**The impact of a training programme to improve the quality of Antenatal and Postnatal care in Kenya – a preliminary cost-consequence analysis**

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**Introduction**

70% of global maternal deaths occur in sub-Saharan Africa. Kenya is off track to meet SDG maternal mortality ratio target by 2030 (530 vs 140/100, 000 live births). Antenatal care (ANC) and post-natal care (PNC) have long served as effective platforms for providing a range of health services for conditions like HIV, tuberculosis (TB), and malaria, which can reduce the risk of complications during pregnancy and childbirth, resulting in improved health outcomes. In September 2021, with the aim to improve the quality of integrated HIV, TB and malaria services in ANC/PNC, a series of live training sessions was delivered to health care workers (HCWs), including training on 52 essential practices for reproductive, maternal, new-born and child health (RMNCH). The aim of this study was to evaluate the cost of an ANC and PNC face-2-face (F2F) training intervention and the consequences in terms of improved delivery of care services in Kenya.

**Methods**

A cost-consequence analysis was conducted reporting the costs of implementing and deploying the training package as well as its impact on routinely collected quality indicators for ANC and PNC care in Kenya. An ingredient approach was used to calculate the full economic cost of designing and deploying the intervention. Both the perspectives of the implementers of the training and the costs of the recipients of the course were considered. All costs were converted from local currency to 2021 USD. Quality indicators were derived from the aggregated Kenya Health Information System (KHIS) which contained monthly data at facility level on ANC/PNC indicators. A difference in difference design, using data from intervention and control facilities from the same counties was adopted to estimate the potential impact of the training on indicators related to HIV and Malaria services as well as other ANC quality indicators. No indicators for the screening and treatment of TB during ANC/PNC were available from KHIS.

**Results**

By December 2022, 80% (30) of all ANC/PNC staff in 13 facilities had been trained. The cost of designing the training package was estimated at USD 34,333, mostly determined by labour costs for the design of course contents and coordinating meetings for the roll-out of the training. Deployment costs of the ANC/PNC training in Kenya were estimated at USD 1,140 per participant. At 6 months after implementation, no significant impact of the training was observed on the proportions of clients tested for HIV or Syphilis during ANC, or the proportions of clients receiving insecticide treated bed-nets or prophylactic treatment for Malaria.

**Conclusions**

This preliminary analysis of the first 6 months after intervention didn’t find significant effects of the F2F training package provided to healthcare workers on the selected indicators for ANC and PNC services. However, the analysis was challenged by the limited sample size in the intervention group, incomplete data on ANC/PNC indicators from KHIS, and limited time horizon of the analysis. More research is needed to validate these results, including exploring the effect of training on TB care; the impact of training on other process outcomes such as customer satisfaction and respectful care; and how training contributes to health system strengthening objectives in the long-term