# An investigation into contraceptive choice in South Africa

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**Description of the topic**

Postpartum contraception is an essential component of maternal and child health, enabling women to have control over their childbearing. It is argued that when women leave two or more years between pregnancies, rates of both maternal and child mortality are much reduced. Quick successions of pregnancies (less than one year apart) increase the chances of low birthweight, preterm birth and small-for-gestational-age babies (Royal College of Obstetricians and Gynaecologists, 2015). Yet in South Africa, research has shown that rates of contraceptive discontinuation are high, even at short durations after birth. Among a population of women living with HIV, 18 percent of women were not using any contraceptive method at 18 months postpartum, despite very low levels of desire for another pregnancy (Towriss *et al.*, forthcoming).

The provision of a variety of contraceptive methods is an integral part of quality sexual and reproductive healthcare. If a woman seeks to delay her next pregnancy, providing a wide range of contraceptive methods from which she can make a choice will facilitate continuous use in a manner that is consistent with her childbearing intentions. In South Africa, research has revealed that women in resource poor settings (which is the case for the majority of the population) have limited access to a choice of contraceptive methods (Chersich *et al.*, 2017; Towriss et al., forthcoming). Nationally, the majority of women use the three-month injectable contraception. The results of the latest Demographic and Health Survey (DHS) put this figure at over 42 percent of sexually active women (National Department of Health *et al.*, 2019). Yet the predominance of one method of contraception in a population is not unique to South Africa: 29 out of 43 African countries for which data is available have been found to have over 40 percent of contraceptive use among married women concentrated on one contraceptive method. In eight countries, this figure was greater than 50 percent (Bertrand *et al.*, 2014).

In the South African context, research has connected the dominance of injectable contraceptives to poor and coercive contraceptive counselling and informed consent practices (Rucell, 2017; Towriss et al., forthcoming). These findings raise important questions about women's autonomy in the context of family planning provision. In recent years, South Africa has attempted to increase the national contraceptive method mix through the introduction of the contraceptive implant (Pleaner *et al.*, 2017). Recent research shows limited uptake of this method, raising further questions about potential barriers to women's access to contraceptive choices.

This research examines the provision of post-partum contraception in public health facilities in Cape Town, SA. It seeks to fulfil this aim through answering four research questions:

1. How frequently do women not receive their contraceptive of choice? Are there particular groups of women who are less likely to receive their method of choice?
2. Has a programme designed to upskill nurses in the delivery of post-partum contraception increased women's access to their method of choice?
3. What are nurse's barriers and enabling factors to support women's access to their contraceptive of choice?
4. How do nurses practice gaining informed consent?

**Theoretical focus**

This study makes use of the rights based approach to women's sexual and reproductive health. This approach can be broken down into three core elements. First, the right to reproductive self-determination, which refers to the right to bodily autonomy and the rights of women to decide if, when and how often to bear children. Second, the right to access quality sexual and reproductive health services, information and education. Third, the right to equality and non-discrimination, which includes the right to autonomous reproductive decision-making, free of coercion, discrimination and violence (Erdmann and Cook, 2008; Hardee *et al.*, 2014).

We also integrate the concept of Quality of Care into our theoretical approach (Donabedien, 1988). This concept can be broken down into six dimensions for contraception services (Jain, 1989): 1) Choice of contraceptive methods, 2) Information given to the user, 3) Patient-provider relations, 4) Technical competence of providers, 5) Patient follow-up mechanisms and, 6) Appropriate constellation of services.

**Data and research methods**

This study used a mixed methods approach. We collected both qualitative and quantitative data from three primary healthcare facilities located in low income communities across Cape Town. One of these three facilities (facility 2) has received an additional programme, Leading Safe Choices (run by the Royal College of Obstetricians and Gynaecologists (UK)), which sought to raise awareness of post-partum contraception and to upskill providers in the public health system. Ethical approval for this study was granted by the Human Research Ethics Committee at University of Cape Town (Ref No. 813/2018) and health system approval from the Western Cape government (Ref No. WC2018_05014).

Quantitative data was collected to determine the consistency between patients' contraceptive method of choice and administration of contraception. The maternity record (a file generated for a pregnant women at her first antenatal care (ANC) visit) provided information on women's contraceptive choice at first ANC. It also was used as our source for patient demographic characteristics (age, ethnicity, marital and occupation), gravity, parity and HIV status; which are all recorded at first ANC. Maternity ward birth registers were used to collect data on the method of contraception administered to the patient after birth. It also provided information on gravity, parity and HIV status at birth, that allowed us to confirm the data collected from the maternity record.

Qualitative data was collected from focus group discussions (FGDs) with clinic managers, nurses and midwives working in the maternity units of the three facilities. The FGDs collected data on staff perceptions of patient's contraceptive needs and intentions, barriers and enabling factors for contraceptive provision, including training on contraception, information and counselling, procedures of informed consent and provider awareness of risks and side-effects. We also conducted stakeholder interviews with a number of women who had given birth at the facility during the three-month period of investigation. The interviews generated information on facility-specific patient experiences of contraceptive services and administration.

Table 1 shows the sample size for the quantitative and qualitative components of the study for the three facilities. We accessed between 430 and 639 patient records per facility, which was representative of all the births occurring within the facility over a three month time period (February – April 2018). We included between seven to twelve nurses and midwives in the FGDs in each facility. We sought to ensure that the staff who worked most regular shifts in the maternity unit were included in the discussions.

*Table 1. Quantitative and qualitative sample size for three community health care facilities*

| | No. of patient records accessed | No. of staff interviewed in FGDs | Patient stakeholder interviews |
|---|---|---|---|
| Facility 1 | 442 | 12 | 2 |
| Facility 2 | 430 | 7 | 3 |
| Facility 3 | 639 | 12 | 3 |
| TOTAL | 1,511 | 31 | 8 |

The analysis of the quantitative data examines the percentage distribution of women's antenatal contraceptive choice and postnatal contraceptive use by method. We create a 'contraceptive consistency' variable that identifies whether or not a woman received a post-partum contraceptive method that is congruent with the intention recorded in her antenatal care visits record. Using chi-squared analysis, we examine whether certain characteristics (age, ethnicity, parity and gravidity or HIV infection) are associated with a higher chance of contraceptive consistency. We also examine whether the contraceptive method given to a woman varies by month of delivery or by staff member.

The qualitative data is analysed thematically according to our core areas of interest: information on contraception given to patients, counselling and informed consent procedures, provider-patient relationships and the technical competencies of providers.

**Preliminary and expected findings**

Figure 1 shows the percentage distribution of women's future contraceptive method choice at first ANC visit across the three facilities. The majority of women were recorded as wanting to use an injectable contraceptive after birth (between 52.2 and 79.9 percent). The implant is the next most commonly chosen intended method, although the percentage distribution varied between the three facilities. The highest percentage was observed at facility 2, where 16.9 percent of women chose this method, the lowest at facility 3, where 6.3 percent of women chose this method. Women attending facility two (which had received the Leading Safe Choices intervention) had the greatest diversity in method choice, with a higher proportion of women choosing to use either the implant or the IUD, as compared to facilities 1 or 3. A small percentage of women elected post-partum sterilisation (between 3.5 and 6 percent). At facility 1, 10 percent of women chose oral contraceptives. This is significantly higher than the percentage observed at facilities 2 or 3, at 1.5 to 4 percent respectively.

*Figure 1: Future method choice by facility*

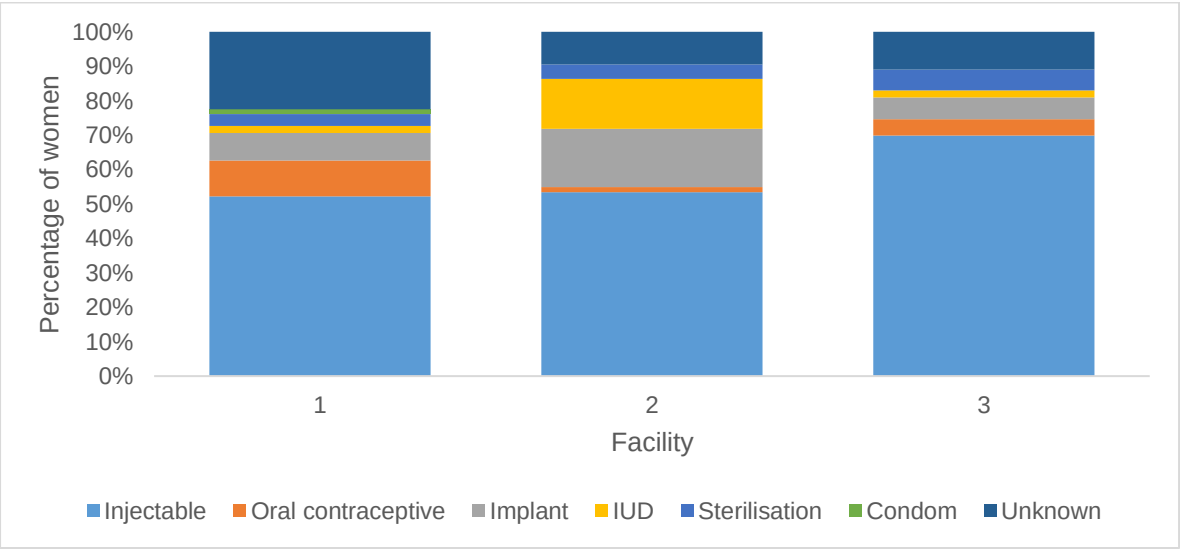
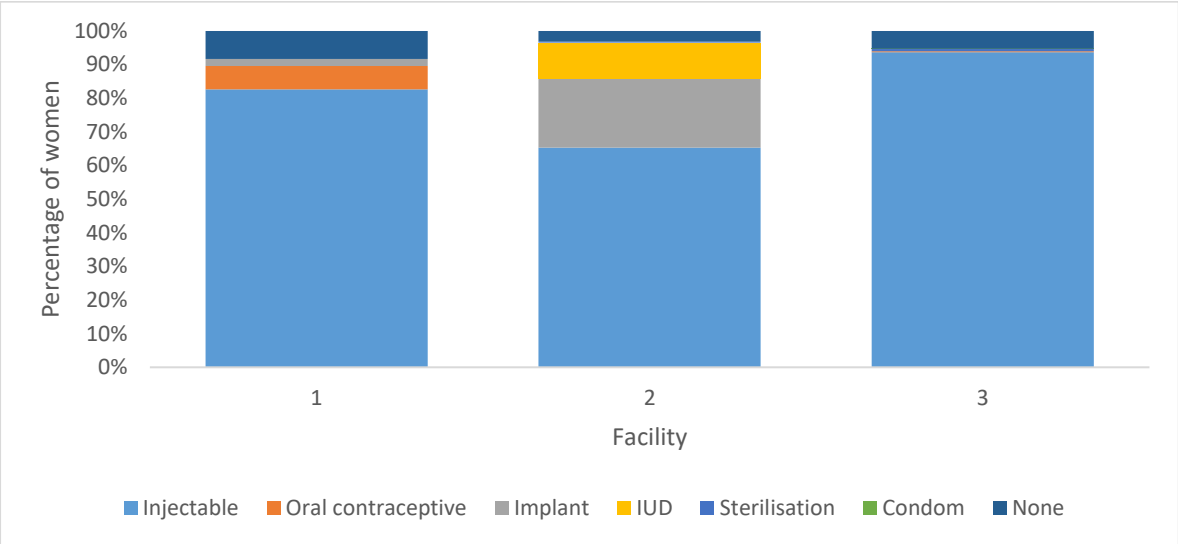


Figure 2 shows the percentage distribution of postpartum contraceptive method administration by facility. Across all three facilities, more than 60 percent of women were administered injectable contraceptives after birth. This percentage was 65.4 percent in facility 2, followed by 82.6 percent in facility 2 and 93.7 percent in facility 3. As with the results for intended post-partum contraceptive method, post-partum method administration varied most in facility 2, where 20.5 percent of women were administered the implant and 10.7 percent of women were administered the IUD. Facilities 1 and 3 recorded very low levels of use of any other method. At facility 1, 7 percent of women were recorded as using oral contraceptives. In facility 3, less than 1 percent of women obtained sterilisation post-partum. Across all three facilities, a small percentage of women were not administered any method after birth: between 8.4 and 3 percent.

*Figure 2 Postpartum method administration by facility*




The final analysis will examine the extent of contraceptive consistency/inconsistency (i.e. whether an individual received a contraceptive method that was consistent with their choice at ANC) across the three facilities. A comparison of the facility-level percentages shown in figures 1 and 2 suggest that levels of inconsistency are high, since percentages of post-partum injectable use are higher than the equivalent percentages for intended use at ANC. Additionally, we will examine whether any socio-demographic characteristics are associated with contraceptive inconsistency. Preliminary analysis (not shown) suggests that contraceptive inconsistency is not associated with individual level characteristics. Rather, our early results suggest that contraceptive consistency is associated with facility-level factors, namely, the presence of increased provider training through the Leading Safe Choices initiative.

Our analysis of the qualitative data will generate further insight into the impact of staff training and perceptions on post-partum contraceptive provision. Early findings suggest that a lack of training in the insertion of long-term contraceptive methods (the implant and the IUD) in facilities 1 and 3 (which did not receive the Leading Safe Choices intervention) has restricted method accessibility to injectable contraceptives only. Data from the FGDs in also show that high patient-provider ratios create the conditions where nurses perceive injectable contraceptives as the easiest to give. Our qualitative data contains rich dialogue on informed consent procedures. Preliminary analysis suggests that providers do not have access to up-to-date information about method-specific side-effects, risks and contraindications. Without access to this information, informed consent procedures cannot be properly adhered to, since women are consenting to receiving a method about which they have little formal information.

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