Cape Higher Education Consortium (CHEC) /
City of Cape Town (CCT)

JOINT RESEARCH PROGRAMME

PROJECT REPORT

February 2020

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Project: Contraceptive prescribing and choices among young women utilising City of Cape Town services

Thematic Area: Youth at Risk

ABSTRACT

Young women are at risk for HIV infection and pregnancy particularly if they are sexually active and not using an appropriate contraceptive method. Quantifying contraceptive service coverage, and loss of women to care, together with an overview of contraceptive prescribing practices would assist the City in providing an improved quality service that addresses young women's contraceptive needs and does not place them at increased risk of HIV infection.

This research project, conducted by two Master of Public Health students, addresses a priority service delivered by City Health – to provide comprehensive reproductive health services to women and youth. The coverage and loss of women to reproductive health care, and the factors underlying providers counselling for contraceptive methods are determined through two interrelated studies. This research was conducted in 2018 and 2019. Attached is the report up to February 2020.

INTRODUCTION AND AIMS

Early in 2017, the health department of the City of Cape Town, noted that there was a decrease in contraceptive coverage amongst women of child-bearing age. This increases women risk of unintended pregnancies.' In addition, a pilot study in a busy peri-urban clinic, Ikwezi, showed that the predominent contraceptive method presecibed was the three monthly administered injectable, Depot-provera, and this included young women.

Front line nursing staff who provide contraceptive services are well placed to understand and voice the reasons underlying clients' contraceptive choices. Recent research on the selection of IUCDs among clients frequenting the City of Cape town health facilities has shown that nursing staff play a pivotal role in determining women's contraceptive methods.

Together with City Health staff, the researcher formulated the research aims to determine:

1. the contraceptive coverage, method use and contraceptive continuation among women in Cape Town by sub-distict and age-group
2. the attitudes and practices of front-line nursing staff regarding contraceptive prescribing and client choices

RESEARCH APPROACH AND METHODS

These aims are answered by two separate studies:

Study 1.
Through quantitative methods, this phase addresses the first aim. City Health through the information system, PREHMIS, contains patient-level data for all consultations.

The database of all contraceptive encounters for 2017 was analysed to generate contraceptive coverage and continuation overall. Descriptive data analysis was conducted including demographic and stratification by sub-district.

Study 2:

This phase was designed to understand contraceptive choices found in Study 1. The second student, through In 1-1 in-depth interviews among front-line staff in City Health facilities, obtained information about their contraceptive practices. It assessed the effect of their knowledge and attitudes on their contraceptive counselling and prescribing practices.

PROGRESS

The grant was awarded in August 2017. Two MPH students began work in July 2018, and obtained Ethics approval and CoCT permission for the research. The first study is currently being written up by the student Ms Carron Naidoo. Her preliminary findings were included in the October 2019 report (Appendix 1 attached, page 5). Since that report, the student sustained a back injury and due to ongoing back pain, she has taken long leave of absence from her studies. Consequently, she failed to submit her dissertation for examination by December 2019. She intends to resume her studies and return to complete the dissertation in semester 2 of 2020.

As was reported previously, a further student, Ms Kulthum Fataar was recruited and commenced fieldwork in September 2019. She has produced a first draft of her thesis and currently plans to submit her dissertation in April 2020. This final dissertation will be forwarded to CHEC as soon as it is submitted for examination. A summary of her findings is attached as Appendix 2 (page 10).

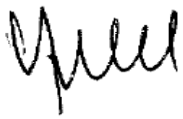
FINANCIAL REPORT

Item	**Date**	**Recipient**	**Amount**	**Balance**
Opening balance	June 2019			R50 000
Dissertation Fees	July 2019	C Naidoo	R19 000	R31 000
Dissertation Fees	July 2019	T Mills	R19 000*	
Dissertation Fees	August 2019	K Fataar	R19 000	R12 000
Expenses for fieldwork	September 2019	K Fataar	R750	R11 250
Transcription of interviews	December 219	P Francis (K Fataar's study)	R4 598.77	R 6 651,23

* This amount is off-set against a Faculty student assistance grant (R30 000) that I received in May 2019. I explicitly made mention of this problem.

FUTURE PLANS

The final reports from both studies in article form will be submitted for publication. Should one be accepted for publication in an Open Access journal, I would like to propose that the remaining funds be used to contribute to the cost of publishing, if necessary. The University can contribute to page costs (Max R20 000), but this is often insufficient for actual costs. I trust that this proposal will meet with the Committees approval.



Virginia Zweigenthal
20 February 2020

APPENDIX 1

Contraceptive continuation among women aged 15-49 utilising City of Cape Town family planning services.

This study was conducted using contraceptive data for all City of Cape Town clinics during 2017.

Preliminary Findings

As illustrated in Table one, 217 274 women aged between 15 and 49 years were retrospectively enrolled in the study if they accessed contraception between 01 January 2017 and 31 December 2017. The sample population was made up of 62.25% (n=135 263) older users aged 25-49, while adolescents and young women (aged 15-24) made up 37.75% (n=82 011) of the sample population. The average age of a contraceptive user in the sample was 27.69 years.

Most users (68%) had ever used an injectable method in the period. Among these users, 48.62% (n=114 412) were DMPA users, while 19.54% were NET-EN users (n=45 980). The oral pill was used by 9.13% of the sample (n= 21 847) while the IUCD was used by 0.42% (n=981) and the implant was used by 3.85% of users (n=9 070). Over half (52.02%) of users had used condoms during the period, while 36.20% were dual hormonal and condom users.

In terms of the health characteristics of the sample, 4.04% (n=8 773) women had a pregnancy in the period. The proportion of users who were HIV positive was 2.04% (n=4 434), while 1.26% (n=2 738) of women in the sample had TB and 4.23% (n=9 192) were treated for an STI in the period.

Table 1: Characteristics of study participants, n=217 274

Characteristics	**N**	**Median; Range**
Age (years)	217 274 (100%)	27.69; 15.00-49.98
	N	**%**
Age Category		
15-24	82 011	37.75
25-49	135 263	62.25

Cont/-

Contraceptive use (ever use in the period)		
	Number	**Percentage**
Injectable use	160 392	68.15
DMPA	114 412	48.62
NET-EN	45 980	19.54
OCP	21 487	9.13
Implant	9 070	3.85
IUCD	981	0.42
Exclusive condom use	42 777	18.17
Emergency Contraception	634	0.27
Exclusive emergency contraception use	165	0.08
Overall condom use	122 416	52.02
Female condoms	*5 421*	*4.43*
Male condoms	*74 208*	*60.62*
Dual male & female condom use	*42 787*	*34.95*
Dual method usage	78 680	36.20
Health Characteristics		
Pregnancy in the 12-month period	8 773	4.04
HIV status		
Positive	4 434	2.04
Negative	212 840	97.96
ART use	4 253	1.96
TB in the period		
Yes	2 738	1.26
No	214 536	98.74

STI in the period	Number	Percentage
Yes	9 192	4.23
No	208 082	95.77
Combined *ART & TB medication use*	45	0.02

Changing methods

Among all method users (n=217 274), method switching was 7.95% (n=17 274). Among users of hormonal methods (oral pill, injectables, implant and IUCD) n=166 664, the proportion of method switching was higher 9.90% (n=17 274).

Method-specific continuation was highest for the IUCD (87.96%), followed by the implant (66%). While short-acting methods generally had lower continuation and compliance. The NET-EN injectable for example, had a continuation proportion of 8.24% among users, followed by the oral pill 11.31% and the DMPA injectable 17.39%.

According to table two, baseline DMPA users made up 46.40% of the sample (n=100 808), of these users, 6273 (7.55%) switched to other hormonal methods within the period, discontinuing use of the method. A further 93.78% (n=94 535) users only used DMPA in the period. Among these users, 73.72% (n=61 247) discontinued the method for reasons other than switching (had 2 or less repeats in the period). While 17.59% (n=17 731) did not switch methods and had the required amount of shots or more in the period and therefore continued use of the method.

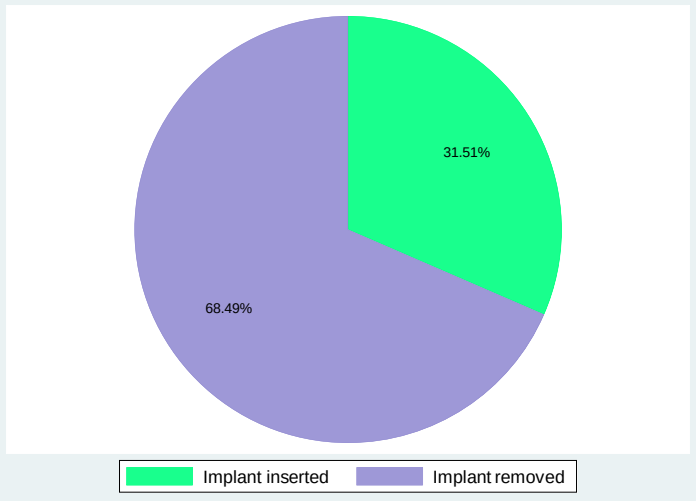
Among baseline implant users 4.17% (n=9070), method continuation was 66.63% (n=6043). As illustrated by figure two, among all implant users over 68% had their device removed in the period. Some users had a new device re-inserted, while others switched methods (33.37%).

Table 2: Method-specific discontinuation and switching patterns of hormonal method users, n=166 664

Method	Used at baseline% (n)*	Remained on baseline method% (n)	Continued % (n)	Discontinued (all) % (n)	Discontinued due to method-switching	Discontinued for reasons other than switching** % (n)	Discontinuation due to 'method break'*** % (n)
DMPA	46.40% (100 808)	93.78% (94 535)	17.59% (17 731)	82.41% (83 077)	7.55% (6 273)	73.72% (61 247)	18.72% (15 557)
NET-EN	18.09% (39 301)	85.94% (33 777)	8.24% (3 240)	91.76% (36 061)	15.32%% (5 524)	69.07% (24 906)	15.62% (5 631)
OCP	7.78% (16 912)	89.44% (15 126)	11.31% (1 913)	88.69% (14 999)	11.91% (1 786)	74.87% (11 230)	13.22% (1 983)
Implant	4.17% (9070)	66.63% (6 043)	66.63% (6 043)	33.37% (3027)	33.37% (3027)	-	-
IUCD	0.26 % (573)	87.96% (504)	87.96% (504)	12.04% (69)	12.04% (69)	-	-

Remaining baseline users used condoms and emergency contraception at baseline. **only one or two method repeats in period, then LTFU ***break in method repeat, then return to same method

Figure 2: Implant insertions compared to removals over 12 months



Chi-square analyses showed that there was a significant relationship between dual method use (condom and hormonal method), with dual users more likely to continue use of any hormonal method (p<0.001). Whether a contraceptive continuer was an adolescent or young woman (aged 15-24) was significantly related to continuation of a short-acting method (DMPA, NET-EN and oral pill). For long-acting method users (Implant, IUCD) this relationship was not significant (p=0.56 and p=0.44).

Table 3: Factors associated with method specific contraceptive continuation among hormonal contraceptive users, n=166 664

Characteristic	**DMPA p-value**	**NET-EN p-value**	**Oral Pill p-value**	**Implant p-value**	**IUCD p-value**
Age category					
15-24	p<0.001	p<0.001	p<0.001	P=0.56	P=0.44
25-49					
Dual use	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001
Pregnancy	p<0.001	p<0.001	p<0.001	p<0.001	p= 0.52
HIV status	p=0.25	p=0.37	p=0.89	p=0.10	p=0.36
TB status	p<0.001	p=0.33	p=0.21	p<0.001	p=0.60
STI	p= 0.41	p=0.23	p=0.02	p= 0.17	p=0.49

Significance level at p<0.05

APPENDIX 2

An exploration of the knowledge, attitudes and practices of primary health care providers providing contraceptive and family planning services in Cape Town, South Africa: A qualitative study

Preliminary findings

Kulthum Fataar

February 2020

This summary outlines the main findings from the study. The full dissertation reporting on the study will be submitted in March. It will take the form of an article which will be ready for submission to a peer reviewed journal.

Between July and October 2019, 10 providers were interviewed (1-1) at 5 clinics in different locations.

Findings:

1. Attitudes towards contraceptive services

Providers had positive attitudes towards family planning (FP) services and many described that they "love" providing the service and feel very passionate reproductive health. They also reported that the service is extremely important to ensure women can space and time their births based on their reproductive needs. They also highlighted the importance of the provider's attitude and how this can be a barrier or facilitator to women seeking family planning.

2. Sexual and Reproductive Health Training

At the time, seven providers attended the SRH training being delivered by Comficor. Many of the providers praised the course in helping them to deliver family planning services that is evidence-based, patient-centred and acceptable to the client. They enjoyed that they could hear from other providers how they dealt with challenging situations. They also thought that it helped to clarify ideas they had about which contraceptive methods are suitable for patients. For example, one PN described that providers at the clinic would not prescribe the Implanon for adolescent females and during the training, she found out that this was not based on evidence. They also enjoyed the practical aspects of the course. A majority reported that it is in-depth and provides a lot more information than they received in the nursing training. Two providers who had not yet attended the course were curious about what information is given during this training and how this might impact on how they deliver FP services. One provider who is currently attending the course felt it was not justifiable for providers to delay attending this training. She has been working for

two years and only started attending the course last year and she felt this was a disservice to clients as she thought there was a significant gap between what they think they know about family planning and what is being delivered on the course. Consequently, all the providers who attending the training felt significantly more confident to deliver contraceptive counselling and to prescribe contraceptive methods that are appropriate for the needs of their clients.

3. Dual protection

Many providers noted that it was challenging to promote dual protection to adolescents and married clients. Married clients will often report to providers that their partner would become suspicious or refuse to use a condom if they suggested to use it because it was never used in the past. Clients are more focused on using contraception to avoid pregnancy. Providers are delivering health education related to this and the risk of contracting HIV even within marriages. With regards to female adolescents, this is mostly related to struggling to negotiate condom use in intergenerational relationships.

4. Contraceptive methods requested by patients

Most providers stated that their clients request to use injectables (especially 3-month injectable). They attributed this to the influence of friends and family members who are also using injectables. Providers reported that it was most requested due to convenience – this method is most convenient for working clients who are unable to attend the clinic every month and for clients who are not "responsible" or are "forgetful". They also noted that because there is a grace period if an appointment for the follow up injection is forgotten, this eases the client's fears about unplanned pregnancy. In comparison, oral contraception is perceived to be a much bigger responsibility (timing, concerns if missing a tablet or missing follow up to collect more pills, concerns about interactions with antibiotics etc). One PN noted that at their clinic, the pill is more popular because the clients were seen as being religious and they wanted greater control over birth timing (client's want to be able to stop the pill and have faster return to fertility due to their religious beliefs). The OC pill is also requested more amongst clients who are migrants and refugees from African countries. The Implanon was reported to be popular in the beginning of rollout, but many clients return to the clinic to have them removed after six months due to "menstrual chaos" or fears that the implant will be forcibly removed by drug users.

5. Youth clinics

Many providers supported the idea of the youth clinic to ensure that more youth feel the clinic is accessible to them to seek family planning services. However, they noted that few

youth are attending the clinic despite the new appointment system and the dedicated hours for the youth service. They believed it was due to many older clients (whether alone or with children) continuing to "drop in" at the clinic during this dedicated time and providers thought this was a barrier due to the stigma attached to youth attending the clinic. They also believed that the dedicated time for the youth clinic allowed youth seeking family planning services to be easily identified by members in the community. They also believed the youth clinic needed to be promoted more in schools but this was a significant challenge in areas where principals, student governing bodies and parents are resistant to the promotion of family planning services in schools. They also reported that the youth clinic and family planning services needs to be promoted to the parents in addition to learners at the schools.

6. PACK guidelines

All the providers reported using the PACK guidelines to assist with contraceptive prescribing. Some providers reported the guidelines were helpful, whereas other providers thought that the guidelines only worked for the "ideal" clients or it clashed with the needs of the client. For example, one PN noted that a client had developed high blood pressure and advised her to switch to an OC pill based on the clinical guidelines and the client felt burdened by having to adapt to a regimen which she has never used before after using injectables for most of her life. This was in addition to the client also felt overwhelmed that she needed to use medication to manage high BP. One PN also noted that the clinical guidelines does not assist them with prescribing contraceptive methods that are suitable for client's who have both diagnosed or undiagnosed mental illness and how this might interact with client's who are using medication to manage their mental health. Some providers also reported that using clinical guidelines "programmed" them to deliver services in a robotic manner as opposed to being focused on the needs of the client. Conversely, some providers fear that deviating from the clinical guidelines might place the client at risk for adverse health outcomes and would avoid prescribing any contraceptive method that may result in this. However, this became challenging when clients reject using a suggested method they have not requested. This also increases the providers fear that if the client has an adverse health outcome, that their job and reputation may be affected.

7. Provider roles

The majority of providers view their role as decision-facilitators during contraceptive counselling. They reported they provide the client with information on all the different contraceptive methods and their related side effects to assist the client with making a choice. If a client chooses an unsuitable method, they will explain to the client why the method might be unsuitable and alternative options. Some providers also suggest

methods they believe might be more suitable for the client than their current method (client's returning for follow-up). For example, one PN reported she promotes the IUD to both clients attending FP services for the first time and returning clients (including young women and nulliparous women) because it is long-term and non-hormonal. Providers also consider their role to reassure clients and to manage their fears and concerns. They also view themselves as protectors of both adolescent and adult females with regards to protecting their right to use contraception. For example, providers reported that parents will enquire why their daughters have attended the clinic and providers will not disclose that they are seeking family planning services. They would also not suggest OC pills to such clients as this might easily be found; instead they would suggest these client's use methods that can be hidden for example injectables or IUD (the Implanon has to be inserted into the arm and the bruising etc. may be noticeable). They also assist adult clients who are hiding their contraceptive methods from their partners by giving them strategies to hide their appointment cards or contraceptive methods (keeping it at work instead of at home) or prescribing contraceptive methods that will not be discoverable.

8. Provider attitudes towards specific contraceptive methods

Oral Contraceptives

Most providers continue to be hesitant to prescribe OC pills to adolescent and younger women as they are perceived as lacking a routine, being irresponsible and not being mature enough to follow the regimen. However, most providers also reported they would prescribe this method as opposed to not prescribing anything and placing the client at risk for an unplanned pregnancy.

Injectables

Most providers are also hesitant to prescribe injectables to clients older than 40 years old and they attributed this to their understanding that there is an increased risk of osteoporosis if this is continued. They also reported that if older clients do not switch, it will become challenging for them to identify if they are experiencing menopause. Majority of the providers feel frustrated by older clients who are resistant to switching to OC pills, particularly because they think clients are not using injectables for family planning but rather because they want to suppress menstruation. Thus, they perceive this client population as being challenging.

Intrauterine devices

Lastly, a few providers had a positive attitude towards prescribing the IUD, particularly for younger women. They also believed that prescribing the IUD may help clients to avoid unwanted side effects that they commonly have with hormonal methods. Thus, they believed the IUD was a great option as it is long-term and are excellent for clients' peace of mind because they do not have to be concerned with keeping appointment cards and fewer side effects. However, this was only amongst providers who had received training

on IUD insertion. Providers who only have theoretical knowledge of the IUD were less confident and less likely to promote the IUD to clients.

Implanon

The Implanon was not reported often by providers. They would only avoid prescribing this to HIV positive clients due to interactions with ARVs. Some providers also noted they would not prescribe this to clients who experienced heavy bleeding on injectables.

9. Client preferred bleeding patterns

Many providers reported that clients are not only seeking contraception to avoid unplanned pregnancy but also to achieve menstrual suppression. Thus, many providers consider client's preferred bleeding patterns before prescribing a contraceptive method. The providers reported numerous reasons why clients may want to achieve menstrual suppression including to avoid costs associated with buying sanitary products. Alternatively, some clients prefer a "regular" menstrual cycle due to fears around blood building up in the body. Thus, it was important for them to ask clients about this as they reported the main reason why clients discontinue contraception is due to irregular or unwanted bleeding.

10. Factors considered when prescribing contraception

The factor most considered by providers when prescribing a contraceptive method is medical eligibility. This is based on age, weight, BMI, current chronic illnesses, current medication use and HIV status. This was mostly reported in relation to side effects, for example one PN stated she would not prescribe the injectable to a patient who weighs less than 45kg because they will experience heavy bleeding. They also reported they would consider the BMI as clients who are already overweight might experience weight gain if they use the injectable. Other factors also considered included client's sexual and reproductive health history, their fertility desires, their employment status and their socioeconomic status. However, these factors were often only explored if clients reported on it; it was not always initiated by the provider. They also consider clients' preferred contraceptive method and compare this with which methods are suitable for them.

11. Managing partner involvement

Some providers reported that male partners need to be given the same health education provided to female clients. They also stated that when an opportunity arises to do this, they will ask the partner to join the counselling session. They also believed male partner involvement might help to address challenges around dual contraception. However, most providers felt uncomfortable when male partners intervened in contraceptive decision-making and made the decision for their partner. Providers felt this infringed on their belief

that the woman should make contraceptive decisions for her body and that this impacted on her autonomy. However, they also acknowledged their professional duty to respect clients' religious and cultural beliefs. Thus, they reported that this clashed with their idea of upholding the clients right to choose. Many providers struggle to manage male partners being involved in contraceptive decision-making. Often, when male partners exit the consultation room, providers will ask client's if they agree and prescribe a method based on their response, regardless of whether this contradicts with the contraceptive method the client agreed to in the presence of their partner. Male partners are also involved in requesting their partners' contraceptive methods be discontinued and decisions around birth timing and spacing.

12. Challenges:

The two major challenges highlighted included having sufficient time to provide in-depth contraceptive counselling and contraception stockouts.

Many providers felt they could not provide an adequative service due to insufficient time with clients – this was both related to clinic constraints and client constraints. Clinic constraints included high caseload due to clinics being a "one stop shop" and having to provide multiple services to various clients. For example, one PN reported that if there is an emergency with a client, they use a significant amount of time to address the emergency which compromises the time spent with other clients, who they believed were equally important. They also reported issues with meeting targets and "stats" – this was often perceived to be a barrier to providing patient-centered care as they were expected to focus on number of patients as opposed to quality of care. They reported that it is challenging to balance providing quality, in-depth contraceptive counselling which requires time with concerns that colleagues are managing the high load of clients on their own if they are seeing a high number of clients within a certain time period. Client constraints were mostly related to clinics who see a high number of clients who attend the clinic due to its proximity to their workplace. Often, these clients are attending the clinic before work or during their lunch break and this creates a significant time constraint as clients are mostly focused on getting their requested contraceptive method. Thus, providers reported there is limited time to explore issues such as side effects and to provide health education.

The next major challenge reported was contraceptive stockouts. Many providers felt it was challenging to promote patient-centered family planning if women were unable to access their preferred contraceptive method. They also reported that many patients were resistant to switching to an alternative method, particularly if their current method was acceptable to them due to issues related to convenience and fears about unwanted side effects. Providers also reported that certain contraceptive methods are prescribed to assist with managing side-effects and this was not in stock at one point and thus could not be prescribed to help clients manage certain side effects.