#### Abstract

#### Title

Expanding contraceptive service delivery: Findings from Mozambique's first pilot assessing safety and acceptability of community-based distribution of injectable contraceptives through community health workers

### background

In Mozambique, contraceptive prevalence is low and unmet need for contraception is high. From 2003 to 2011, the contraceptive prevalence rate declined slightly from 14% to 12%, and unmet need rose sharply from 18% to 29%. An estimated 53% of women experience challenges accessing health services due to distance from the health facility. Provision of contraceptive methods at the community level is an evidence-based practice for mitigating these access barriers to services. Based on evidence from nine countries, a 2009 technical consultation hosted by the WHO concluded that community-based distribution of a range of contraceptive methods, including injectable contraceptives (depot-medroxyprogesterone acetate [DMPA]), is safe, effective, and acceptable to clients.

Despite this evidence, community-based health workers (CHWs) in Mozambique are only permitted to provide oral contraceptives and male and female condoms to clients. Given the importance of full contraceptive access and choice for ensuring reproductive rights, Pathfinder International partnered with the government of Mozambique to conduct the country's first safety and feasibility assessment of community-based distribution of injectable contraceptives in two districts in Mozambique.

### **Main question**

Funded by UNFPA and USAID, the study was conducted from February 2014 to April 2015 in Cabo Delgado province in northern Mozambique. The study aimed to explore the effectiveness of training two cadres of CHWs (traditional birth attendants [TBAs] and polyvalent elementary health workers [APEs]) to administer DMPA, and to provide evidence to policy-makers on the feasibility of expanding communitybased distribution of DMPA in areas where these two cadres of CHWs are present. Key study questions included the safety, feasibility, and acceptability of provision of DMPA at the community level, and DMPA continuation among clients of both cadres of CHWs.

# Methodology (location, study design, data source, time frame, sample size, analysis approach

The study was a prospective non-randomized community intervention trial designed to test DMPA provision by TBAs and APEs in rural communities. A total of 59 CHWs were provided with five-day classroom training, followed by a two-stage clinic-based practical training emphasizing safe injection techniques.

Through community events, women of reproductive age were informed that they could request DMPA from a community-based provider. At first contact, CHWs counseled clients on available contraceptive methods and then screened clients for DMPA eligibility. If the client chose another method, she was referred to a health center. If the client elected to use DMPA, the CHW checked for eligibility,

administered an enrollment questionnaire, provided DMPA, and informed the client about the reinjection schedule (after 13 weeks) and follow-up interviews. Upon consent, the client was enrolled in the study.

At 13 and 26 weeks after initiating DMPA, respectively, clients were visited by CHW supervisors who administered a follow-up questionnaire. During this visit, women were asked about their satisfaction with both DMPA as a method and their provider, acceptability of the method, side effects, reasons for discontinuation if relevant, willingness to pay for DMPA, and preferred point of DMPA administration. Data analysis was conducted with Stata version 13

# **Results/key findings**

The TBAs and APEs enrolled and administered the first DMPA injection to a total of 1,432 eligible women. The mean client age was 29.5 and 83% of clients were married or cohabiting. Most reported no education. The majority of women (65%) were first-time contraceptive users.

Of the 1,432 women enrolled, 1,242 completed a questionnaire at 13 weeks and 1,264 did so at 26 weeks. Overall, the project shows a high DMPA continuation rate of 81.1% and a low discontinuation rate (5.2%), with 13.7% lost to follow-up. Most women who discontinued use reported that they intended to continue with DMPA, but had not yet received their shot or had forgotten.

Most clients reported experiencing no side effects at three-month and six-month follow-up visits. At three months, less than 10% of women reported experiencing amenorrhea, spotting, heavy or irregular bleeding, and only one woman reported abscess. Most women were satisfied with their provider: 73.7% of TBA clients and 89.1% of APE clients reported satisfaction at 3 months, and satisfaction improved to 89.8% and 94.1%, respectively, at 6 months. Almost 90% of women in the study were satisfied with DMPA as a method of contraception, and the proportion satisfied increased from the three-month to six-month follow-up visit. At six months, 45% of TBA clients and 78% of APE clients reported counseling on STIs/HIV, and 21.3% and 54.8% of the TBA clients and APEs received condoms in addition to DMPA. Sixty-four percent of women reported willingness to pay for DMPA in the future

### **Knowledge contribution**

The pilot generated important information about community-based provision of DMPA among rural populations in northern Mozambique. The majority of women in the study started using contraception for the first time during the study period and very few experienced side effects or morbidities at the injection site. Satisfaction with community-based providers was high, and improved over the study period. Overall continuation rates for DMPA were high for three-month and six-month injections, with higher continuation rates among TBA clients (91%) than APE clients (68%). Clients' reported willingness to pay for DMPA (64%) highlights the latent demand for injectable contraceptives and suggests an opportunity to develop cost recovery approaches to community-based service delivery.

This study provides key insights for policy-makers and program planners. Implications for future programming to increase access to injectable contraceptives through community-based distribution include:

- DMPA can be administered safely and effectively by APEs and by TBAs. Both cadres should be considered as part of community-based family planning provision efforts in Mozambique.
- Administration of DMPA by APEs and TBAs increases access, particularly to first-time contraceptive users, and thus, could potentially hold promise for family planning programs in rural areas.
- Training for APEs and TBAs in DMPA provision should consider emphasizing: (1) following clients repeatedly to ensure adherence to DMPA without risk of pregnancy, (2) the importance of counseling on side effects, (3) the importance of STI/HIV counseling and condom provision, and (4) supportive supervision that ensures these strategies are carried out in each interaction between DMPA providers and clients.