

Brief Research Article

Missed opportunity for self-injectable contraception awareness and adoption: Insights from client exit interviews in Uganda and Nigeria[☆]



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ABSTRACT

Objectives: To assess the extent to which self-injection contraceptive information and services are provided to women in Uganda and Nigeria.

Study design: We conducted a descriptive information cascade analysis using data from a cross-sectional exit interviews with 492 family planning clients in Uganda and 720 in Nigeria.

Results: More than a third of respondents in Uganda (31.2%) and Nigeria (40.5%) reported not receiving any information about the self-injection contraceptive during service provision. Only 45.6% clients who adopted self-injected DMPA-SC in Uganda and 1.7% in Nigeria were issued with additional doses to take home.

Conclusion: The findings suggest that there are missed opportunities to provide women with information and services on DMPA-SC self-injection.

Implication: A contraceptive counseling and services cascade can be a useful tool for identifying gaps in the quality and person-centeredness of family planning services, and ultimately improving the experience of clients.

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1. Introduction

One-third (38.8%) of all modern contraceptive users in sub-Saharan Africa use intramuscular injectable contraception, making it the most popular modern contraceptive method in the continent [1]. Despite widespread use, discontinuation of injectable contraception for method-related reasons is high: A 2012 analysis of Demographic and Health Survey data from 19 low-and middle-income countries found a median probability of method-related discontinuation by 12 months among intramuscular injectable users of 34.8% - the highest of any modern method; among those discontinuing for method-related reasons, three-fourths (77%) discontinued due to side effects or health concerns, while the remaining one-third reported other reasons such as problems of access, availability, cost, or inconvenience of use [2].

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Subcutaneous depot medroxyprogesterone acetate (DMPA-SC) is a newly introduced injectable contraceptive, first approved in 2015 and now registered in over 33 countries [3,4]. Its design that combines the drug and needle in a pre-filled system makes it simple to administer hence providing users with the option to self-inject as well as facilitating task-sharing to other cadres such as community health workers [3,5]. There is evidence of demonstrated high levels of acceptability and method satisfaction among DMPA-SC users [6,7]. Studies conducted in Malawi, Senegal, and Uganda have reported significantly higher self-injection (SI) continuation rates compared to provider-administered injectable contraceptive users [5,8,9]. DMPA-SC SI has other benefits to users, including time and cost savings associated with removing the requirement for frequent re-supply and visits to health providers [10]. Findings from a study in Senegal revealed that 87% of women were able to competently self-inject without additional support from healthcare workers, three months after training hence reducing the frequent visits to facilities [11]. The DMPA-SC SI method also has the potential to increase contraceptive empowerment and self-efficacy among covert users, adolescents, and other groups who may not be well served by other

contraceptive methods, although little research has been conducted in these areas [12].

Despite a growing body of evidence on DPMA-SC SI practice and outcome, awareness of the method remains low in many contexts given its recent introduction. A study conducted by Performance Monitoring for Action in 2022 revealed that awareness levels of the self-injectable contraceptive method ranged from 13% in Kenya, 20% in the Democratic Republic of Congo (Kinshasa), 21% in Nigeria (Kano and Lagos), and 24% in Burkina Faso [13]. Moreover, in many settings, the extent to which information, counseling, and training on self-injectable hormonal contraception is being integrated into current family planning (FP) service delivery is unclear. It is against this background that the Children Investment Fund Foundation funded the Delivering Innovation in Self-Care project (2020–2024) in Uganda and Nigeria to support women to initiate, adopt, sustain use of, and advocate for SI as a cornerstone of sexual and reproductive healthcare among women in urban settings. Nigeria approved DMPA-SC for SI in 2016 while Uganda approved it in 2017 to leverage the popularity of injectables which remains to be the most popular method among married women [14]. In this study that was conducted as part of the formative phase of the Delivering Innovation in Self-Care project, data were collected from public sector health facilities among family planning clients in Uganda and Nigeria to develop a simple, visual information cascade that can be used to identify potential missed opportunities for the provision of SI information and counseling among women seeking FP services.

2. Materials and methods

2.1. Study design and population

We conducted facility-based client exit interviews with women who had received contraceptive services in Oyo, Lagos, and Niger states in Nigeria, and Wakiso, Jinja, and Kyenjojo districts in Uganda. One facility in each of the states and districts was selected based on high FP client volume as per the service statistic records for the year 2020. In Nigeria, two out of the three facilities sampled were hospitals while one was a Health Centre. In Uganda, two facilities were health Centre IV sites that serve a constituency, and one was a hospital. Across the six study sites, all contraceptive methods and services were routinely provided to women. In Uganda, the guidelines allow women to be trained on how to self-inject during their first visit, while in Nigeria, SI can only be done during the second visit. Women were eligible to be included in this study if they were aged 18 to 49 years, had received a contraceptive method from the study facilities, and consented to be part of the study. The study was conducted for six weeks between August and September 2021 with trained research assistants who were stationed at the facility. All eligible clients who consented were enrolled in the study. In Uganda, a total of 492 FP clients were enrolled across the three facilities, ranging from 140 to 180 clients per facility while in Nigeria 720 clients were sampled, 150 to 279 clients per facility. The response rate was 87% in Uganda and 96% in Nigeria. During the period of data collection, all facilities had adequate stocks for all contraceptive methods including DMPA-SC.

2.2. Analysis

We conducted a descriptive information cascade analysis to assess the extent to which SI information and services are provided to women who reported a desire to learn about the method. For each indicator, we restricted the cascade analysis to the predicated population based on the earlier response. Our analysis approach was informed by the 90–90–90 HIV treatment cascade; diagnose 90% of all HIV-positive persons, provide antiretroviral therapy (ART) for 90% of those diagnosed, and achieve viral suppression for 90% of those

treated by 2020 [15]. Our cascade begins with an analysis of the sub-sample of women who indicated they would have been interested in learning about self-inject during the visit (based on the question administered at the client exit, “Would you have been interested in learning about DMPA-SC SI contraceptive method before your visit today?”). Our decision to limit the analysis to those who expressed a desire to learn SI is based on women’s stated preferences, which aligns with growing calls to ask women directly about their contraceptive needs and preferences. Among women who desired SI information, we tabulated the proportion of FP clients who were informed of the method by providers (“Did the provider inform you of a SI contraceptive method?”); we then analyzed those who received training in SI (Were you shown how to self-inject?) among those who were informed; who adopted the self-injectable contraceptive (“Which method did you receive today? If DMPA-SC, who injected?”) among those who trained; and who were given additional doses to take home with them (“Did you receive additional doses to take home with you?”) among those who self-injected.

2.3. Ethics statement

The Institutional Review Board at Population Services International, the Nigeria Health Research Ethics Committee (NHREC/01/01/2007-06/01/2016), and the Mildmay Uganda Research Ethics Committee (0906-2021) approved this research. Informed consent was obtained from all clients before the interview.

3. Results

3.1. DMPA-SC SI contraception information, counseling and uptake cascade

In Uganda, among the overall sample of 492, 430 (87.4%) reported an interest in learning about the DMPA-SC SI contraceptive method. Among those interested in learning about the method, 296 (68.8%) were informed by a provider during their visit. Out of these informed individuals, 223 (75.3%) received training on the SI process, leading to its adoption by 136 (61%) among those trained. Only 62 clients (45.6%) who adopted self-injected DMPA-SC were issued with multiple doses (Fig. 1).

In Nigeria, a total of 720 participants were sampled, and among them, 501 (69.6%) FP users expressed an interest in learning about DMPA-SC SI contraception. However, only 298 (59.5%) of those interested of those interested were informed about the method by a provider. Out of those informed, 229 clients representing slightly more than three-quarters (76.8%) were trained, leading to 60 (26.2%) adopters of the self-injectable contraceptives. Among those who adopted the DMPA-SC SI contraceptive method, only one client (1.7%) received additional doses to take home (Fig. 2).

4. Discussion

Care and treatment cascades have been widely used in clinical medicine and public health to identify potential gaps in service quality [16,17], but have not yet to our knowledge been adapted to describe potential gaps in the quality of contraceptive counseling and service delivery. Using DMPA-SC SI as a case study, we demonstrate the utility of constructing descriptive contraceptive information and counseling cascade for identifying potential gaps in facility-based service readiness. From our findings, more than a third of women in both countries reported not receiving any information about the SI contraceptive method during their visit, despite a stated desire by the client to learn more about it in the facilities that were offering the method. The cascade also highlights clear missed opportunities to provide DMPA-SC SI adopters with additional doses to take home, with less than half of Ugandan adopters and only 1.7% of

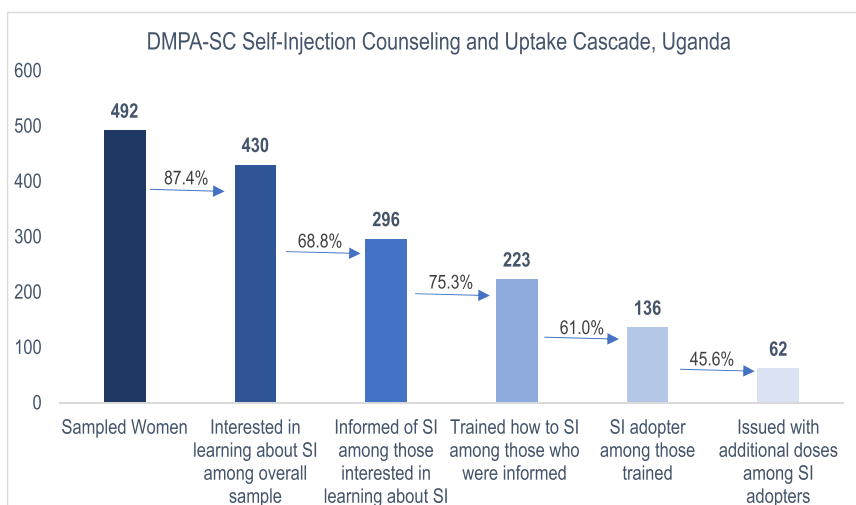


Fig. 1. Subcutaneous depot medroxyprogesterone acetate (DMPA-SC) Self-Injection (SI) contraceptive method information and services cascade, Uganda.

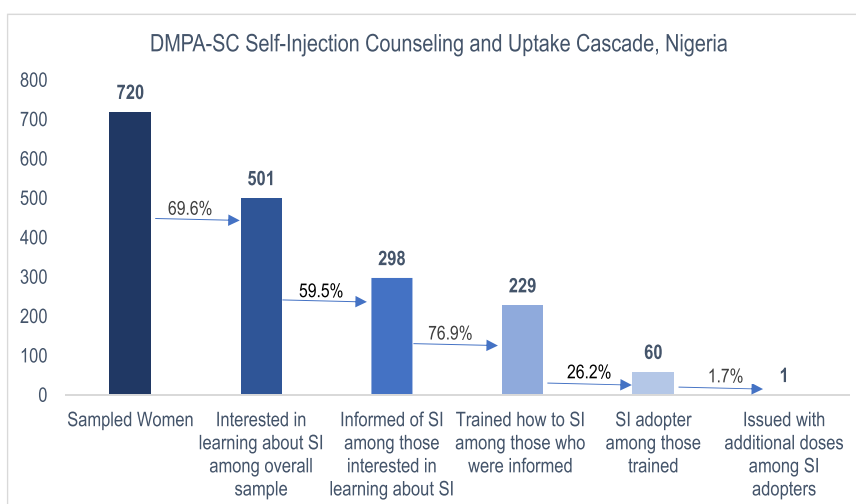


Fig. 2. DMPA-SC SI contraceptive method information and services cascade, Nigeria.

Nigerian adopters reporting receiving additional doses. Given that prevention of resupply, visits is a core value proposition of the method [6], the cascade quickly highlights key shortcomings in current service provision in these high-volume public facility settings in both Uganda and Nigeria. The low figures in Nigeria were not surprising given that the national DMPA-SC guidelines only allow women to receive additional doses after the second visit, unlike Uganda where women who have competently self-injected are allowed to go with the doses home. Additional studies are however needed to understand the dispensing protocols that providers follow when issuing DMPA-SC among clients who have been trained and are eligible to take additional doses home.

The contraceptive counseling and service provision cascade we present is distinct from many other care and treatment cascades, in that we should anticipate and welcome “drop off” along the cascade continuum: for example, 100% retention across information, training, and adoption steps of a contraceptive cascade would rightfully raise concerns about provider bias and coercion. Following training in DMPA-SC SI, many women may opt to uptake other methods or choose not to adopt any method, outcomes that reflect autonomous decision-making.

Despite this additional nuance, we believe that capturing and visualizing stages of contraceptive information provision, counseling, training, and adoption using the cascade model is a useful

tool for identifying potential gaps in service readiness and quality, particularly among women with a stated desire to receive information about the contraceptive method in question. In addition, it may be beneficial for monitoring the rollout of new and underused contraceptive methods within broader FP service delivery.

Data availability

All the data presented is contained within the manuscript.

Declaration of Competing Interest

We as the authors would like to declare no conflict of interest.

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