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Post-partum Family Planning Service Provision in Durban, South Africa: Client and Provider Perspectives

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Abstract

Researchers in sub-Saharan Africa have found health facility factors influence client contraceptive use. We sought to understand how client provider interactions, discussion of side effects and HIV status influence women's contraceptive use post-partum. We conducted in-depth interviews with 8 HIV negative clients and 6 HIV positive clients in Zulu and with 5 nurses in English. Interviews were translated and transcribed into English. We created a codebook and coded all transcripts. Nurses and clients reported limited time to discuss contraception, side effects and HIV. Nurses did not comply with national contraceptive policies and created unnecessary barriers to contraceptive use.

Keywords

Africa; sub-Saharan; contraception; health care; international; HIV/AIDS; postpartum care

As part of a larger intervention study to improve reproductive outcomes for pregnant and post-partum clients, we sought to better understand health facility factors influencing women's post-partum contraceptive use. We explored factors previously identified in the literature as important to contraceptive use and continuation, and found that several of these were also vital to clients and providers in this setting. Our study is unique because we include *both* the client and nurse perspectives about family planning service provision. This study is of particular interest to an international, interdisciplinary audience because our findings are useful to public health professionals who promote contraceptives postpartum, and the areas for suggested intervention are relevant to family planning service provision in

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other countries. We highlight the importance of addressing areas amenable for intervention at the facility level for nurses and clients, as a strategy to improve postpartum contraceptive use and continuation.

Background

South African women of childbearing age (15–49) are vulnerable to HIV infection and unintended pregnancy despite high levels of contraceptive use (Department of Health, 2007). An estimated 3,300,000 women age 15 and older are infected with HIV, accounting for 62% of adult infections (UNAIDS, 2010). Half of all births to women of childbearing age in South Africa in the five years prior to the last Demographic and Health Survey (DHS) were unintended at the time of conception (Department of Health, 2007). Twenty four percent of those pregnancies were wanted later (mistimed) and 23% were not wanted at all (unwanted) (Department of Health, 2007). High levels of contraceptive use among sexually active women in South Africa belie high levels of unintended pregnancy. The contraceptive prevalence rate for sexually active women of reproductive age (15–49) was 65%, according to the most recent DHS (Department of Health, 2007). Despite efforts to deter unintended pregnancies in HIV positive women, 300,000 HIV positive women give birth each year resulting in mother-to-child transmission of HIV, and many of these births were likely unintended (World Health Organization, 2006).

In recent years, the South African government invested considerable resources in expanding family planning programs, particularly for HIV positive women, as a cost-effective public health intervention (Department of Health, 2001). However, there still remains an unmet need for contraception of 15%, and that were this need met, over U.S. 3.3 million dollars would be saved annually (Halperin, Stover, & Reyolds, 2009). Further, reductions in unwanted births may contribute to lowering the number of maternal and infant deaths, particularly for HIV positive women and children (Wilcher, Petruney, Reynolds, & Cates, 2008). The leading cause of excess maternal and infant death in South Africa is HIV/AIDS, and the maternal mortality rate for HIV positive women (340 deaths per 100,000 live births) is ten times higher than for HIV negative women (Chopra, Daviaud, Pattinson, Fonn, & Lawn, 2009). Reducing morbidity and mortality due to HIV/AIDS in women and children through modern contraceptive use is a cost-effective intervention (Reynolds, Janowitz, Wilcher, & Cates, 2008; Wilcher, et al., 2008). For example, small decreases in unwanted pregnancies in HIV positive women are equivalent to approximately the same number of infant infections averted through anti-retroviral (ART) drugs, yet modern contraceptives are much less expensive than ART drugs, and are therefore more cost effective (Sweat, O'Reilly, Schmid, Denison, & de Z, 2004).

Authors of several research studies in Africa found that the health facility plays an important role in client contraceptive adoption and continuation (Bradley, Gillespie, Kidanu, Bonnenfant, & Karklins, 2009; Chabikuli, et al., 2009; Liambila, et al., 2009; Ngure, et al., 2009; Spaulding, et al., 2009). In South Africa, the contraceptive method mix may play an important role in contraceptive continuation. Contraceptive use in South Africa is dominated by injectable methods (Depo-Provera and Nuristerate), which account for approximately one third of all contraceptive method use, and 83% of women receive contraceptives from the

public sector, where they are free (Department of Health, 2007). Researchers in other settings have found that when women are given a choice of contraceptive methods, continuation rates are higher (Frost & Darroch, 2008; Pariani, Heer, & Van, 1991). Health facility factors such as the contraceptive method mix available, counselor's level of knowledge and explanation of side effects, and client waiting times have all been shown to influence contraceptive adoption and client satisfaction (Allen, et al., 1993; Elul, et al., 2009; Halperin, et al., 2009; Hoffman, et al., 2008; Maharaj, 2006). Given high rates of unintended pregnancy despite high levels of contraceptive use in South Africa, changing health facility factors to improve client contraceptive adoption and adherence may be an effective area for intervention.

We sought to better understand health facility factors influencing women's post-partum contraceptive use as part of a larger intervention study to improve reproductive outcomes for pregnant and post-partum clients through psychosocial support services. We explored factors previously identified in the literature as important to contraceptive use and continuation, to determine whether these were also important to clients and providers in this setting. These factors included: client waiting times, amount of time providers spend with clients, client provider interactions when discussing contraception, discussion of contraceptive side effects, whether or not a client's HIV status played a role in the contraceptive methods promoted to them, discussion of condoms, patient's satisfaction with the family planning services, and patient and provider's suggestions about how to improve family planning services (Bradley, et al., 2009; Chabikuli, et al., 2009; Liambila, et al., 2009; Ngure, et al., 2009; Spaulding, et al., 2009). Authors of previous studies in South Africa and other sub-Saharan African countries examined family planning service provision from either the client *or* the nurse perspective. Our study is unique because we include *both* the client and nurse perspectives about family planning service provision. We add to the literature about post-partum family planning service provision by providing suggestions from multiple perspectives, thus strengthening the validity of our findings. By including multiple perspectives, we were better able to understand why post-partum family planning services are provided the way they are, and we were able to suggest improvements that satisfy both health care workers' and clients' needs.

Methods

Study Setting

The study setting is an urban township outside the city of Durban in the province of KwaZulu-Natal (KZN). The HIV prevalence in KZN is 16.5%, and as high as 40% in pregnant women testing in antenatal care (Abdool-Karim, et al., 2011; Human Sciences Research Council, 2005). Contraceptive use among sexually active women in KZN is high at 76%, however, 23% of women used no method at all at last sex (Department of Health, 2007). Some of these women may desire pregnancy, but for others, non-use of a contraceptive method at last sex leaves them vulnerable to both HIV infection and unintended pregnancy. Fifty-four percent of currently married women in KZN want no more children, and this percentage increases with parity (Department of Health, 2007). The unmet need for family planning in KZN is 6.8% (Department of Health, 2007).

Study Site

The study site is a government public health clinic in the township. The clinic is staffed by one physician and 15 nurses and offers services 24 hours a day, seven days a week. The study was part of a larger intervention study initiated by the University of KwaZulu Natal and the University of North Carolina at Chapel Hill, The South Africa HIV Antenatal Post-test Support Study (SAHAPS), a randomized controlled trial examining the efficacy of an integrated model of HIV post-test support for women attending antenatal care at the study site. The township was established during apartheid as a settlement where black migrant laborers resided after working in the city during the day. It is the biggest township in KwaZulu-Natal (Thumboo, 2011) and the second biggest in the country (Mullick, Kunene, & Wanjiru, 2005). The population estimate for the township varies considerably depending on whether the enumerators included informal settlers or not in their estimation; the lower bounded estimate suggests that 300,000 people reside there (Integrated development Durban: Ethekwini municipality, 2007) while the upper bounded estimate is that the population is nearly 2,000,000 (Mullick, et al., 2005). The community has one hospital that serves the 17 clinics in the surrounding area.

Ethical Approval

All study methods and procedures were approved by the Biomedical Research Ethics Committee at the University of KwaZulu-Natal located in Durban, South Africa and the University of North Carolina at Chapel Hill, Chapel Hill, USA, as well as the Regional South African Department of Health office and the head supervisor at the research site.

Interview Procedures

We purposively recruited fourteen family planning clients by HIV status (8 HIV negative; 6 HIV positive). We intended to recruit 10 HIV positive and 10 HIV negative women, but reached data saturation with fewer women. All women were legal adults (18 years or older), had experience with post-partum family planning at the clinic and gave informed consent. We developed a semi-structured in-depth interview guide in Zulu with the help of local staff. All interviews were conducted in Zulu by a trained interviewer and tape-recorded. Interviews lasted from 30–60 minutes. Tape recordings were transcribed and translated into English from Zulu. Interviewees were remunerated with 50 Rand (~US $6) for transportation.

Five nurses were purposively recruited to participate in the study with the help of the local study staff and all were 18 years old or older and gave informed consent. Nurses interviewed were all of the clinic nurses who promoted family planning post-partum. We developed a semi-structured in-depth interview guide in English for nurses with the help of local staff. The interviews were conducted by the first author in English and lasted 30–75 minutes. The in-depth interviews were tape-recorded and transcribed. Nurses were remunerated with 20 Rand (~US $2.58).

Analysis

The first author read all of the client and nurse transcripts together for initial theme identification. Then, the first author created a preliminary codebook drawn directly from the

interview guides and emergent from the data. The transcripts were then hand-coded using deductive coding primarily from the interview guide questions, although we also used some inductive coding as well, representing themes that emerged from the interview data (Berg, 2004). The unit of analysis was the individual. Analyses of client interviews included exploring differences between HIV negative and HIV positive women's experiences at the clinic.

Results

Demographics

The average age of client participants in in-depth interviews was 29 (range: 18–36 years) and HIV positive women were older than HIV negative women on average (31 versus 27). Women were highly educated, as all completed 10 to 12 years of schooling and 64% completed Matric, the high school equivalent in South Africa. Most women had one or two children (range: 1–3) and HIV positive women had more children on average (2.3 compared to 1.6 for HIV negative women). One woman was married, one woman was single and the remaining 12 women were in relationships, but not married. Although women were not married, they were in relationships for an average of 4.8 years (range: 1–17), and HIV positive women had been in a relationship for an average of 4 years and HIV negative women for 7 years.

All but one woman (93%) reported current contraceptive use, and all 13 women were using an injectable contraceptive method. Four women specified that they were using the 3-month injectable (Depo-Provera) and one specified that she was using the 2-month injectable (Nuristerate) and the other women did not specify the injectable type. Eleven of 14 (79%) women reported past contraceptive use. Five women used an injectable contraceptive method, two used contraceptive pills, three used condoms and one used contraceptive pills and condoms. All six HIV positive women used contraceptives in the past (3 injectable contraceptives, 2 condoms and 1 injectable contraceptive and condoms). Five of eight (63%) HIV negative women used contraceptives in the past (2 injectable contraceptives, 2 contraceptive pills and 1 condoms).

The nurses interviewed were an average 49 years old (range: 37–55) and four of the five nurses had been working as nurses for over 20 years (average for all five: 23 years, range 6–31). Two nurses had worked at the clinic for over 20 years, and the others between 4 months and two years.

The Process of Family Planning Promotion and Provision

Women arriving for family planning at the clinic register at the main clinic and then wait in the reception area of the main clinic until they are called in groups of 10–15 to come to a separate building where they, along with other women there to immunize their babies, are seen by nurses who immunize babies and distribute family planning. All women coming for post-partum family planning wait with clients also seeking immunization and see the same nurses. Women coming for family planning for the first time receive education from a nurse in a group about the available contraceptive methods and then have an individual

conversation with a second nurse. Women returning for family planning only meet with one nurse in a private room. All of the women interviewed were at the clinic for post-partum family planning. The family planning methods offered are two injectable contraceptive methods, Depo-Provera and Nursisterate, as well as hormonal contraceptive pills and condoms. All contraceptive methods are free of charge. When we asked nurses and clients whether other methods should be offered, they didn't think any other methods were necessary. We also asked whether stock-outs of available contraceptive methods were a problem and nurses and clients said it was never a problem. Women are given a family planning card where nurses write the contraceptive method of their choice and their return appointment dates.

Factors Important to Client Satisfaction with Family Planning Services: Waiting Times and Nurses Treatment of Clients

The amount of time women waited for family planning services affected their reported satisfaction with services. When women waited for short periods of time, 10–15 minutes, they were satisfied. When they waited for long periods of time (hours) they were not as happy with the family planning services. Women reported that if you arrive early in the morning (7am) the family planning nurses attend to patients quickly. The nurses begin to see clients around 8am, and at that time, clients move quickly from the main clinic to family planning and are often seen in 10–15 minutes. One woman described this:

> [The nurses] treated me very well. When you come to the clinic, you don't wait for a long time. They are very fast to help you. When they start working you don't wait more than ten minutes. They have good care. They are very hospitable. *(Client #2, 20 years old, HIV negative, 1 child, 12 years of education)*

However, two women reported long waits when they were unable to get to the clinic first thing in the morning. One woman explained:

> Sometimes, if you are not here early, they don't attend to you. They forget that we are not the same. I live [in another part of the township] and sometimes…I come here after 10 [am]. They ask: "Why were you sleeping?" We once came after 10am, and we waited until 3:30pm, it was so slow. *(Client #9, 32 years old, HIV positive, 3 children, 11 years of education)*

A different woman was frustrated because at her last family planning visit, the nurses were rushing in the afternoon and were not giving the patients optimal care because they had arrived at the clinic later in the day:

> The nurses asked me why I came in the afternoon. I told them that I forgot that it was the 16th and that was why I didn't wake up early in the morning to come to the clinic. When I checked my card in the afternoon and saw that it was my date, I rushed and came late. [Because it was so late] the nurses didn't have any time. I don't want to lie to you; they didn't have any time. Instead of asking us questions about how the injections were treating us, because they normally ask, they didn't ask any of us, but they wrote down "she is happy", where as I never said that at all. *(Client #10, 27 years old, HIV positive, 1 child, 12 years of education)*

The nurses realized that sometimes patients wait a very long time in the clinic, but the nurses said that they were understaffed and overloaded with patients. One nurse described this situation:

> Clients want things to happen [immediately] but [sometimes] we are not fully staffed. So sometimes we'll let the client know we are busy with someone else. But some people [lose patience]. Nurse #1

Some women compared their experiences at the clinic to other clinics in the township and preferred the services of the study clinic because of their hospitable treatment of patients:

> When you go to other clinics for contraception, the nurses treat you badly. They shout at you and say all sorts of things. But here, even if you missed [the date for the injection], they don't ask you a lot of things; they do what they are supposed to do. I think they treat patients well here, I have never seen any abuse [of patients]. *(Client #3, 34 years old, HIV positive, 3 children, 11 years of education)*

When women reported that they were treated poorly or did not feel comfortable with the nurses, they were more likely to also report dissatisfaction with the family planning services. One woman said it was because there were certain nurses with whom she did not feel comfortable:

> There are those [staff] for whom you feel like going to the back of the queue [in order to] see the staff who don't [cause] problems. Sometimes you [wish] you knew who was on shift, otherwise, you can't relax. You should be able to relax with the nurse and tell her when you have a problem. [The way it is now] you are scared to tell the nurse your problem if you have one. *(Client #9, 32 years old, HIV positive, 3 children, 11 years of education)*

A different woman said that nurses shout at the patients and are impatient with clients, to the point that she was considering going to a different clinic:

> I got what I came for, but my feelings were hurt. I did not feel good. Sometimes when it is your date to attend the clinic, you think, I can't talk to the nurses because they are always busy shouting [at the patients]. Sometimes I think [about] changing to another clinic. *(Client #8, 23 years old, HIV negative, 1 child, 12 years of education)*

Variability in Length and Content of Nurse-Client Conversations Affects Clients' Understanding of Family Planning Methods

We asked women about their most recent conversation with a family planning nurse. Five of the 14 women said that the nurse spent time with them and explained how the injection works in the body, possible side effects, risk of pregnancy if they miss a dose, the importance of condom use for protection from sexually transmitted infections and that they should return to the clinic if they experience problems with their chosen method. One woman described her most recent conversation:

> The nurse told me that the injection does not [always] agree with [you], and [sometimes] you must come back and change the injection. The nurse said when

> you take an injection [some clients] get fat and [some] don't develop anything [and some] bleed when using the injection. We spoke about the risk of pregnancy if you don't wait [to have sex] for 7 days. You must wait 7 days for the injection to settle. After that, you can sleep with a man. After the injection has settled, it protects you from pregnancy. *(Client #5, 27 years old, HIV negative, 2 children, 10 years of education)*

Nine of 14 women described very short conversations (2 to 5 minutes) with the nurses during which time the nurse usually only asked them what method they were using and then the nurse gave it to them. Women often didn't know the name of the contraceptive method they were using, but described it as the 2 or 3-month injection or the pills. One woman described her conversation with the nurse:

> [The nurse] asked if I chose pills or the injection, I said the injection for 3-months and she wrote it down, and I got the injection. They don't explain a lot of things; you just say the injection that you want or the pills that you want, that's all. *(Client #9, 32 years old, HIV positive, 3 children, 11 years of education)*

When asked whether nurses inquired whether clients experienced side effects, described the risk of pregnancy if they miss a dose, or discussed other family planning methods, five of the 14 women said no. One woman described her last conversation with the nurse:

> It's just that here at the clinic they don't explain. You end up choosing an injection [but you have] no information about it. Even when things happen in your body, it takes time [for you] to realize that it's a side effect from the injection, because you were never given an explanation [about] the good and the bad of [the injection]. *(Client #8, 23 years old, HIV negative, 1 child, 12 years of education)*

Some women were afraid to ask the nurses questions about family planning because there was a sense that they would take up too much time and the nurses were busy. One woman explained:

> [I wanted to ask] What is the difference between the 2-month and the 3- month injection? Because I've never heard about it in the clinic, but I always hear about it elsewhere. I was scared [to ask because the clinic] was full and there were people [waiting]. *(Client #14, 18 years old, HIV negative, 1 child, 11 years of education)*

We asked the nurses how many patients they see in a day and how much time they spend with each patient. All of the nurses said that they see between 20–30 patients per day and spend 2–5 minutes with each of them. They also said that depending on the patient's problem, they sometimes spend more time with the patient, but that they feel pressured to see patients quickly. One nurse explained:

> It is difficult. The number of patients is increasing due to the squatter camps. Sometimes when you see them you don't do a proper examination because of overload. In a day, we see 80 [patients]. And yet we are four nurses. It's supposed to be 30–40 minutes per patient. Sometimes [we don't have time] to do the proper thing. We have to push [in order to see everyone]. Nurse #2

Nurses described their conversations with the clients about family planning. The nurses treated the younger and older clients differently as well as the first time acceptors of family planning and the repeat users. One nurse explained how they separate the younger and older women:

> To make family planning effective, you must separate the young women from the older women, so that the women feel comfortable. Your health education and explanation will be different for the different groups of women. Nurse #5

For the younger clients, the nurses promote Nuristerate and for older women Depo-Provera. This is because Depo-Provera causes amenorrhea and it can take longer for fertility to return after stopping the method.

> Normally, the Nuristerate is good for the young ones who have never conceived. The other one [Depo-Provera or Petrogen], sometimes when you want to fall pregnant, it takes [a long time]. We normally start new acceptors and those who have never conceived on Nuristerate. Nurse #2

However, the nurses emphasized that it is the patient's right to choose the method and that they advise them about all of the different methods, and the patient ultimately decides for herself. The nurses also reported that they spend more time with the first time users because they must guide the patient in the process of choosing a method for the first time, and this requires more in-depth discussions. One nurse described this:

> When you are dealing with a patient who is coming for the first time, you have to spend more time with that patient because we have to tell the patient about the methods that we have, we look at the age of the patient, whether the patient is breastfeeding or not, whether the patient is HIV positive or not, so with those patients, we have to spend more time, especially when they are coming for the first [family planning] visit. Nurse #3

Menstruation: An Unnecessary Barrier to Family Planning Initiation

Six clients mentioned that a woman must be menstruating in order to initiate a contraceptive method at the clinic. These women said that if a woman is not menstruating the nurses send them home and tell them to come back when they are menstruating. One woman described this:

> You have to go [to the clinic] when you are still on your period. You [can't] just go there [any time]. [The nurses] want [clients] who are menstruating to [confirm] that they are not pregnant [before they start them on a contraceptive method]. *(Client #8, 23 years old, HIV negative, 1 child, 12 years of education)*

Three of the five nurses interviewed said that clients must be menstruating in order to initiate a family planning method at the clinic. One of the nurses described this:

> If it is her first time using family planning, she must wait for her period and then come to do family planning. Nurse #3

However, another nurse mentioned that nurses should not do this and that they should not turn away the clients because they are not menstruating:

> You must not dispatch the patients without a contraceptive method. Nurses have got it [in their minds] that the clients must be on their periods to start a contraceptive method. Then the patient will leave, have sex with her boyfriend and get pregnant. Bleeding or not, give the patient a contraceptive method [at that moment]. Even if you give the patient an injection when the patient is pregnant, that injection is not going to harm anything. Nurse #5

The Importance of Discussing and Understanding the Side Effects of Family Planning Methods

Ten of fourteen women interviewed reported 1–3 side effects when they used an injectable contraceptive method. Seven women described bleeding ranging from spotting to heavy bleeding for up to a month. Five of the seven women who experienced bleeding discussed it with a nurse, and one switched methods, another took pills to stop the excessive bleeding, for one woman the bleeding resolved on its own, and for two women they were waiting to see if the bleeding normalized. One woman was not informed that bleeding was a possible side effect of Depo-Provera:

> The first time I used Depo. With my ignorance, I bled for a month. When I came back to the clinic, I explained that the injection induced bleeding. [The nurses] asked me why I hadn't come back to tell them that I had a problem with bleeding. It was clear that I had not been well informed. *(Client #3, 34 years old, HIV positive, 3 children, 11 years of education)*

Another woman was aware of the possible side effect of bleeding and was able to resolve the issue when she told the nurse:

> I bled a lot when I first started using contraceptives. I bled for a long time, about two weeks, but after that, it stopped. [The nurses] explained to me that I might bleed a lot, but that it's not a problem. If I bleed a lot [the nurses explained] I should come to them so that they can give me the pills to stop the bleeding. *(Client #10, 27 years old, HIV positive, 1 child, 12 years of education)*

The other two women who experienced bleeding did not say anything to the nurses, and one of them was in need of advice:

> If [there was] something that would [return] my period back to being normal. But I'm not sure if that is possible. *(Client #14, 18 years old, HIV negative, 1 child, 11 years of education)*

Three women experienced weight gain and stopped getting their period, and one woman also experienced excessive bloating. One of the three women who gained weight told her sister, but not the nurse. She remained on the method. Another woman whose period stopped and she gained weight and had excessive bloating just stopped using contraception:

> I am the one who… what can I say? I wasn't having my period and I was gaining weight, so I thought I should stop for a while. [The injectable] makes you hungry, you gain a lot of weight and your body gets full of water. *(Client #13, 25 years old, HIV positive, 2 children, 12 years of education)*

All of the nurses said they counsel their clients about the side effects of family planning. In particular, they said that they emphasize the side effect of bleeding and educate the women about what to do if they experience this side effect. One nurse explained:

> When they first come, we tell them the pill or the injection might cause them to have severe menses. We tell them that if they menstruate for more than 7 days, they must come back. But if you see [the menses] coming and going, or spotting, that is a normal thing, or stopping. But they know. It doesn't scare them, because they know that it is the side effect from the injectable or pills. Nurse #1

Nurses also said that they educate about the side effects of headache and weight gain. One nurse thought it was important to discourage changing methods if clients experience side effects:

> The most common side effect is the headache, the weight gain. Educate. Don't say "Change the method", educate. Stay on the method. Unless there are severe, severe side effects. Nurse #3

Whereas another nurse cautioned against not switching the client's method because the client might stop taking contraception and then get pregnant:

> Tell them contraindications. Don't just say this [contraceptive method] is fine. Tell them about the side effects. When patients experience side effects, you counsel them. And then [depending on the patient] you change the method. If [the method] causes her to bleed, you cannot say: "Continue! Continue!" Because you don't want [her to stop the method and get pregnant]. Nurse #5

Another nurse also pointed out that if patients experience side effects, they don't always return to the clinic and just discontinue their contraceptive method. She described this:

> The patients don't always come back when they have side effects. They just stop taking the method. Nurse #4

The Importance of Discussing HIV Status and Family Planning

Of the six HIV positive women interviewed, the nurses discussed with four women their HIV status as part of their last family planning counseling session. The nurses who discussed women's HIV positive status supported their use of family planning, but also emphasized the importance of condom use and ART prophylaxis to them. One of the women who discussed her HIV positive status described her experience:

> The nurse said that if I know my status I must look after myself and use a condom. And because I am on contraception [I must not] stop using a condom. She said we must use condoms because we know our [HIV positive] status. *(Client #6, 32 years old, HIV positive, 2 children, 11 years of education)*

The two HIV positive women who did not discuss their HIV status with the nurses at the clinic wanted more information about how HIV and contraception affect their bodies. One woman explained:

> (Interviewer: Did the nurse say anything about your HIV status when you discussed contraception?) She never asked me about my [HIV] status. [The nurses] must [give us the] proper information. Like those of us who are HIV positive, they must explain to us, because there are those of us without [the right] information. If they could explain about family planning, what they are going to do, why they are doing it, how is it going to protect you and what is it going to do in your body. *(Client #11, 36 years old, HIV positive, 3 children, 12 years of education)*

For the eight HIV negative women, four did not discuss their HIV status with a nurse as part of the family planning counseling, three did, and there was no information for one woman. One woman who did not discuss her HIV status with a nurse did discuss the importance of condom use in addition to the injection:

> [The nurse] said even if you are on contraception it is important to use condoms because the injection does not prevent HIV, it prevents pregnancy. *(Client #5, 27 years old, HIV negative, 2 children, 10 years of education)*

Although one of the women told the nurse her HIV negative status, the nurse simply noted it, but did not discuss it with her:

> (Interviewer: Is there anything that the nurse said about your HIV status when you were talking about family planning?) She asked if I checked my HIV status, and I said yes. She asked: “What were the results?” So I said they told me I was negative. Then she wrote other things, and then I went to be injected. *(Client #8, 23 years old, HIV negative, 1 child, 12 years of education)*

Another nurse emphasized that even though the patient knows that she is HIV negative, she must still use condoms:

> (Interviewer: Did the nurse say anything about your HIV status when you discussed family planning methods?) Yes. My status was negative. [The nurse] told me I must not stop [using] condoms because a man goes all over. If I stop using condoms because I think I trust my partner, I [still] don’t know what he is up to. I’ll have sex with him, trusting him and knowing that I’m HIV negative; then I [might] get infected. Therefore, I must not stop using condoms. *(Client #7, 26 years old, HIV negative, 1 child, 12 years of education)*

Two nurses reported that they promote contraceptives the same way to HIV positive and to HIV negative patients. One of these nurses explained:

> We promote contraceptives the same way to HIV negative and HIV positive patients. If they are HIV negative they can still be exposed to HIV. And those who are HIV positive, they are supposed to use contraceptives, especially condoms, because they prevent STIs and pregnancy. Everyone must use contraceptives, condoms. If you don’t use condoms and you use [hormonal] contraceptives, you can get HIV. Use both [hormonal contraceptives and condoms]. Nurse #4

Two other nurses described differences in how they promote family planning to HIV positive and HIV negative clients. One nurse explained how family planning is promoted to HIV positive patients:

> Those who are HIV positive we don't give the 2-months [injection], the short acting one, rather we give the 3-months or long acting one. Because of contra-indication of the [ART] treatment, you cannot give a patient who is HIV positive the Tri-phasal, the Nordette, because the effect of the [contraceptive] tablets is reduced if the patient [is taking ART treatment]. Nurse #3

Tri-phasal and Nordette are contraceptive pills that do interact with ART drugs to lower contraceptive effectiveness. Another nurse described the importance of condom use for HIV positive patients, but also the difficulty of convincing HIV positive patients to use condoms. She explained:

> The HIV positive patients, we advise them to use condoms. They say [condoms] are uncomfortable, I'm going to die anyway, so [I'd rather have] "flesh on flesh" [sex]. We discourage "flesh on flesh" and still encourage them to use condoms. They say they don't enjoy sex with a condom. There are people who say "I'd rather die than use a condom". Nurse #2

Condoms Should be Discussed with All Clients

We asked women whether nurses discussed condoms during their last family planning counseling session. A majority of women discussed condom use with a nurse (11/14; ~79%), whether they were HIV positive (5/6; 83%) or HIV negative (6/8; 75%). Nurses emphasized with women in the counseling sessions that injectable contraceptives do not protect them from HIV or other STIs. One woman described her session, including a condom demonstration:

> (Interviewer: Did the nurse talk about condom use?) [The nurse] showed us how a condom is used. The condom protects you from falling pregnant and protects you from sexually transmitted diseases. The nurse showed us how it works and how to throw it away. *(Client #7, 26 years old, HIV negative, 1 child, 12 years of education)*

For HIV positive patients, nurses emphasized the importance of condom use at all times with their partners. One woman explained:

> (Interviewer: Did the nurse say anything about the use of condoms?) Yes, she did. She said that if you know your [HIV] status is positive, you must [have sex using] a condom at all times. She said that whenever you [have sex] with your partner, you must always use a condom. *(Client #13, 25 years old, HIV positive, 2 children, 12 years of education)*

Nurses also emphasized condom use with HIV negative women, particularly if they have multiple partners. An HIV negative woman described her session:

> (Interviewer: Did the nurse talk about condom use?) Yes. She said you should condomize. If you have multiple partners you must condomize, because you don't know where your partners have been. *(Client #1, 35 years old, HIV negative, 3 children, 12 years of education)*

All of the nurses said that they promote condoms to all clients, whether they are HIV positive or HIV negative. Nurses give out condoms free to all clients and demonstrate their proper use. One nurse described this:

> To promote condoms, we put them everywhere. The condoms are free for them to take. I demonstrate how to use a condom. Nurse #4

All of the nurses also explained that they promote condoms as a method to prevent sexually transmitted diseases, including HIV, but not as a family planning method. The nurses acknowledged that condoms are indeed a family planning method, but as a health education strategy, they promoted hormonal contraceptives for family planning and condoms for STI prevention as a means to encourage the use of both. One nurse explained this strategy:

> So I cannot say condoms are one of the methods of contraception, because when you say a condom is a method of contraception, the client will say nurse, I don't want to take Petrogen, I don't want to take Nuristerate; I'll use a condom. When you know very well that there will be that day when the patient will not use the condom. So never ever mention the condom as a contraceptive. Mention the condom as prevention for HIV/AIDS and STIs. Nurse #3

Although the nurses encouraged clients to use condoms and educated them about their proper use, they understood the challenges clients face when using condoms because their male partners are often opposed to condom use and because women are often submissive to men and unable to request condom use. One nurse described this:

> There are challenges with condom use. The clients say their husbands, their boyfriends; they don't want to use a condom. That is why there are so many people who are HIV positive. Nurse #2

Missed Opportunities and Misinformation about Sterilization as Another Family Planning Method

We asked women whether the nurses at the clinic ever discussed sterilization with them. Sterilization is not offered at the clinic, but women are referred to a nearby hospital for the procedure. Half of the women were interested in sterilization, yet none of them spoke with a nurse at the clinic about it. One woman explained:

> I first heard [about sterilization] at [the hospital]. The doctor was talking to someone next to me. [Their conversation] made me realize that sterilization is important. It's something that I always imagined as painful. I'm scared of anything that involves the uterus. I never heard [about sterilization] here [at the clinic]. *(Client #9, 32 years old, HIV positive, 3 children, 11 years of education)*

Five women were afraid of sterilization for different reasons. Two women were afraid that it wouldn't work. One woman explained:

> At the hospital I told the doctor to sterilize me because I did not wish to have another baby. I was talking to another lady and she said "I sterilized but here is the baby". She had two children and decided not to have another, so she sterilized. So then I also wanted to be sterilized, but I was scared. Now I'm worried because [if I

> do sterilize] I have no way to check to see if I was really closed. *(Client #3, 34 years old, HIV positive, 3 children, 11 years of education)*

The other women were afraid that sterilization would make them sick and were not clear how the procedure was done. One woman described her fears:

> I am afraid. I heard from ladies that are sterilized that it makes you sick. When you get the operation, [they] close the uterus inside and it makes you sick in the blood; that is what scares me. *(Client #5, 27 years old, HIV negative, 2 children, 10 years of education)*

Three women believed that you could not sterilize until you have three or four children. One woman also thought that her husband had to agree for her to be sterilized:

> If you are going to sterilize, your husband should also agree. Once I asked a nurse, before I had this baby, if you are allowed to [sterilize], if you had a C-section and you are pregnant with a fourth child. She said yes, if you agree with your husband. You are able to [sterilize], but the law says [after] three [children] and sometimes four [children]. *(Client #1, 35 years old, HIV negative, 3 children, 12 years of education)*

Despite women's fears about sterilization, half of the women interviewed wanted more information about the procedure. One woman expressed multiple fears, but was still interested in sterilization and wanted more information from a medical professional:

> I have thought about [sterilization], but I was frightened because people say it's scary. I don't know how it's done…some operation on the side of the body? I thought after having this baby, I would get sterilized. But I didn't do it. I was scared. And there's a girl who told me that she was sterilized, but she was always bleeding every month, and not just a little, but a lot. I would like to hear more about sterilization from a doctor or a nurse. *(Client #10, 27 years old, HIV positive, 1 child, 12 years of education)*

Several nurses said that female sterilization is rare because of lack of knowledge on the part of the providers and the clients and lack of uptake. One nurse explained the lack of knowledge about the procedure:

> It's very rare [sterilization]. It's a lack of knowledge on the part of the clients and the providers. The procedure is available. I would refer the patient to the hospital. I would first advise her. You want to give them time to think about it, because it's not an easy procedure, because then she won't be able to have a child for the rest of her life. Nurse #2

Another nurse perceived that patients weren't interested in sterilization:

> Even if we talk to patients about tubal ligation, they don't want to do it. Nurse #3

The nurses promote sterilization to older women with high parity or women who already had several C-sections. One nurse explained that sterilization if for higher parity women:

> Tubal ligation is a family planning method for those who have more babies. Let's say you've had four babies or three babies. The mother will say nurse, "I don't

> want any more babies. I'm tired of [taking] family planning". You tell the patient, because you have so many babies, three is enough for you, I recommend that you do a tubal ligation. Nurse #3

Patients are told they must use hormonal contraceptives before they are considered for sterilization, because they must be referred by a nurse to the hospital. The length of time nurses told patients that they must first use family planning varied. One nurse described this:

> We refer patients to the hospital for sterilization. Sometimes they ask what can I do if I don't want to have any more babies. We advise them to do family planning first, for one year. Then we refer them to the hospital. Nurse #4

Nurses were very reluctant to discuss sterilization with younger women because it is permanent, and they would rather the younger women use a reversible family planning method until they are older or are higher parity. Nurses said they considered the patient's age and marital status as part of discussing sterilization with a patient. One nurse explained the process:

> The process of sterilization…you check the [patient's] age, you check the marital status also. You check the HIV status [of the patient] and you also check the mentality of the patient. Nurse #5

Suggestions to Improve Family Planning Services

We asked women if they had any suggestions about how to improve the family planning services at the clinic. Most of the women said that they were satisfied with the services and did not have any suggestions, however, eight women gave suggestions about how to make the family planning services at the clinic better. Five of the eight women who made suggestions said that the women attending the clinic for family planning should be separated from the women attending the clinic to immunize their babies.

> I wish that they would separate [the patients] coming for contraception from the mothers with babies, because sometimes you are in a rush [to get your contraception]. *(Client #11, 36 years old, HIV positive, 3 children, 12 years of education)*

One woman suggested that one nurse be dedicated to family planning only.

> They should separate the nurses. There should be one nurse for family planning and one nurse for immunization. *(Client #6, 32 years old, HIV positive, 2 children, 11 years of education)*

The women who suggested these changes wanted the separation for expediency and for privacy.

The other three women suggested that the clinic staff needed to improve. One woman said she thought that the staff needed to learn to respect the clients more. She described this:

> (Interviewer: Are there any changes you think should be made to improve the clinic?) Educating the employees about respect…respecting other people. Maybe

> other things [would] automatically [improve]…because it all starts from respect. *(Client #8, 23 years old, HIV negative, 1 child, 12 years of education)*

In a similar vein, another woman suggested that the staff not shout at the clients:

> They should limit their shouting…the way they shout at you and go crazy. They must limit shouting [at patients] and speak to us in a pleasant manner. *(Client #13, 25 years old, HIV positive, 2 children, 12 years of education)*

Finally, one woman thought that the clinic needed more staff, and staff that are dedicated to their work and to the clients. She explained:

> They must find permanent staff that will work with passion, not casual staff. I wish they would increase [the number of] staff. What is more important, is that clients should be looked after, and [with] no delays. *(Client #9, 32 years old, HIV positive, 3 children, 11 years of education)*

We asked the nurses how the clinic could improve to make their jobs promoting family planning easier. Four of the five nurses said that the clinic should have one nurse dedicated to family planning only, rather than several nurses who work on family planning and immunization. The nurses said that this would help with privacy and allow the nurse to have enough time with the family planning clients. One nurse explained:

> We don't have a place where we have a family planning nurse [attending to family planning clients only]. It's time consuming because someone will come with a card for family planning and bring a baby for immunization, so you have to do immunization and family planning and there is no privacy. If there was a room just for family planning, that would be better. Nurse #1

Another nurse thought that they also needed more staff because they are too busy and don't have enough time to adequately promote family planning. She explained:

> We need to have more staff. Because you'll find that sometimes we fail to promote contraception because we are rushing the queue. That's the most important thing, the shortage of staff and the number of clients. I think for us to promote family planning we need to have more staff. We need to have a nurse who is responsible for family planning only. That is how we can effectively promote family planning. Nurse #3

One of the nurses discussed the importance of privacy, dignity and allowing the patients to ask questions. Dignity included not judging patients. She explained:

> Here at the clinic, we are caregivers, we are not mothers. We are not the priest. We are caregivers. When you see a young girl come to the clinic in a school uniform, [nurses berate them], but we are not their mothers. We are not the social worker. We are caregivers. Don't just shout [at her] and scold [her], she is not going to come back. Don't treat her as if she is your own child. Do you think someone is going to ask for contraceptives if you just shouted at her? That is why our clients are running away. Then the clients tell other people not to go to the clinic. Nurse #5

She also stressed the importance of letting the patients talk and ask questions:

> You must let the patient ask [questions]. You can't just talk and talk and talk. You must give them a chance to ask [questions]. Sometimes, if you just give them the method without telling them everything, for three or four days they are not safe [but they don't know]. They will think they are protected [when they aren't]. Nurse #5

Discussion

Clients and nurses reported variations in client waiting times and the amount of time they spent together during a family planning visit at the clinic. The volume of patients at times affected the client-provider interaction time, and as a result, the quality of care. Patients were unable to ask questions or perceived that nurses were too busy to answer them, and nurses reported that they felt rushed and didn't always have sufficient time to address patient's concerns. Authors of other studies also find that where staff are overworked and clients wait for a long time, patient satisfaction and quality of care are decreased (Cheraghi-Sohi, et al., 2008; Maharaj & Cleland, 2005; Myer & Harrison, 2003). The South African government's national contraceptive policy guidelines include that all government clinics ensure reasonable waiting times for clients (Department of Health, 2001). In this study, we found that although the clinic was open 24 hours, clients who did not arrive early in the morning often had to wait for very long periods of time, whereas those who arrived early were seen quickly and reported greater satisfaction with the family planning services.

Nurses promoted different contraceptives to younger and older clients. Nurses encouraged younger women to use Nuristerate and older women to use Depo-Provera. From the nurse's perspective, Nuristerate was better for younger women because their return to fertility was quicker compared to Depo-Provera. In a society where fertility is highly valued, this makes sense (Kaufman, deWet, & Stadler, 2001). Depo-Provera also causes amenorrhea, which may be unacceptable to some younger women. Authors of other studies conducted in South Africa found that menstruation was important to women because it was a way for "dirty blood" to exit the body, and lack of menstruation was a reason for method discontinuation (Laher, et al., 2010; Morroni, Myer, Moss, & Hoffman, 2006). Use of Nuristerate has increased in South Africa, likely due to its promotion to younger women (Morroni, et al., 2006; Smit, Gray, McFayden, & Zuma, 2001). However, according to World Health Organization guidelines, there is no reason based on age or parity alone why one injection should be preferred over the other, and the South African national contraceptive policy guidelines state that young women should not be prevented from using either injectable method because of their age (Department of Health, 2001; WHO, 2004). We also found that clients were required to initiate contraceptive use during their menstrual period to confirm that they were not pregnant. The South African national contraceptive policy guidelines clearly state that contraceptive use should not be restricted to menstruation because this creates an unnecessary barrier to access (Department of Health, 2001).

A majority of women in the study experienced side effects from injectable contraceptive methods. Most women discussed the possibility of side effects with a nurse when they initiated the method and returned to the clinic and were able to resolve their problems. However, several clients reported that the nurses never discussed side effects with them. Side effects are common with injectable contraceptive methods and can lead to

discontinuation (Hatcher, et al., 2003). Authors of studies in South Africa and other African countries also found that women who experienced side effects discontinued their contraceptive method (Imbuki, Todd, Stibich, Shaffer, & Sinei, 2010; Laher, et al., 2010; Nattabi, Li, Thompson, Orach, & Earnest, 2001). Effective counseling as defined in the South African national contraceptive policy guidelines includes providing complete information about the chosen method, including side effects and how to deal with them, and warning signs of complications and what to do if they occur (Department of Health, 2001).

Nurses were more likely to discuss HIV status with HIV positive women as part of their contraceptive counseling; however, nurses did not discuss HIV status at all with many clients interviewed. Some of the nurses said that they promoted family planning the same way to clients whether they were HIV positive or negative and some said that they promoted different methods to HIV positive women. Authors of a study in Ethiopia with voluntary HIV counseling and testing clients found that counselors were more likely to discuss reproductive health with HIV positive women (Bradley, Tsui, Kidanu, & Gillespie, 2010). South Africa's contraceptive policy guidelines state that providers should conduct an HIV/STI risk assessment with clients as part of family planning counseling and promote dual protection, as necessary (Department of Health, 2001).

Even where nurses did not explicitly discuss the client's HIV status, they did promote condom use. A majority of clients discussed condom use with nurses and nurses promoted condoms to clients regardless of their HIV status. In a population of women where the HIV prevalence exceeds 30% (Kharsany, et al., 2010), condom promotion to every client is extremely important. Nurses promoted condoms as STI prevention, not as a family planning method, in order to promote dual protection with clients. Both nurses and clients mentioned the difficulties of condom use with male partners. The difficulty of getting men to use condoms has been well documented in South Africa and elsewhere (Harrison & O'Sullivan, 2010; MacPhail, et al., 2009; Nattabi, et al., 2001; Rispel, Metcalf, Moody, Cloete, & Caswell, 2011).

Many women in our study were interested in female sterilization but expressed numerous fears and misconceptions about the procedure. None of the women interested in sterilization discussed it with a nurse. The nurses said that there was lack of information on the part of the clients and the nurses and perceived that clients weren't interested in the procedure. Patients are referred to a local hospital for the procedure, however, nurses were confused about whether the patient had to use contraception for a specified period of time before she could be sterilized and nurses were reluctant to promote sterilization to younger women. The South African Sterilization Act of 1998 guarantees the right to sterilization for any consenting adult over the age of 18 (Department of Health, 2001).

A majority of women interviewed were satisfied with the family planning services they received at the clinic. Women liked the fast service, hospitable nature of nurses they interacted with and they were happy with their contraceptive methods. For clients who were not satisfied with the services, they felt that the nurses were rushing and that nurses were impatient or demeaning to them.

When asked how family planning services at the clinic could be improved, clients and nurses thought that there was a need for more privacy for family planning clients and that a nurse (or nurses) should be dedicated specifically to family planning. The national contraceptive policy guidelines state that effective family planning counseling should be in a private, comfortable environment where client confidentiality is ensured (Department of Health, 2001). Nurses wanted more staff because they felt rushed and overworked and felt this would ensure better quality care. Nurses and clients thought that the staff needed to work harder to respect clients and not yell at them or demean them. As part of the national contraceptive policy guidelines, nurses should be trained in values clarification, anti-bias and the development of client rights, and provide services to all people in a respectful, understanding and nonjudgmental manner (Department of Health, 2001).

This study is limited by its size and the findings should not be generalized beyond the study site. The findings are based on nurses' and clients' self-reported behaviors and may suffer from social desirability bias. We tried to minimize this by interviewing clients in Zulu by trained interviewers who built rapport with interviewees and nurses in English by an interviewer with no influence in their professional development. Despite these limitations, the findings from this study are useful for understanding the family planning experience from the client and the provider perspectives.

Conclusion

We sought to understand family planning promotion from both the client and provider perspectives in a government clinic in an urban township in Durban, South Africa. Overall, most clients were satisfied with the services they received at the clinic, particularly when they were expedient and hospitable. We did uncover areas where services could be improved, and this has implications for post-partum contraceptive promotion in other settings. First, client volume decreased the amount of time nurses were able to spend with clients. Client volumes must be addressed so that clients and nurses are afforded sufficient time to discuss contraceptive options, side effects and conduct an HIV/STI assessment. In settings where HIV prevalence and unintended pregnancy rates are very high, it is imperative that nurses discuss with *all* clients their HIV status, contraceptive use and condoms for dual protection. Side effects and requiring a woman to be menstruating are deterrents to client contraceptive use and must be addressed through better nurse education. Sterilization as an option should be presented to all women and any myths about it dispelled by nurses. Finally, nurses must treat patients in a respectful manner so that they are able to discuss contraceptive use with nurses.

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