Title: Effect of a Comprehensive Package of Interventions on the Provision of Immediate Post-Pregnancy Family Planning Services: Preliminary analysis of a PPFP program in Kenya

Authors: Daisy Ruto[1], Elaine Charurat[2], Sara Kennedy[2], Michael Muthamia[1]

Affiliations: [1]Jhpiego Kenya, Nairobi; [2]Jhpiego, Baltimore, MD

Acknowledgements: This study was conducted with support from the Bill & Melinda Gates Foundation and funding from Merck, through *Merck for Mothers*, the company's 10-year, $500 million initiative to help create a world where no woman dies giving life. *Merck for Mothers* is known as *MSD for Mothers* outside of the United States and Canada.

Background

Post-pregnancy family planning (PPFP) is important for timing and spacing pregnancies following childbirth or pregnancy loss[3], preventing unintended pregnancies, and improving health outcomes for both mothers and infants. Globally, the unmet need for family planning among postpartum women is 63%. In Kenya, there is a great need for PPFP services. According to the 2014 Kenya Demographic and Health Survey data, 23% of births occur at intervals of less than 24 months[6]. Additionally, postpartum women are at risk of unintended pregnancy soon after giving birth, as only 19% of Kenyan postpartum women begin using a family planning method during the first 6 months postpartum[4]. Sixty one percent of Kenyan women deliver at health facilities, providing a critical opportunity to improve PPFP services through facility-based strategies.

The World Health Organization (WHO) has recommended that women space pregnancies by two years or more following the delivery of a newborn and six months or more after a pregnancy loss.[2, 3] In 2015, the WHO updated the Medical Eligibility Criteria for Contraception (MEC) guidelines expanding the contraceptive method mix that women in the immediate postpartum period may use safely.[5] Despite these changes, many women still return home after delivery or pregnancy loss without an FP method due to providers' lack of knowledge or awareness about the updated guidelines.

Many factors contribute to knowledge about and use of PPFP services and methods. These can include provider skills related to PPFP counseling and service provision, facility readiness (including infrastructure, equipment and commodities), and various client level factors (such as PPFP knowledge as well as FP related myths and misconceptions at the community level).

The Postpregnancy Family Planning Choices (PPFP Choices) implementation research study is a 3-year mixed methods study that aims to improve access to facility-based FP for women in the immediate postpartum or post-loss of pregnancy stage, while generating practical evidence and recommendations for both the public and private sectors. The study is currently being implemented in intervention and control areas in Kenya and Indonesia. Within each country, facilities in the intervention area receive a package of interventions following a facility assessment. The package of interventions includes: Training on counseling and PPFP service delivery for providers; leadership development, quality improvement, business management and data for decision-making training programs for facility management; provision of essential equipment; and PPFP awareness creation and message dissemination for clients, providers and communities. Following conclusion of the study, the control areas will similarly receive the package of interventions. This abstract presents preliminary analysis with regard to the provision of FP counseling and immediate PPFP methods following initial implementation of the study's package of interventions in the intervention county of Kenya.

Research question

The main research question of this abstract is: Is the PPFP Choices package of interventions related to differences between intervention and control counties with regard to the provision of PPFP counseling and uptake of immediate PPFP methods in public and private facilities in Kenya?

While the PPFP Choices study is a mixed methods prospective implementation research study that includes patient interviews and facility assessments, this analysis of data explores 13 months of service statistics (December 2017 through December 2018) following the initial implementation of the interventions at the facility level. Initial PPFP Choices interventions began in November and December, 2017.

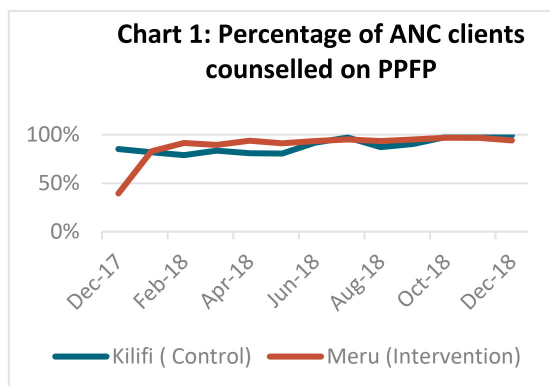
Methodology

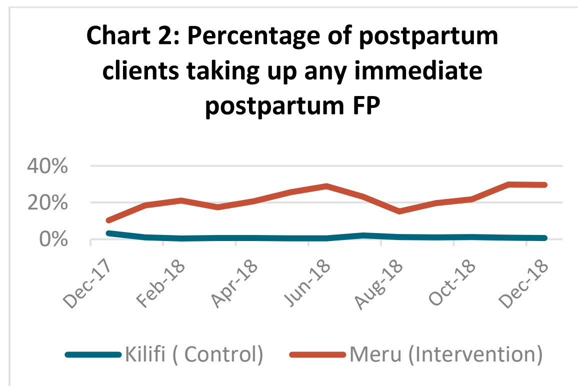
For this analysis, service statistics data were collected from 46 facilities: 5 private and 18 public facilities each in the intervention (Meru) and control (Kilifi) counties. To facilitate data collection, the project introduced a stamp tool which creates a place to record timing of FP counseling and service provision in existing Kenyan health facility registers, where data on postpartum FP is otherwise not currently collected. The project also designed a register to record data on treatment for pregnancy loss and FP following treatment in project facilities. All information in the facility registers is recorded by facility providers.

The PPFP Choices study developed a structured service statistics data abstraction tool to capture data from these facility registers. Data captured included number of antenatal care (ANC), delivery and pregnancy loss visits, as well as provision of PPFP methods after childbirth and pregnancy loss. This data was collected on a monthly basis by trained MOH staff and entered into REDCap, a secure tablet-based data capture system, by program staff after data verification. Analysis was completed using Stata and pivot tables. Data analyzed was gathered from December 2017 to December 2018.

Key Findings

PPFP Counseling and Uptake:
Preliminary results indicated that while there was an overall increase in reported PPFP counseling at ANC reported in both the intervention and control counties, a much larger improvement was seen in the intervention county. While the proportion of clients counseled in the control county increased from 85% to 99%, the intervention county increased from 39% to 94%. The largest month-to-month increase in the intervention county took place from December 2017 to January 2018, immediately following implementation of changes to the facility registers as well as the PPFP Choices provider training on postpartum FP. Notably, while both the control and intervention counties posted relatively similar percentages of ANC clients receiving FP counseling, the immediate postpartum FP method uptake between the intervention and control were dissimilar. Over the 13 month time period, uptake in the intervention county increased from 10% to 30%, while it fell from 3% to 1% in the control county. The differences are displayed in charts 1 and 2.





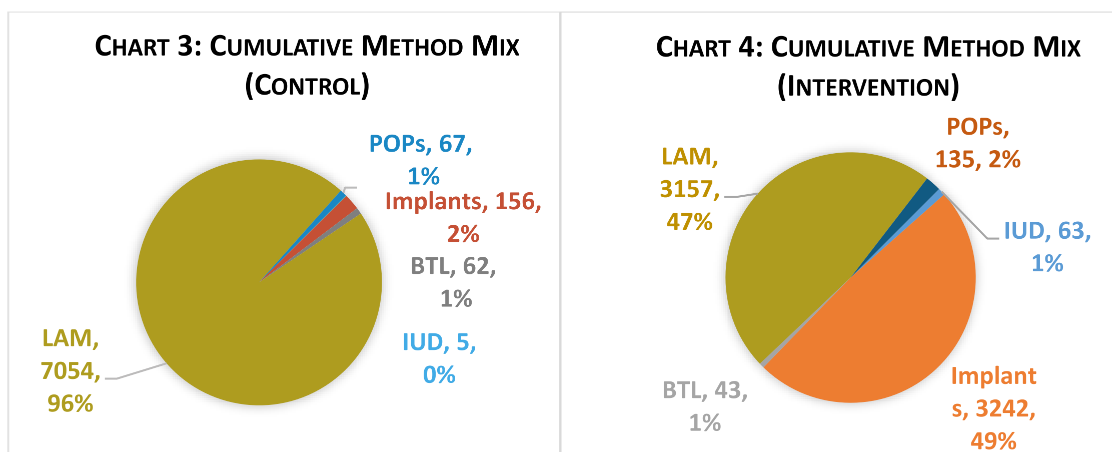
Within the analyzed time period, significant differences were seen between the intervention and control with regard to patients receiving treatment for loss of pregnancy, as is seen is the table below. In the control county, 68% of these clients were counseled on FP after receiving treatment, while 96% were counseled in the intervention county. The percentage of FP uptake post-loss of pregnancy was 43% and 67% in both counties respectively.

Table 1: Post Loss of Pregnancy FP Counseling and Uptake

County	No. of Post Loss of Pregnancy procedures completed (all methods)	Counselled on FP after treatment for loss of pregnancy	Post Loss of Pregnancy FP uptake
Kilifi (Control)	769	68% (520)	43% (328)
Meru (Intervention)	442	96% (425)	67% (295)

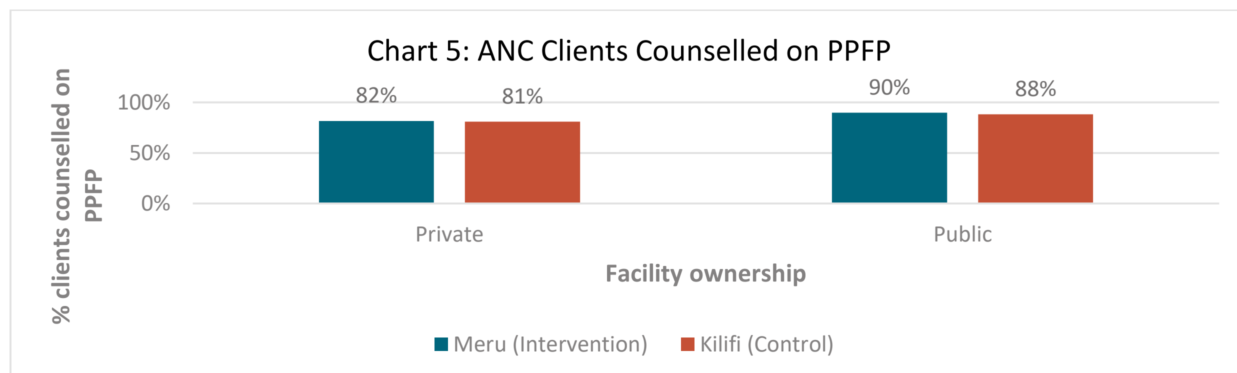
Method Mix:

Charts 3 and 4 display the cumulative immediate postpartum FP method mixes for control and intervention areas. As recorded in the facility registers, the majority (96%) of patients in the control facilities taking up a FP method in the immediate postpartum period chose the Lactation Amenorrhea Method (LAM). In the intervention area, while 47% of the clients took up LAM, 49% received Implants.



Private and Private Facilities:

Over the same period of time, 81% and 82% of ANC clients were counseled on PPFP by private facilities in control and intervention counties respectively, compared to 88% and 90% in control and intervention counties respectively in the public sector.



Knowledge contribution

Preliminary data following initial implementation of the PPFP Choices Study intervention suggests that the provision of a package of interventions targeting provider skills, facility readiness and community awareness appears to be tied to percentage increase in the provision of family planning counseling and services by facility providers in public and private facilities in Kenya.

PPFP Counseling and Uptake (Charts 1 & 2, Table 1):
From the preliminary results, while an overall increase in reported PPFP counseling at ANC was reported in both the intervention and control counties, a much larger improvement was seen in the intervention county. It is expected that the large increase noted between December 2017 and January 2018 resulted from distribution of modified registers and strengthening of data capture in the intervention county (There had already been non-standardized documentation of counseling in the control county) in addition to provider training on PPFP. Notably, in the same time period, immediate postpartum FP method uptake increased in the intervention county three fold, while FP uptake in the control county remained between 0% and 3% of deliveries. Similarly, the intervention facilities saw a higher percentage of patients being counseled on and taking up a method of FP immediately following treatment for loss of pregnancy than in the control. Findings suggest that the PPFP Choices package of interventions is associated with a higher proportion of women choosing immediate postpregnancy FP.

Method Mix (Charts 3 & 4):
The main Postpartum FP method chosen by clients in the control facilities is LAM while in the intervention facilities, the majority of patients are split almost evenly between Implants and LAM. LAM offers potential in PPFP provision, since it is user driven and not provider dependent. When used properly, it is effective and fully free for the new mother. While it is acceptable to many clients, LAM is a transitional method as it is only recommended up to 6 months postpartum. The quality of LAM counseling in both the control and intervention counties is being further explored by the PPFP Choices study.In the Intervention County, both implants and LAM were chosen at similar rates, pointing toward greater patient choice. The large percentage of patients who receive an implant suggests high provider confidence in the method, in addition to the large proportion of patients willing to receive an implant. Low uptake of other methods (e.g. PPIUCD) may be related to low post-training provider confidence in PPIUCD provisions skills. This needs to be further explored and addressed by PPFP Choices.

Public and Private Facilities (Chart 5):
While both the public and private sectors in both counties show relatively high percentages of PPFP counseling at ANC, the private sector lags behind the public sector, even though in the intervention county, all facilities received the package of interventions. The lag in private facility PPFP counseling at ANC suggests a further area for improvement to be reviewed by the PPFP Choices study.

References

1. *Transforming Health: Accelerating attainment of Universal Health Coverage.* The KENYA HEALTH SECTOR STRATEGIC AND INVESTMENT PLAN – KHSSP July 2012 – June 2017
2. World Health Organization. (2012). Family planning: a health and development issue, a key intervention for the survival of women and children. Retrieved on October 10 2013, from WHO: http://www.who.int/reproductivehealth/publications/family_planning/rhr_12_23/en/index.html
3. World Health Organization. (2005). Report of a WHO Technical Consultation on Birth Spacing http://www.who.int/maternal_child_adolescent/documents/birth_spacing.pdf
4. Moore, Z. (2013). Family Planning Needs during the Extended Postpartum Period in Kenya. USAID
5. WHO MEC, 2015
6. KDHS 2014