May 2011

Preliminary Results: Provision of DMPA by ChildFund Zambia Community-Based Distribution

Background

FHI and ChildFund Zambia (CFZ) conducted a pilot study that was approved by the Zambia Ministry of Health. The study determined the safety, acceptability, cost, and impact of introducing injectable contraception through community-based distribution (CBD) agents in Zambia. Evidence from pilot studies in other sub-Saharan African countries (Kenya, Madagascar, Malawi, Nigeria, and Uganda) as well as a global evidence review conducted for a WHO global technical consultation has found that trained CBD agents can provide injectable contraception safely and effectively (see Global Evidence box for more information).

Expanding access to injectable contraception could address a number of urgent needs in Zambia. According to the latest Demographic Health Survey (DHS) in Zambia (2007), 33 percent of women currently use modern contraceptive methods, with differences between rural (28%) and urban (42%) areas. Unmet need for family planning (27%) did not change between 2001/2002 and 2007. Meanwhile, the total fertility rate is high at 6.2 births per woman nationwide (CSO and Macro International Inc, 2009).

Study Objectives and Setting

The main objectives were to assess the feasibility and acceptability of CBD provision of depot-medroxyprogesterone acetate (DMPA) injections, and CBD agents' ability to safely and effectively provide DMPA injections to clients. This study was also designed to provide information on the cost of adding DMPA to a CBD program; the measurable effect on the contraceptive prevalence rate, couple-years of protection, and method continuation; and the potential benefit this service might have on reducing clinic-based providers' workload.

The study was conducted in Mumbwa and Luangwa districts, two CFZ catchment areas. These districts were selected because they have low contraceptive prevalence rates (CPR), limited access to health services, and an existing FP program in which pills and condoms are provided.

Study Design and Methods

Forty CBDs (20 in Mumbwa and 20 in Luangwa districts) were trained by Ministry of Health master trainers to administer DMPA. DMPA provision commenced in February 2010 and continued through February 2011. The study employed cross-sectional and longitudinal designs. Longitudinal data were obtained from: (1) more than 3,600 CBD clients who had DMPA injections by CBD agents during the 12-month data collection period; and (2) CFZ and District Health Office (DHO) supervisors who were interviewed at the beginning and at the end of the 12 months.

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The study design incorporated input from local stakeholders and partners including CFZ. In Lusaka at the July 1, 2009 stakeholders' meeting, stakeholders provided feedback to FHI and CFZ staff who presented the proposed study. Thus, the design reflects the consensus of this group, including the need to assess the safety of CBD-administered injections, to confirm the evidence of safety already documented in other CBD of DMPA studies.

Preliminary Findings

The overall study includes measurements of the impact on CPR and the incremental costs associated with adding DMPA to services provided by an existing CBD program. This summary addresses preliminary findings on feasibility, acceptability, and safety of CBD provision of DMPA. The findings are based on structured interviews and observations. Structured observations were performed by clinic nurses during CBD agents' two-week practicum to allow for independent assessment of safety. Structured interviews were also conducted with DHOs and ChildFund district supervisors one year after initiation, while interviews with CBD agents and 253 DMPA clients were conducted nine months after the start of the study. The 253 clients were randomly selected from women who accepted DMPA between February and April 2010. This subset was selected to allow follow-up of up to three injections.

Global Evidence

To help inform policies and programs regarding expanding access to injectable contraceptives, WHO, with USAID and FHI, convened a global technical consultation in 2009. The 30 technical and program experts from eight countries and 18 organizations based the conclusion on a review of the global scientific evidence and programmatic experience.[1] The evidence review identified 16 projects in nine countries where community health workers (CHWs) provided injectable contraception (Afghanistan, Bangladesh, Bolivia, Ethiopia, Guatemala, Haiti, Madagascar, Peru, and Uganda).

The consultation concluded that given appropriate and competency-based training, CHWs can screen clients effectively, provide DMPA injections safely, and counsel on side effects appropriately, demonstrating competence equivalent to facility-based providers of progestin-only injectables.[2] Endorsing organizations of the WHO consultation findings include: International Confederation of Midwives, International Council of Nurses, International Federation of Gynecology & Obstetrics, International Planned Parenthood Federation, Marie Stopes International, UNFPA, and the World Bank.

Currently, 35 million women worldwide use injectable contraception to prevent pregnancy, twice as many as a decade ago. In sub-Saharan Africa, more than one-third of users of modern contraception rely on injectables, more than any other modern contraceptive method. Even so, most countries report levels of unmet need for injectables between 25 to 50 percent of women who intend to use contraception in the future, according to Demographic and Health Surveys from 32 countries. Injectables are among the most effective contraceptive methods, after intrauterine devices, implants, and sterilization.

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[1] Malarcher, S., Meirik, O., Lebetkin, E., Shah, I., Spieler, J., & Stanback, J. (2011) Provision of DMPA by community health workers: What the evidence shows. Contraception.83(6):495-503.

[2] Stanback, J., Spieler, J., Shah, I., & Finger, W.R. (2010). Community-based health workers can safely and effectively administer injectable contraceptives: Conclusions from a technical consultation. Contraception, 81, 181-184.

Feasibility

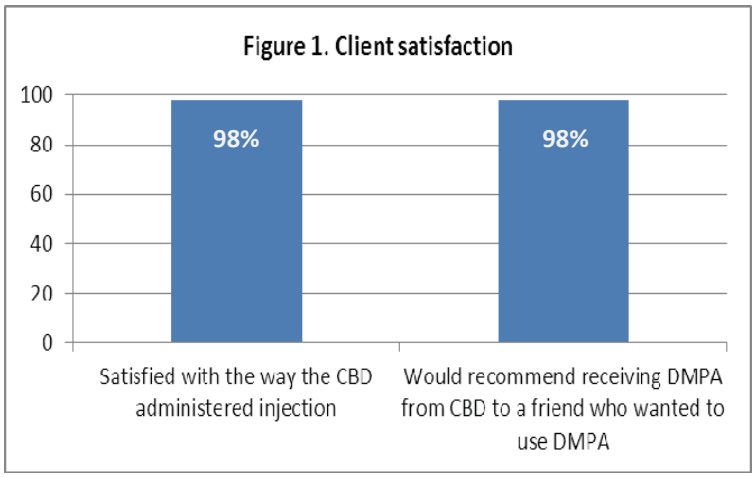
DHOs and CFZ supervisors stated that benefits included decreased health center workload, which brought FP services closer to the community, and all endorsed the following benefits of having CBD agents provide DMPA:

- Increased use of FP in remote areas
- Clients have an expanded choice of methods
- Fewer clients lost to follow-up
- CBD agents learned new skills

Some challenges reported by the supervisors included difficulty experienced by CBD agents in traveling to clients' homes mainly due to flooded roads (53%). While health centers experienced a decrease in workload, 90% of CBD agents reported that their workload increased. However, the agents felt the increase was acceptable and appreciated helping their communities. All CBD agents were satisfied with the experiences of providing DMPA to their clients and wanted to continue providing the service. Eighteen percent of CBD agents reported difficulties with lack of supplies.

Acceptability

Client satisfaction with DMPA and CBD agent services appears to be high. Ninety-four percent of eligible clients received a second injection. Ninety-eight percent of clients were satisfied with the DMPA services received and would recommend to a friend receiving DMPA from their own CBD agent (see Figure 1). Most of the reasons for not recommending are not associated with quality of CBD services. Fifteen of the 253 clients (5.9%) did not receive a reinjection; most cited side effects or wanting to have children as reasons. The CBD agents had good rapport with their clients. Clients reported that the agents talked to them in a friendly manner (96%) and they trusted their CBD agent to protect private information (97%).



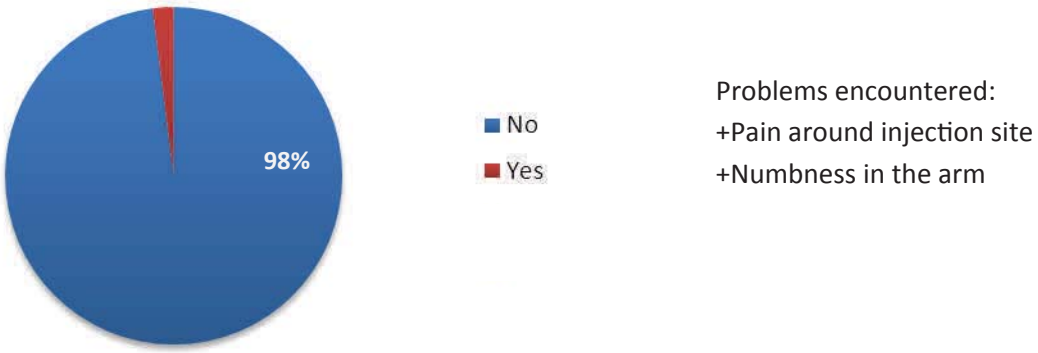
Most of the reports on community perceptions of the CBD agent provision of DMPA program were positive. For instance, CBD agents heard comments that women appreciated that DMPA services were easier to access within the community. Negative comments reflected myths about DMPA and FP in general and some concern about CBD agents' ability to safely provide injections.

Safety

The 40 CBD agents had their injection skills assessed during a two-week practicum prior to being able to give DMPA to their FP clients. Clinic-based health care providers used a Structured Observation Guide which included 21 items on which to assess safety of injection practice and procedure. For both measures, CBD agents' scores were high during the initial assessment and improved in the final assessment.

Only six clients (2.4% of the 253 clients) reported experiencing a problem at the injection site (see Figure 2). Three reported minor issues related to pain at injection site and numbness in the arm. The other three clients did not describe the problem they encountered. None reported infections.

Figure 2. Client reported problems at injection site



The CBD agents' ability to counsel well is a measure of safety. Ninety-eight percent of CBD agents and 96% of DMPA clients reported that the agents counseled clients on side effects. Client knowledge is a reflection of the CBD agent's training and ability to communicate important health messages. Not all of the clients knew that DMPA does not provide protection from sexually transmitted infections. Only 10% of clients knew this, yet 94% knew that DMPA provide protection against pregnancy for three months. Nearly 80% knew that they should go to a clinic if they experienced very heavy bleeding, although only 39% said they should go to the clinic for severe headaches.

Conclusions

Preliminary results show that the provision of DMPA by CFZ's CBD agents is safe, acceptable, and feasible. While the preliminary findings are mostly positive, they also point to some programmatic aspects that need to be strengthened. Dual protection messages in counseling could be strengthened. Also, the percentage of CBD agents reporting difficulty maintaining their supplies points to the need to improve logistics in order to accommodate the demand for FP commodities at the community level. Community-level sensitization and education about FP methods and DMPA in particular could address the myths reflected in community members' comments. Such sensitization may also serve to increase uptake of FP methods.

Reference

Central Statistical Office (CSO), Ministry of Health (MOH), Tropical Diseases Research Centre (TDRC), University of Zambia, and Macro International Inc. 2009. *Zambia Demographic and Health Survey 2007.* Calverton, Maryland, USA: CSO and Macro International Inc.