Theme: Interventions and Programs to improve Family Planning access among the underserved, internally displaced and the most at-risk populations

Title: Introduction of self-injectable contraceptive in Uganda.

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Significance

Globally, injectable contraceptives are widely used for preventing pregnancy. In East and South Africa, injectable use is on the rise. In Uganda, the injectable is the most commonly used method (for married and unmarried women alike), representing over 50% of the modern method mix.

Self-injection (SI) of subcutaneous injectable contraception (DMPA-SC) is transforming women's contraceptive access and autonomy in Uganda by putting a popular method directly into the hands of users. Recent studies across several countries found that the practice is generally feasible and acceptable to clients and health workers improves continuation rates compared to health worker administered injections, and is a cost-effective approach. Based on this research, WHO's new consolidated guideline on self-care interventions for health strongly recommends that self-injection be made available as an additional approach to deliver injectable contraception for individuals of reproductive age. To plan for introduction and scale up of self-injection, "what is most needed is implementation research to analyse how self-administration is implemented in practice and to understand the barriers and facilitators to successful implementation" (Kohn, 2018). The Uganda Self-injection Best Practices program was designed to address this need, by generating evidence and guidance that decision-makers in family planning programs can use to introduce and scale up self-injection programs.

Program implemented

The Uganda Self-injection Best Practices program implemented and evaluated self-injection in real world conditions in Uganda, in order to identify optimal components of a self-injection program. The program applied a human-centered design approach, utilizing input from a wide range of stakeholders from family planning clients to MOH decision-makers to develop self-injection program designs that could be rolled out in the public sector. Self-injection training was implemented across in Uganda in late 2017 through 44 sites in two channels: a general public sector channel in 3 district and an adolescent friendly channel in 1 district. The public sector channel was implemented in 3 districts, where self-injection was offered in public sector clinics and through Community Health Workers (CHWs) who were affiliated with clinics for reporting purposes but provided self-injection training in the community. The adolescent friendly channel was implemented in one district, where self-injection services were offered through public sector clinics and through adolescent safe space outreaches. During the program implementation, routine monitoring data was collected to understand trends in self-injection uptake (i.e. how many women are utilizing the services over time) and accessibility of the programs (i.e. do the programs provide self-injection training and supplies to those with limited or restricted access to health services such as adolescents, women with no formal education, women in remote areas, and new users of family planning). Routine supportive supervision visits were also conducted to follow up on the implementation of the program.

Methodology

A monitoring system was developed using a dedicated self-injection client register for health workers to capture data on client trained on self-injection. The self-injection register collected information on the client's visit date, some background characteristics (age, past use of family planning, education, travel time to the clinic), whether she self-injected at the end of the visit or received the injection from the health worker, and the total number of DMPA-SC units that were administered at the end of the visit. The data was entered electronically into ODK by research assistants on a monthly basis, downloaded and analyzed in STATA. The data on visits and doses from the self-injection registers was also aggregated into the governments HMIS report monthly. The data presented in this abstract was collected between November 2017 and November 2018.

Moving forward, Uganda plans to incorporate self-injection data collection into HMIS systems, which currently uses paper based collection at service delivery points with electronic data entry into DHIS2 at the district level.

Results

Health worker engagement

- During program launch in November 2017, 230 health workers were trained to offer self-injection services. At the end of the data collection period in November 2018, about 77% of CHWs, 49% of facility-based health workers, and 54% of the adolescent-friendly program health workers were actively engaged in the program.

Self-injection uptake

- In total, 12,700 clients were oriented/trained in self-injection between November 2017—November 2018 across the 44 sites in Uganda, as indicated by entry in the self-injection registers and database (Table 1).
    - Over half of these clients (7,125; 56%) were self-injection clients, meaning they self-injected and/or took units home with them for independent self-injection.
    - The remaining clients (5,579; 44%) were health worker-administered clients, meaning they went through a self-injection orientation/training, but received the injection from the health worker at the end of the visit.
- For context, there were about 31,400 total family planning visits across the sites involved in the self-injection program during this time period, based on results obtained from DHIS2 (the platform used to display HMIS data).
- In the public sector implementation of the program, CHWs reached more clients with self-injection orientation/training (5,791) than facility-based health workers (3,083; see table 1). However, a higher proportion of facility-trained clients self-injected (36%) compared to CHW-trained clients (41%).

Table 1: Total number of clients involved in the self-injection best practices program, by service delivery setting.

	Public sector channel: Facilities	Public sector channel: CHWs	Adolescent friendly channel: Facilities	Adolescent friendly channel: Safe spaces	Total: all channels
Clients oriented/trained in self-injection	3,083	5,791	2,068	1,758	12,704

Self-injection clients	1,980 (64%)	2,378 (41%)	1,413 (68%)	1,350 (77%)	7,125 (56%)
Health worker administered clients	1,103 (36%)	3,413 (59%)	655 (32%)	408 (23%)	5,579 (44%)

- The majority of self-injection clients (95%) self-injected at the end of their visit and took two units home with them for independent self-injection, meaning that they received 9 months' worth of contraceptive protection on the day of their visit.
- An expected number of self-injection clients returned to obtain more DMPA-SC units to self-inject with. In total, about 1,400 clients returned to the health workers for resupply compared to an 1,100 expected based on modeling accounting for an ~80% continuation rate and anticipated timing of resupply needs.
- In total, 24,622 DMPA-SC doses were self-administered or distributed for independent self-injection, comprising 47.2% of all DMPA-SC units that were administered/distributed across the sites involved in the program.
    - The number of injectable doses reported in DHIS2 were consistently lower each month than what was captured through the program monitoring, indicating potential challenges aggregating data from the self-injection registers into HMIS.

<u>Accessibility of the program:</u>

- The program generally reached a high percentage of new family planning users (29.0%), adolescent girls and young women (54.6%), and women who reside far from health services (40.8%, Table 2).
- Self-injection clients were more likely to have attended school (89.4%) than clients who received injections from health workers (81.0%, Table 2). This trend was particularly pronounced among women served by CHWs (data not shown in).
- Self-injection clients were more likely to be first time users of family planning and first time users of injectables compared to health worker—administered clients (Table 2).
- Safe space outreaches facilitated involvement of adolescent girls and young women in the program; 86.2% of self-injectors at safe spaces were under the age of 25, compared to 52.8% of facility and 43.2% of CHW trained self-injectors.

Table 2: Accessibility indicators for clients entered in the self-injection databases.

	Clients oriented/ trained in self-injection (N=12,704)	Self-injection clients (n=7,125)	HW-administered clients (n=5,579)	P value
First time use of family planning	29.0%	**32.9%**	**24.1%**	**0.00**
First time use of injectables	33.7%	**37.8%**	**28.4%**	**0.00**
Age				
<20 years	17.5%	17.7%	17.3%	0.59
20-25 years	37.1%	**38.2%**	**35.5%**	**0.00**
≥25 years	45.4%	**44.1%**	**47.2%**	**0.00**
Mean	25.3 years	**25.1 years**	**25.6 years**	**0.00**

Clients who have attended school	85.7%	**89.4%**	**81.0%**	**0.00**
Traveled 1+ hours to health worker	40.8%	41.0%	40.5%	0.59

Program implications

- **Self-injection can increase access:** The self-injection program reached promising numbers of first time contraceptive users and adolescent girls and young women over the first year of implementation.
- **Evidence for decision-making:** Over 12,000 women were entered in the self-injection client registers over the first year of program implementation. The monitoring data and supportive supervision visits led to many lessons about program design, implementation and supervision.
- **Limitations of monitoring:** However, there are limitations to what monitoring data can tell you about programs.
    - From the monitoring data we saw variations in the total number and type of clients served across districts and across delivery channels. However, the monitoring data cannot explain what drives these differences. There are several potential reasons for the variation, such as demographic differences in the populations, busyness of sites involved in the program, or missing data.
    - Defining the scope of the program in terms of the number trained in self-injection may overestimate reach, since many are 'oriented' who do not become self-injection clients (immediately post-training).
    - Programs may consider additional options, such as small-scale evaluations and supportive supervision visits, to understand the effectiveness and quality of SI training programs.
- **Incorporate with routine data collection:** Incorporating self-injection into HMIS systems is important for quantification, and it will take time and training.
    - In some cases, it may not be possible to incorporate self-injection into family planning registers immediately. In this case, data will need to be subsequently entered into the HMIS.
    - One common challenge we observed when incorporating self-injection data into the HMIS was not counting doses taken home for independent use.
- **Delivery channels:**
    - Community health workers and community outreaches have the potential to reach many women with self-injection orientation and training.
    - To reach maximum volumes: introduce DMPA-SC at all levels of the public sector (or both public and private).
- **Method mix:**
    - Not all women who are oriented or trained in self-injection will proceed to self-inject that day or take units home with them. For some women, self-injection may not be the right method for her; other women may need multiple orientations/trainings to be comfortable with self-injection. Women should continue to be offered the full range of methods available.
    - Stock outs of DMPA-IM or DMPA-SC may skew the interpretation of the contribution of self-injection to the overall injectables mix.