

Is sub-dermal implant removal indicative of contraceptive discontinuation?

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Introduction

Modern contraceptive prevalence among women in union in Jamaica increased considerably from 62.9% in 1997 to 68.2% in 2008, progressing toward the country's goal of 75 % prevalence by 2015 [1]. More than 85% of women of reproductive age have ever used a modern contraceptive. Data from the National Family Planning Board indicate that, currently, 72.3% of women use a modern method. [2]. The sub-dermal implant represents less than 1% of the contraceptive method mix.

The Jamaica Family Planning Association (JFPA), pioneer of family planning in Jamaica, is the only civil society contraceptive service provider in Jamaica. As an independently funded service, JFPA serves contraceptive users through two fixed clinics - one rural-based and one urban-based - and through a small cadre of community distributors. The sub-dermal implant is only available from the fixed clinics.

The urban clinic provides services to two groups of implant users. Those who receive all their services from the JFPA clinic and those who receive their implants post delivery from the Victoria Jubilee Hospital. Clients of the rural clinic receive all the implant related services - pre-procedure counselling, implant and follow-up counselling and monitoring - from the same (rural) clinic.

Discontinuation of implant use is perceived to be high and indicative of contraceptive discontinuation. If the JFPA is to reach additional user targets, the Association needs to assess implant discontinuation and switching among women who use its clinics.

In 2020, the Association conducted an exploratory study to determine:

- the discontinuation rate for sub-dermal implants;
- women's reasons for discontinuing implant use;
- whether women who remove their implants discontinue contraceptive use; and
- whether implant discontinuation rates vary by clinic.

Method

A retrospective study was conducted of users of sub-dermal implants who were registered in the two JFPA clinics in the period January 1, 2016 to December 31, 2018.

Client data was abstracted from the Association's electronic client data system. These data included: client history of visits for implant consultation, implantation, implant check ups, implant removal and post-removal contraceptive method use.

The data were evaluated and structured to form the final secondary data file.

To comply with strict doctor-client confidentiality protocols, all personal client information and identifiers was removed.

Results

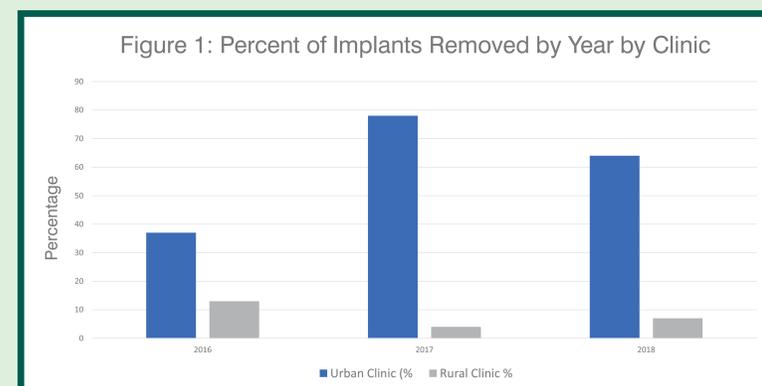
Over the 3-year period, a total of 135 women were using sub-dermal implants – 46 were clients of the urban clinic; 89 were clients of the rural clinic.

Thirty (22%) of the 135 women requested removal of their implants.

- 22 (48%) were users of the urban clinic;
- 8 (8%) were users of the rural clinic.

13.8% of women how removed their implant replaced it with another. 34.7% of women removed their implant and switched to another modern contraceptive.

Just over half (51.5%) of the removals occurred before term¹. Term is 5 years.



- Implant removal was significantly higher for users of the urban clinic than for users of the rural clinic (95% CI; $\alpha=0.05$).

- Of the 3 years, the removal rate was highest in 2017 – reaching close to 90% among implant users of the urban clinic. This rate was significantly higher than that of the rural clinic (95% CI; $\alpha=0.05$). The removal rate for 2018 was also significantly higher for the urban clinic than for the rural clinic. See Figure 1.

Reasons for implant removal were not always available from the database. From the data we have:

- 22% of all removals were done because of completed durations.
- 21% of all removals done in both clinics was due to bleeding.

Conclusions

This study provides evidence that implant removal do not reflect contraceptive discontinuation.

Further follow-up study of implant users is needed, however, to isolate the factor(s) associated with implant removal that leads to contraceptive discontinuation and to thoroughly investigate the reasons for the significant difference in implant removal rates between the two clinics.

References

1. http://www.healthpolicyplus.com/ns/pubs/2068-2113_HPSFIBriefJamaicaEnglish.pdf Retrieved November 2020.
2. *More Jamaica women now using contraceptives.* <https://www.moh.gov.jm/more-jamaican-women-now-using-contraceptives/> Retrieved September 2020.