Self-Injection Feasibility and Acceptability

Research results from Senegal and Uganda

Injectable contraceptives are the most commonly used method of family planning in Senegal and Uganda. A new injectable contraceptive, subcutaneous DMPA (DMPA-SC, brand name Sayana® Press) has the power to expand access and options: DMPA-SC is easy to use, allowing for less specialized health care workers to administer the contraceptive. New research from Senegal and Uganda also suggests self-administration of DMPA-SC is both feasible and acceptable.

STUDY METHODS

- **Participants:** 378 women aged 18 to 49 in Senegal and 380 women aged 18 to 45 years in Uganda who had chosen to use injectable contraception at a family planning clinic. A subset of women who declined to self-inject were also interviewed (61 in Senegal and 62 in Uganda).

- **Training and counseling procedures:** Study participants attended a clinic where they:
  - Were trained one-on-one by a study nurse, guided by a client instruction booklet.
  - Practiced injecting on a prosthetic.
  - Received counseling on side effects, HIV prevention, calculating injection dates, and safe storage and disposal.
  - Self-injected under the supervision of a study nurse using an observation checklist to assess proficiency.

- **Follow-up procedures:** Self-injecting participants were followed up for subsequent injections differently in each country (see figure, page 2), and encouraged to use the booklet during their independent self-injection. Women were interviewed at baseline and after each injection. For the second injection, women’s independent self-injection proficiency was evaluated using an observation checklist of injection procedures (while self-injecting in Senegal and on an injection prosthetic in Uganda).

SELF-INJECTION IS FEASIBLE FOR MAJORITY OF PARTICIPANTS

Nearly 90 percent of participants were proficient at self-injecting without any additional guidance at three months post training. The majority of participants were both on time (within one week of their injection date) and proficient at their second injection.

SAFETY

No pregnancies or serious adverse events occurred. The most common side effects were amenorrhea and other changes in menstrual bleeding, as are typical for the method. Some women experienced injection site reactions in the form of a dimple, bruise, blister or nodule, and four women sought treatment or advice.

What women say about self-injection

**Self-injection is very easy to do**

- Senegal: 64% (first injection), 66% (second injection), 72% (third injection)
- Uganda: 61% (first injection), 92% (second injection)

**Would like to continue self-injecting in the future**

- Senegal: 93%
- Uganda: 98%

**Very likely to recommend to others**

- Senegal: 73%
- Uganda: 88%

**Able to store DMPA-SC securely**

- Senegal: 97%
- Uganda: 98%

**Where women store the device**

- Senegal: Armoire/dresser (74%)
- Uganda: Handbag (61%)

**Experiences with disposal of the device**

- Stored spent devices in an impermeable container until safely discarded (Senegal 49%; Uganda 71%)
- Disposed in a pit latrine, as per instructions (Senegal 49%; Uganda 94%)
PROFILE OF STUDY PARTICIPANTS
There were several statistically significant differences between study participants who chose self-injection compared to those who declined. In both countries, self-injectors had less needle anxiety. The figure describes characteristics of women who chose self-injection compared to those who declined.

**PROFILE OF PROFICIENT SELF-INJECTORS**
After being trained in self-injection, baseline differences were assessed for women evaluated as proficient at self-injection versus not proficient. Women with less education, particularly those who had never attended any amount of school, had a more challenging time learning to self-inject and may need additional support during training. For example, proficient self-injectors had an average of 5.3 years of education in Senegal and 6.8 years in Uganda—whereas women who were not able to self-inject had 3.6 years of education in Senegal and 5.6 years in Uganda.

**TRANSITIONING FROM RESEARCH TO PRACTICE**
The results from the research studies led to both countries’ commitments to move forward with self-injection rollout. A new Self-Injection Best Practices project in Uganda is enabling PATH to understand how to utilize research results to create scalable, sustainable programs. For example:

- The client instruction booklet was a useful, but expensive, component of the research and is now being replaced with a one-page job aid.
- The project is exploring different training methods, including whether it is possible for women to learn the injection steps in a group setting, without practicing, and from community health workers rather than nurses.
- To support women to safely store used devices prior to disposal, they are being given small, locally available, impermeable and inconspicuous containers.

**RESOURCES**
- PATH Subcutaneous DMPA Program Website
- Self-injection training materials