RESEARCH BRIEF
MALAWI

Evaluation of Community-Based Distribution of DMPA by Health Surveillance Assistants in Malawi

SUMMARY: In early 2010, FHI conducted a comprehensive evaluation to assess a pilot program in Malawi on provision of DMPA by Health Surveillance Assistants (HSAs). Results showed that HSAs are attracting new clients to family planning. Of the 16 safety guidelines assessed for providing injections, they performed 13 steps on average. Some inconsistencies were noted in the counseling that HSAs said they provide compared to client reports on their DMPA knowledge. The majority of HSAs want to continue providing DMPA but acknowledge that their workload has increased. Overall, most clients are satisfied with HSA provision of DMPA, and communities find the program acceptable.

KEY POINTS

An evaluation of HSA provision of DMPA in rural Malawi was found to be acceptable and safe, and expanded access to family planning.

Most clients interviewed were satisfied with HSA provision of DMPA and would recommend it to a friend. About half of the clients said their first injection was also the first time they had ever used family planning. The main reason clients already using DMPA switched to an HSA was for convenience.

Most HSAs followed safety guidelines for injection provision. They also were respectful of clients and their privacy. Results suggest some gaps in specific counseling on DMPA and demonstrate the need to reinforce messages on side effects and length of protection from pregnancy.

fhi
THE SCIENCE OF IMPROVING LIVES

Background

Malawi is one of the fastest growing and poorest countries in the African region (Haub and Kent 2008), and the Malawian government has identified increasing contraceptive prevalence as a priority in the country's Growth and Development Strategy. In 2004, modern contraceptive prevalence among married women was 35% in urban areas, 27% in rural areas, and 28% in total (Malawi NSO and ORC Macro 2005). The Malawi Growth and Development Strategy goal is to increase contraceptive prevalence to over 40% by 2011.

Unmet need for contraception remains particularly high—at almost 30% in rural areas, where over 80% of Malawians live (Malawi NSO and ORC Macro 2005). To meet the needs of rural women, community-based distribution (CBD) of family planning has been available in Malawi for some time. To date, the CBD program has focused on provision of oral contraceptives and condoms.

Evidence from a number of countries and settings shows that community-based provision of depot-medroxyprogesterone acetate (DMPA) can lead to increased uptake of family planning (WHO 2009). This strategy is likely to succeed in Malawi, where unmet need is high in rural areas and where injectables are the most popular type of contraceptive method identified for current and future use.

Health Surveillance Assistants (HSAs), the lowest-level cadre in Malawi's public health system and the group that provides the majority of primary health care services, have provided community-level family planning services in a few districts that opted to train them. In 2007, the Health Policy Initiative conducted a feasibility study to assess the need for provision of injectable contraceptives at the community level and to gauge the acceptability of using HSAs to provide these services (Richardson et al. 2009). The study documented strong desire for injectable contraceptive services at the community level and reported that rural women prefer injectables because they are long-lasting, require fewer trips to the clinic, are convenient and private, and have few side effects (Richardson et al. 2009). A majority of rural women in the study were in favor of provision of injectables by HSAs. Providers favored training HSAs for the role because they already provide immunization injections.

As a result, a pilot program was designed to improve access to DMPA services in rural communities. In nine pilot districts, HSAs in hard-to-reach areas or areas where family planning services were not available were selected to participate in a six-day DMPA training program. Through the pilot program, HSAs have provided DMPA services in the community and in health facilities on specific days. Community-based distribution agents (CBDAs) have continued community-based provision of condoms and oral contraceptives.

In early 2009, the U.S. Agency for International Development (USAID) office in Malawi asked FHI to develop and implement an independent evaluation of the pilot program after one year of service provision. The evaluation was designed to address salient issues at the client and provider levels as identified by the Ministry of Health (MOH), USAID, and program stakeholders.

Study objectives

The goals of the evaluation were to provide information to help the Malawi MOH decide whether the pilot program should be brought to scale and to provide guidance for scale-up, if warranted. Objectives for the evaluation were developed in consultation with the Reproductive Health Unit of the MOH, USAID, and the two organizations that implemented the pilot, Adventist Health Services and Management Sciences for Health (MSH).

Table 1. Summary of Targeted and Actual Sample Sizes

Method	Targeted Sample	Number Targeted	Actual Numbers
Survey	Clients-register Clients-exit interview HSAs HSA supervisors CBDAs	96-128 96-160 32 20 32	140 229 32 20 34
Observations	Clients	96-160	236
Key informants interviews	Various stakeholders	53	42
Program records	HSA registers	32	32
Service statistics	District LMIS data	9 districts	9 districts

The specific objectives of the evaluation were:

- To assess the HSA DMPA program training, supervision, and supply systems and the coordination of the program with other community- and facility-based family planning services
- To assess the service delivery environment, including accessibility and the quality of DMPA services provided by HSAs
- To determine the number of clients obtaining DMPA from HSAs and whether they are new users, restarters, continuing users, or switchers

Study Design and Methods

This study was a nonexperimental, post-test evaluation. Cross-sectional measurements of evaluation outcomes were obtained from observations of client-provider interactions and from structured interviews with HSAs, CBDAs, HSA supervisors, and HSA DMPA clients. Clients were recruited in two ways: from the HSA registers and after HSA direct observation visits (exit interviews). Key informant interviews were conducted at the district, zonal, and central levels. In addition, program records and service statistics were examined to assess the program retrospectively. This evaluation was approved by FHI's Protection of Human Subjects Committee and the Malawi National Health Sciences Research Committee.

Study setting

The evaluation focused primarily on four of the nine districts where HSAs were providing family planning: Zomba, Karonga, Chikwawa, and Kasungu Districts.

Data collection

Four study teams were responsible for structured interviews, observations, and data collection from program records at the sub-district level in the four focus districts. The local principal investigator was responsible for key informant interviews at the district, zonal, and central levels. Data collection was conducted from February 22 to March 24 in 2010.

Table 1 summarizes the sample size targeted for the evaluation and the actual numbers obtained. The table shows that the evaluation met or exceeded its goals for the surveys, program records, and observations. All of the planned key informant interviews could not be conducted due to staff unavailability.

Results

The results are divided into five sections: the scope of the program; the quality of DMPA services provided by HSAs; community perceptions and client satisfaction; training, supplies, and supervision; and the impact of the program on family planning service providers. Only the results from the structured interviews, direct observations, and HSA program records are presented here.

Scope of program

Program records from the sample of 32 HSAs reveal the scope of the DMPA program. Fourteen months of data (from December 2008 through January 2010) were collected, although each HSA contributed a varying number of months. These HSAs served a total of 5,998 new clients seeking family planning. Of these, 2,074 were new DMPA (and new family planning) users, 2,881 were continuing users, and 1,043 were either switching to DMPA or restarting it. Each HSA had an average per month of 21 new family planning clients, 8 of whom were new to DMPA (and family planning), 10 of whom were continuing users, and the rest of whom were switching or restarting. The extent to which this program is attracting new family planning users can also be seen in the client surveys, where 49% of clients said that their first DMPA injection from the HSA was also the first time they had ever used family planning. For those clients who had previously had a DMPA injection from another source, the main reason for switching to an HSA (over 70%) was because traveling to the HSA was more convenient.

Quality of DMPA services

The quality of DMPA services provided by the HSAs was measured through direct observations and through interviews with clients and HSAs. Quality measures focused on the provision of the injection itself and on the counseling provided to the clients.

Observations of the injection show that HSAs are, for the most part, following the correct safety procedures. Out of the 16 steps observed, the HSAs on average performed 13 with a range of 0 to 16. Over 90% of the HSAs performed half of the steps, such as inserting the needle properly, not massaging the injection site, and discarding the used syringe and needle into the sharps container. There were four steps that fewer than 70% were observed to perform: "allows water on arm to dry before giving the injection" (57%), "checks vial for content, dose, and expiration date" (67%), "aspirates to ensure needle is not in a vein" (52%), and "washes hands with soap and water" (47%).

On average, HSAs were observed to follow four out of six postinjection procedures with a range of 0 to 6. Some procedures were followed by nearly all HSAs and over 90% instructed the client to return in three months, recorded information on the health passport, and recorded information on the register. Only 37%, however, instructed the client not to massage the injection, and just over half encouraged the client to return if there were any problems (56%) or recorded information on the tally sheet (60%).

HSAs confirmed they had some difficulties following safety or infection prevention guidelines (47%). The main challenges they reported were hand washing before and after each injection (19%) and disposing of needles and syringes in sharps containers (9%). These were similar to the issues that supervisors noted as areas of concern. About one-third of supervisors felt that their HSAs do not follow safety and infection prevention guidelines all of the time. The areas of difficulty that they identified most often included bringing the sharps container to the facility when it is three-quarters full (61%) and hand washing before and after injection (44%).

Overall, the HSAs were observed to be establishing a courteous environment for their clients. Nearly all of the HSAs who were observed established and maintained rapport with the client (99%), showed respect and did not judge the client (99%), and ensured privacy (90%). The clients confirmed these findings, and 92% said that they thought their HSA was friendly and they trusted the HSA to protect their privacy (98%). In terms of general counseling, direct observations showed that 46% asked their clients about their reproductive goals and 79% counseled on all methods. Only 42% were observed to use the checklist to rule out pregnancy, and 61% used the checklist to screen for eligibility for DMPA. Use of the checklist is an area that 16% of supervisors felt that only some of their HSAs could competently use.

The results from the HSA interviews and client interviews show some inconsistencies in what HSAs report that they tell clients about side effects compared to what clients say they know about side effects. Table 2 shows that the percentage of HSAs who say they counsel about specific side effects is far higher than the percentage of clients who know about that side effect. In addition, 19% of the clients reported that they were not told about any side effects; this is in contrast to direct observations, which showed that 94% of new and restarting clients were counseled on side effects.

It is of some concern that not all of the clients knew that DMPA provides protection from pregnancy for three months or about 12 weeks. About 80% of clients from the register and 70% from exit interviews knew this. Over 80% knew that they should go to a clinic if they experienced very heavy bleeding, although only 9% said they should go to the clinic for severe headaches. While HSAs were not specifically asked if they counseled clients on these points, all HSAs did report that DMPA protects against pregnancy for three months. In terms of returning to the clinic for problems, 97% said that clients should return for constant, heavy bleeding and 53% said they should return for severe headaches.

Table 2. HSA-Reported Counseling Compared to Client Knowledge about Common DMPA Side Effects

	Percentage of HSAs Counseling on Side Effect (N=32)	Percentage of Clients Aware of Side Effect* (N=140)
Heavy bleeding	91	65
Irregular bleeding	78	27
Amenorrhea	71	33
Spotting	66	14
Headaches	28	7

** Data is from clients identified from registers.*

Community perceptions and client satisfaction

Most of the reports on community perceptions of the HSA DMPA program were positive. For instance, all of the CBDAs had heard positive things in the community about HSA provision of DMPA. The remark they heard most often was that women do not have to travel as far to access the method. Similarly, over 70% of HSAs felt it was easy to gain community confidence, although 28% felt it was somewhat difficult.

Over three-fourths of all clients interviewed felt that people in the community approve of the program; very few felt that people disapprove, and the rest had mixed opinions. By far the most positive thing that most people heard about the program was that women can get DMPA services more easily (about 70%). Nearly one-fourth reported that they heard that people like the quality of DMPA services provided by the HSAs.

While most feedback was good, there were still some negative impressions of the program. About one-fourth of CBDAs said they heard some complaints, as did some clients (14% of clients from the registers and 8% of clients from the exit interviews). The complaint most often heard, according to CBDAs, was about the side effects of DMPA.

Client satisfaction with DMPA and HSA services appears to be high. About 90% of clients from the registers and 95% from exit interviews reported that they were very satisfied with the counseling and information they received from the HSA during their first visit. Close to 100% reported that they would recommend to a friend that she get a DMPA injection from the HSA who gave them their injection. There were a few who reported dissatisfaction; about 4% of register clients said they were not at all satisfied with their visit, and a few said they would not recommend that a friend get the injection from their HSA.

HSA training, supervision, and supplies

While most HSAs and supervisors felt prepared to begin offering DMPA at the beginning of the program, over half of the HSAs felt their DMPA training was too short. However, when supervisors were asked about their perceptions of HSA skills and knowledge, most felt that all of the HSAs they supervise had all or most of the necessary skills needed to provide DMPA. The areas where supervisors felt that at least some of the HSAs were not competent included using the pregnancy checklist to rule out pregnancy and counseling on DMPA side effects.

On average, supervisors supervise 3.7 HSAs who provide DMPA. Nearly half meet with the HSAs once every 1 to 2 months, one supervisor meets every week, and the rest meet once every 3 to 4 months or less frequently. Two reported that they never meet with the HSAs they supervise. Nearly three-fourths felt they should be directly observing the HSAs more often and cite distance, time constraints, and lack of transportation as obstacles. While supervisors might not feel that they are doing enough, nearly two-thirds of HSAs said they have received all of the supervisory support they need; the rest said they have received some of the support they need.

The supervisors indicated that there are some supply issues with maintaining stocks of DMPA and other needed materials. Thirty-five percent of the supervisors reported that keeping the HSAs supplied with DMPA is

"somewhat of a problem," and one supervisor said it is a "big problem." Similarly, one-fourth of HSAs reported that they sometimes turn clients away because they do not have DMPA. Over one-third of HSAs said they do not have all of the informational and educational materials that they need. Missing materials include the training manual, the checklist for method suitability, the checklist to rule out pregnancy, posters or flipcharts, the calendar tool, and informational pamphlets for clients.

Impact of the program on service providers

The HSA DMPA program has made an impact on the other two main providers of family planning services in the pilot program districts: the CBDAs and the health facilities. The program has also made an impact on the HSAs' workload.

Since HSAs started providing DMPA, the majority of CBDAs (77%) stated that they now spend less time on their CBDA responsibilities. The main reasons why CBDAs felt their workload decreased were because women are switching to DMPA now that it is available in the community (67%) and the workload is now shared between CBDAs and HSAs (22%). In addition, most supervisors reported that the number of family planning clients at their health center has decreased since HSAs starting providing DMPA.

In contrast, half of the HSAs said that they spend more time working since they started providing DMPA. The rest said that they spend the same amount of time. About 40% felt that providing DMPA in addition to their other HSA duties has caused some problems with their workload; the main problem cited was the need to travel to far-away clients.

Linkages among the programs include referrals between CBDAs, HSAs, and health facilities. On average, each CBDA referred 16 clients to HSAs for DMPA in the past six months and referred 12 clients to a clinic. Nearly two-thirds of HSAs reported that they either very often or sometimes have clients who want a method other than DMPA, usually oral contraceptives or a long-acting or permanent method. Most (85%) say they have either very often or sometimes referred a client to another provider for contraceptives; half have referred to a CBDA.

There is support among the HSAs, CBDAs, and supervisors for the HSA DMPA program, although some potential conflict exists between the HSAs and CBDAs. Despite the increased workload, most HSAs say they would like to continue providing DMPA, and three-fourths also want to provide oral contraceptives. However, most (81%) do not believe that CBDAs should also provide DMPA. While all but one of the CBDAs think HSAs should continue to provide DMPA, the majority of them also think they should be trained to provide DMPA. In contrast, only a little over half think HSAs should also provide oral contraceptives in their communities.

Summary and Recommendations

The three main findings of this evaluation are that HSA provision of DMPA is acceptable, is safe, and expands access to family planning. While the results are mostly positive, they also point to some programmatic aspects that need to be strengthened.

The survey results show that communities and clients find the program acceptable and that clients are satisfied with it. Most supervisors, CBDAs, and HSAs support continued HSA provision of DMPA.

While the support for the program is clear, the impact on the HSA workload is an issue that needs to be addressed. In addition, the respective roles of CBDAs and HSAs in future provision of DMPA and oral contraceptives is a potential area of conflict which should be dealt with.

Direct observations show that most HSAs are following most of the procedures for safe provision of the injection. But, while the average number of procedures followed is very good, the range of the number of steps followed shows that not all HSAs are following the safety procedures. This suggests the need for additional supervision visits to identify which HSAs need the most guidance. Finding ways to enable supervisors to make more supervisory visits is another issue for consideration.

While the results show that the HSAs are creating a good counseling environment, the results also suggest that the specific content of the counseling sessions should be strengthened. It is possible that HSAs provided counseling but clients did not remember what they were told. This possibility highlights the need for reinforcing messages at different visits. All clients should be counseled until they understand that DMPA protects against pregnancy for three months. The direct observations only recorded counseling on side effects for new or restarting clients—supervisors should verify that HSAs are also providing or reinforcing messages to continuing clients. Improving the stock of educational materials that many HSAs report missing might also help convey information to clients. Supervisors might also want to reinforce use of the pregnancy checklist.

Finally, program records and client surveys suggest that HSA provision of DMPA is increasing access to contraceptives in rural Malawi. Not only is the program making it easier for women to get their reinjections, it has also attracted new users to family planning. ■

References

Haub C, Kent MM. 2008. 2008 world population data sheet. Washington (DC): Population Reference Bureau; 2008.

Malawi National Statistical Office (NSO), ORC Macro. Malawi demographic and health survey 2004. Calverton (MD): NSO and ORC Macro; 2005.

Richardson F, Chirwa M, Fahnestock M, Bishop M, Emmart P, McHenry B. Community-based distribution of injectable contraceptives in Malawi. Washington (DC): Futures Group International; 2009.

World Health Organization (WHO), U.S. Agency for International Development, FHI. Community-based health workers can safely and effectively administer injectable contraceptives: conclusions from a technical consultation. Research Triangle Park (NC): FHI; 2009.

This work is made possible by the generous support of the American people through the U.S. Agency for International Development (USAID). The contents are the responsibility of FHI and do not necessarily reflect the views of USAID or the United States Government. Financial assistance was provided by USAID under the terms of Cooperative Agreement GPO-A-00-08-00001-00, the Program Research for Strengthening Services (PROGRESS) Program.

fhi
THE SCIENCE OF IMPROVING LIVES

P.O. BOX 13950
RESEARCH TRIANGLE PARK, NC 27709 USA
tel 1.919.544.7040 *toll-free* 800.919.7038
fax 1.919.544.7261 *web* www.fhi.org

USAID FROM THE AMERICAN PEOPLE