



Senegal: Community Health Workers Successfully Provide Intramuscular Injectable Contraception

Key Findings

- **Government support.** The active involvement of the Ministry of Health and Social Action (MOH) facilitated the pilot introduction in multiple ways, including by changing policy to permit community health workers to provide injectables nationwide.
- **Pilot introduction.** A total of 45 community health workers (CHWs) working in 36 health huts in three different regions were trained to offer the injectable contraceptive depot-medroxyprogesterone acetate (DMPA, called Depo-Provera or “Depo”). The pilot period covered August 2012 to March 2013.
- **Community-level distribution is feasible.** Most CHWs were able to correctly and confidently provide Depo injections by the end of the study period, according to interviews with the CHWs. They served 1,078 family planning clients; 670 of the clients (62%) chose Depo.
- **Clients and community appreciate expanded access.** Overwhelmingly, clients were satisfied with services (99%) and said they intended to get their next injection at the health hut (94%). Clients, spouses, community leaders, facility-based providers, and district-level managers all supported the initiative for its perceived health and economic benefits.
- **Agreement by stakeholders to expand/scale-up.** Results were shared and discussed in May 2013 with key stakeholders, who endorsed scaling up this service and made several recommendations to facilitate the process.

Background

Depot-medroxyprogesterone acetate (DMPA), marketed as Depo-Provera and known simply as “Depo,” is the most popular family planning (FP) method in sub-Saharan Africa.* In Senegal, where the contraceptive prevalence rate among married women is low at 12%, Depo represents 40% of the method mix, according to the 2011 Senegal Demographic and Health Survey. However, large disparities exist in access to FP for those living in urban and rural areas. While Senegal has had a network of community health workers (CHWs) for many years, until recently they have only been authorized to offer barrier methods and to resupply oral contraceptives (OCs).

Given the large (30%) unmet need for FP in the country and ambitious national health and development goals, the Ministry of Health and Social Action (MOH) decided to

expand the range of methods available at the community level beginning in 2009 by training some low-level, volunteer CHWs in two cadres used in Senegal — matrones and community health agents (ASCs) — to offer OCs to women.

After a successful evaluation which, among other results, demonstrated that 82% of clients seen by these CHWs were actually being referred for injectable contraceptives, the MOH decided to expand the available method mix even further by training a sample of those same CHWs to offer Depo. The MOH designed an introduction study and changed national policy to permit distribution of OCs and injectables by these CHWs, pending successful results.

* While this pilot used the intramuscular (IM) injectable Depo-Provera, the MOH initiated a separate study around the same time to introduce Sayana® Press, a subcutaneous formulation of DMPA in the Uniject injection system. Consequently, stakeholders in Senegal and French materials refer to DMPA or Depo IM to distinguish it from the subcutaneous formulation.

Study Objectives and Methods

The overall purpose of this study was to assess whether trained matrones and ASCs are able to safely and correctly provide Depo in the context of the introduction project and to evaluate the acceptability of this new service by providers and communities. The study had six objectives:

1. To assess the skills of matrones and ASCs trained to offer Depo in health huts.
2. To assess the experiences of matrones and ASCs with Depo service provision, training, and supervision.
3. To document re-injection rates after three months and reasons why clients accept or refuse to receive re-injection from matrones and ASCs.
4. To measure Depo client loads and to report on clients' prior contraceptive use, including numbers of Depo users who are new to family planning.
5. To assess the acceptability of this strategy by service providers in health facilities, district health management teams, and direct and indirect beneficiaries (spouses and community leaders).
6. To assess logistics management for the implementation of the community-based distribution of Depo.

This was an MOH-led intervention, supported by several partners, including FHI 360/PROGRESS, the USAID-funded Community Health Project led by ChildFund, CEFORP, and other technical

assistance partners. This full group formed a technical committee that provided guidance and oversight to the introduction study. The regions of Fatick, Kaolack, and Thies and a district in each region (Dioffior, Niore, and Joal respectively) were selected purposively for this project by the technical committee based on logistical considerations and other points including: the interest and support of local health management personnel, the availability of functioning health huts with a matrone/ASC previously trained to initiate OCs, and the presence of supervising staff at the health posts who were trained to offer Depo. All health huts meeting those conditions were ultimately selected to participate in the intervention, for a total of 36.

Forty-five matrones/ASCs working in the selected health huts were trained, who fulfilled the same criteria as were previously established for the OCs pilot; the criteria included being at least 25 years old, being a resident of the community, and having a primary education or being literate in French. Training materials were developed and tested by the technical committee, based upon materials provided by FHI 360 and used in other countries. Central-level MOH staff and partner representatives first conducted a training-of-trainers with facility-based staff who would be responsible for training the matrones/ASCs. Matrones/ASCs then underwent seven days of theoretical and practical training which included 10 supervised injections with actual clients at health centers and health posts. To be officially certified, a supervisor had to observe three additional injections by the matrone/ASC at her respective health hut. Matrones/ASCs were supervised at their health hut once or twice a month by facility-based providers and quarterly by district health management teams and members of the technical committee.

A descriptive study was conducted using both quantitative and qualitative methods. There were three rounds of data collection, at approximately three, five, and seven months after services were initiated. All but one of the 45 matrones/ASCs were interviewed twice using two different structured questionnaires; the first round of interviews focused on assessing counseling

Aissatou Coly/MOH, 2012



A matrone practicing injection technique on fruit during training in the district of Joal

Table 1: Study Data Sources and Samples

Target group	Type of data collection	Number of persons interviewed per data collection round			TOTAL
		1st NOV 2012	2nd JAN 2013	3rd FEB/MAR 2013	
Matrones/ASCs	Quantitative	45	22	22	45
Clients	Quantitative	77	110	121	308
Providers (trainers and supervisors)	Qualitative	13	—	17	30
District health management teams	Qualitative	9	—	9	18
Communities	Qualitative			8 FGD	80
TOTAL					481

and injection knowledge and skills while the second round (at either five or seven months) focused on their experiences with re-injection as well as aspects of supervision and logistics. In addition, a total of 308 clients were interviewed using one structured questionnaire. Clients who had received at least one Depo injection from the matrone/ASC at the health hut were randomly selected from the health hut registers at each of the three time points. See Table 1 for the study samples.

The qualitative component included semi-structured interviews with a sample of 13 randomly-selected facility-based providers who participated in training the matrones/ASCs at the first data collection round, and with 17 providers involved in the supervision of matrones/ASCs at the third data collection round (seven months). In addition, three representatives of each district health management team, including the district chief medical officer, reproductive health coordinator, and primary health care supervisor, were also interviewed individually both at the first and third data collection rounds using an in-depth interview guide. A total of eight focus group discussions across the three districts were held with clients' spouses and with community leaders as part of the third data collection round. Finally, routine service statistics extracted from health hut registers were collected at the end of the study period using a specific form.

Results

Table 2 shows the demographic profile of the matrones/ASCs and the clients interviewed in this study. Results from the data collection are summarized by study objective.

Objectives 1, 2, and 6: By the second and third rounds of data collection, matrones/ASCs reported feeling either “very comfortable” or “comfortable” with key components of Depo service provision, including use of the screening checklist (98%), managing medical waste (95%), completing forms/registers (100%), injection technique (100%), counseling on side effects (98%), and calculating re-injection dates (98%); the matrones/ASCs experienced the greatest gains in

confidence in the last three skills. Client-reported experiences largely confirmed that matrones/ASCs were providing accurate information in an environment of respect and free choice. For example, 98% of interviewed clients reported that they were free to choose the method they desired, and 84% reported being counseled on side effects. While matrones/ASCs expressed being comfortable providing Depo, some responses indicated a need for further improvement. Specifically, 78% responded that they could not provide Depo to a woman who is not currently having her period. While the matrones/ASCs were trained on use of the pregnancy checklist to rule out pregnancy, only 10 remembered the conditions under which pregnancy can reasonably be ruled out in a non-menstruating woman. In addition, while 87% of the matrones/ASCs correctly agreed that a woman who had her last injection 14 weeks ago was still within the re-injection window, only 49% correctly believed that a woman whose last injection was 16 weeks ago is still within the grace period.

Most matrones/ASCs (84%) reported that finding Depo clients was easy, and only eight of the 45 matrones/ASC (18%) ever experienced a stock-out of Depo. Most of the matrones/ASCs received supervision visits, although 18% never received a visit. Notably, most supervision visits were made by the facility-based staff, as opposed to the bilateral project or study staff, including weekly visits as reported

Table 2: Matrone/ASC and Client Demographics

Client (n=308)	Demographics
Average age	31
Average number of children	4.5
Married	96%
Wants more children in the future	58%
New FP user	64%
Matrones/ASCs (n=45)	
Average age	40
Average years of experience in health hut	12
Completed primary education	47%
Completed secondary education	40%

Figure 1: Proportion of Depo Users among FP Clients in Health Huts

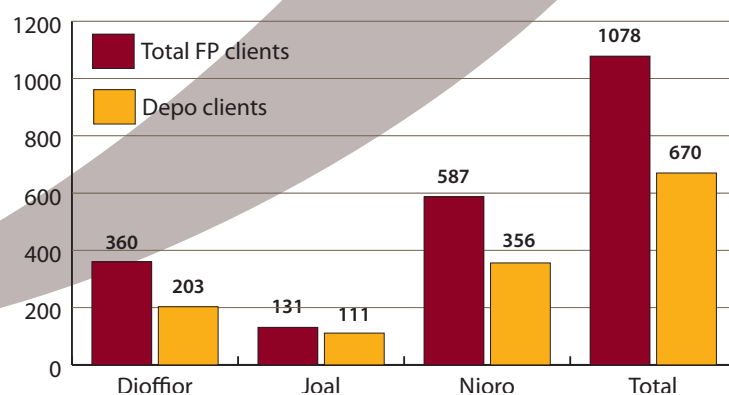
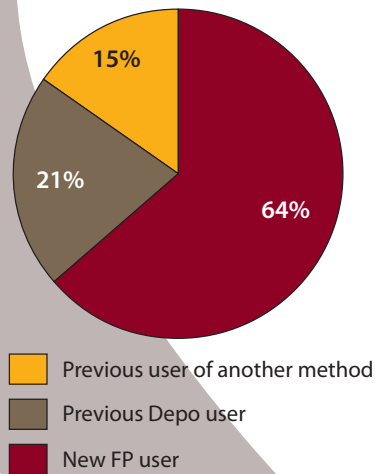


Figure 2: Distribution of Depo Clients according to FP History (n=308)



by 61% of matrones/ASCs. While matrones/ASCs reported some challenges to conducting their work, including a lack of equipment and materials and a negative opinion about FP among the populations they serve, all expressed their desire to continue offering the service, citing their increased skills and increased respect in the community as positive outcomes.

Objectives 3 and 4: According to routine service statistics, the matrones/ASCs in the study served a total of 1,078 FP clients over the seven month study period. While proportions varied across districts, the majority of FP clients (670) selected Depo (see Figure 1). Data collected from client interviews indicated that 64% of Depo clients were completely new to FP, while 21% were Depo clients who had transferred from health posts to the health huts (see Figure 2). Among clients who were interviewed, 93% of those who reported being eligible had received a second injection. Nearly all (94%) Depo clients planned to continue using Depo; of those, 99% stated their intent to get their next injection at the health hut from the matrone/ASC.

Objective 5: Facility-based providers, supervisors, and district health management teams found distribution of Depo by matrones/ASCs to be feasible and acceptable. For example, one provider from Niore stated, "At the beginning, we [providers] really said no, no a matrone cannot give a Depo injection. But after the training we saw that it was possible and it was accepted." The husband of a Depo user in Joal appreciated the quality of care provided by the matrones stating, "We have confidence in the matrone and we feel comfortable communicating with her and can express ourselves. This is different than a stranger who we don't know and who speaks a language that we haven't mastered. In a year's time, you will see massive [FP] uptake among the population."

Respondents noted many advantages to offering Depo at the community level including the relief provided to overburdened health workers and the improved access for clients (convenience and the cost savings associated with not needing transportation). Stakeholders also felt this was a positive

strategy for reducing unmet FP need and for improving the overall health and economic status of rural Senegalese. A member of the district health management team in Niore stated, "In my opinion, this study increased geographic access to FP, which is very important because we are in a zone with 593 villages and only 26 health posts, and that means that the 26 health posts are in 26 villages, so the remaining 570 or so villages only have health huts. So, if FP methods are only available in health posts, then we will have a major problem of access."

Conclusions

This study demonstrated that distribution of Depo by matrones and ASCs in Senegal is feasible, that the community-level providers felt confident and comfortable after proper training, that clients and communities appreciated the service, and that key stakeholders, including facility-based providers and health management teams, saw benefits in this task-sharing approach. Nonetheless, certain provider skills could be strengthened and stock-outs did occasionally occur.

Using the government's own scale-up framework and criteria, participants at a May 2013 dissemination meeting recommended that provision of Depo by matrones/ASCs should be expanded within the country. Next steps include submitting the study results to the national scale-up committee for official validation and sharing the findings with district and regional health management teams throughout the country in order to raise awareness and prepare for scale-up.

These results contribute to the growing body of evidence demonstrating the feasibility of lower-level cadres of health workers offering Depo services. Previous evidence documented by the World Health Organization and partners included no evidence from Francophone Africa.** This additional evidence produced in West Africa can be compelling to countries seeking to implement new strategies in order to reach the MDGs and ambitious targets set as part of FP2020.

** See Shawn Malarcher et al. Provision of DMPA by community health workers: what the evidence shows. *Contraception* 83 (2011) 495-503.

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