics and the intervention whilst propensity score matching with series of sensitivity analytic techniques used to determine the effect of T4MCH on MCH utilization services.

**Results:** The T4MCH intervention significantly improved Postnatal care attendance by 28 percent [95% CI: 0.17-0.40, p-value <0.001] and skilled delivery by 17 percent [95% CI: 0.05-0.30], p-value=0.006]. However, it had no significant effect on ANC services utilization (p-value=0.388).

**Conclusion:** The study shows that T4MCH is effective in improving postnatal and skill delivery services utilization in health facilities and must be considered for scale up to other areas as well as inclusion in other services.