

Abstract Title: Intervention fit for modern contraceptive use among women who self-manage their abortion outside health system.

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Significance/Background

Sustainable Development Goals call on countries to ensure universal access to sexual and reproductive health services, including modern contraception by 2030. In Kenya, many women and girls lack access to contraception services leading to rising cases of unintended pregnancy, especially among adolescents. Many unintended pregnancies end in abortion, and the increasing availability of safe, simple, highly effective medical abortion (MA) meets women's need for safe abortion on their own terms. Provision of postabortion contraception is recommended as a high impact practice to improve access and reduce unmet need for contraception. Despite Kenya making tremendous progress on provision of postabortion contraception in the health system, postabortion contraceptive use by women who self-manage their abortions is not well understood but expected to be significantly lower.

Kenyan pharmacists are consulted daily by women seeking MA pills. Formative research conducted by Ipas shows that pharmacists' counseling is skewed towards supporting safe termination of the pregnancy and not prevention of future unintended pregnancy. The Post Medical Abortion Contraception (PMAC) project implemented in Nakuru County, Kenya applied a Human-Centered Design (HCD) approach to develop three intervention prototypes that sought to improve postabortion contraceptive uptake among women and girls accessing MA from pharmacies.

Main question/ Hypothesis

Our study sought to assess whether women and girls who purchased MA pills from a pharmacy and were exposed to one of three intervention prototypes: Nurse Nisa (a digital counseling chatbot), a discount program, and peer education had higher uptake of modern contraception 30 days after purchase, compared to those not exposed to these interventions.

Methodology

The study was conducted in Nakuru County, Kenya between July and October 2021. Twenty-three pharmacies with a monthly MA caseload of at least 10 women and willing to implement a standardized intervention were enrolled. Twenty-one pharmacies were randomly assigned to the three intervention arms (Nurse Nisa, a discount program, and peer education) while two pharmacies that had previously participated in a different contraceptive related intervention were used as control pharmacies. MA users were eligible for participation if they were aged 15-49 years and purchased MA pills at one of the selected pharmacies. A total of 400 MA users consented to participate and completed in person structured interviews by trained research assistants. 89% of participants completed a follow up survey via phone 30 days later. Quantitative data were analyzed using Stata 15. Descriptive statistics analyzed the distribution of the participant's characteristics by intervention type using an intent to treat approach. Logistic regression models assessed differences in modern contraceptive use at the 30 day follow up by intervention group adjusting for socio demographic characteristics and accounting for clustering at the pharmacy level. The study protocol was approved by Kenya's Amref Ethics and Scientific Research Committee and the Population Council

Results /Key findings

Thirty-five percent of MA users were aged 24 years or less. A third of the participants were married while two-thirds had secondary or higher levels of education. Access to smartphones was high among MA users 24 years or less (73%); and lower among women aged 25 years and above (58%). The discount program was more popular among adults 25 years and above (85%) while the post-MA peer education (34%) and the digital counseling (39%) were more popular among younger women aged 24 years and below.

Overall, the discount program had the greatest change in contraceptive use from use at the index pregnancy to 30-days post-abortion (31% to 79%), but the peer support group had the highest percentage of post-MA contraceptive use at the 30-day follow-up (80%). Post-MA contraceptive use was 73% among women and girls in the control group at the 30-day follow-up.

In adjusted analyses, women exposed to the interventions were equally likely as controls to be using post-MA contraception at the 30-day follow-up, after accounting for age, access to smartphones, and educational status.

Knowledge Contribution

Post-MA modern contraceptive use was similar across intervention and control groups at the 30-day follow-up. This study suggests solutions in the abortion self-care ecosystem that are of interest to women and girls who self-manage their abortions outside the health system, but we were underpowered to provide evidence on whether the newly developed solutions result in higher uptake of modern contraception compared to control pharmacies that formerly implemented contraceptive interventions.

The integration of a HCD approach helped to understand the dynamics between users and providers in the abortion ecosystem outside the public health structure and work with them to co-create solutions to improve access to post-MA contraception. Additional research is needed to develop strategies that significantly improve contraceptive use for women and adolescent girls who self-manage their abortions in Kenya and similar settings in sub-Saharan Africa.