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## Author Manuscript

*Health Care Women Int.* Author manuscript; available in PMC 2014 July 07.

Published in final edited form as:

*Health Care Women Int.* 2012 ; 33(4): 342–358. doi:10.1080/07399332.2012.655390.

## Fertility Intent and Contraceptive Decision-making among HIV Positive and Negative Antenatal Clinic Attendees in Durban, South Africa

**Heather M. Marlow, M.P.H.\***,

Ph.D. Candidate, Department of Maternal and Child Health, University of North Carolina at Chapel Hill

**Suzanne Maman, Ph.D.**,

Assistant Professor, Department of Health Behavior and Health Education, University of North Carolina at Chapel Hill

**Allison K. Groves, M.H.S.**, and

Doctoral Student, Department of Health Behavior and Health Education, University of North Carolina at Chapel Hill

**Daya Moodley, Ph.D.**

Associate Professor, Women's Health and HIV Research Unit, Department of Obstetrics and Gynecology, Nelson R. Mandela School of Medicine, University of KwaZulu Natal

### Abstract

We explored contraceptive decision-making among South African antenatal clinic attendees, fertility intent post-HIV diagnosis, and women's experiences at government health facilities. Data are from in-depth interviews with HIV negative and HIV positive women. We interviewed women in Zulu; interviews were recorded, transcribed and translated. We conducted qualitative analyses of interviews. Women were the dominant decision-makers about contraceptive use, whether they involved their partners or not. A majority of women obtained a contraceptive method at a government facility; however, several women were unable to attain sterilizations. Women were presented with limited contraceptive options and were not always able to access services.

### Keywords

South Africa; HIV/AIDS; Fertility Preferences; Contraception; Qualitative Methods

### Introduction

We conducted an exploratory study to understand whether or how knowledge of HIV status affects antenatal clinic attendees' planning of pregnancies, their intentions to have more children, their decisions to use modern contraceptive methods, and their experiences attaining contraceptive methods and related reproductive health services at a public health

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\*Corresponding Author: [hmarlow@email.unc.edu](mailto:hmarlow@email.unc.edu).

clinic. We conducted this study to inform the development of a larger intervention to enhance HIV testing, contraceptive use and reproductive health services at the same clinic. This study is of particular interest to an international, interdisciplinary audience because our findings are useful to public health professionals who promote contraceptives post-partum and to Prevention of Mother to Child Transmission of HIV program managers. Our findings highlight the need for ongoing dialogue between patients and providers about fertility intentions and contraceptive use, even in a setting where contraceptive use is high and fertility desire is low. In addition, we uncover a need for improved client access to abortion and sterilization services, which are legal and free of charge in South Africa, yet remain inaccessible due to lack of promotion at this public health facility. Throughout this study we highlight the importance of learning about reproductive health services from the client's perspective in order to improve services, and this is important in other countries as well.

## Background

The adult HIV prevalence in South Africa is one of the highest in the world at 18.1% and women in their childbearing years (over the age of 15) are most affected, accounting for 59% of adult infections (UNAIDS, 2008). The HIV prevalence in women attending antenatal care in South Africa increased thirty-fold; from 1% in 1990 to over 30% today (Human Sciences Research Council, 2002). In response, the South African government initiated a Prevention of Mother to Child Transmission (PMTCT) program in 2001 to reach pregnant women. The PMTCT program goals are to improve HIV testing, place HIV positive women on treatment, prevent HIV infections in children, and avoid future HIV positive births through modern contraceptive use. Modern contraceptive use as a PMTCT intervention has the potential to avert 120,256 HIV positive births in South Africa yearly, according to estimates (Reynolds, Janowitz, Wilcher, & Cates, 2008). 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 (WHO, 2006). Unintended pregnancy is measured by asking a woman if she wanted to become pregnant at the time of the pregnancy (intended), later (unintended-mistimed) or did or want to have any (more) children (unintended-unwanted) (Santelli, et al., 2003). Half of all births 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).

Fertility rates in South Africa are quite low, and most South African women want two children on average, whereas in other sub-Saharan African countries, women want three or four children on average (Department of Health, 2007). In the last 40 years in South Africa, contraceptive use increased, resulting in declining fertility rates and lengthened birth intervals (Brown, 2003; Moultrie, 2005; Moultrie, et al., 2008; Moultrie & Timaeus, 2002, 2003). However, South African women still experience high levels of unwanted fertility and many first births are mistimed (43%) (Department of Health, 2007). In the context of the HIV/AIDS epidemic, women's control over the limiting, timing and spacing of births is ever more important. Understanding a woman's fertility desire and whether her HIV status

affects her decision to bear more children is critical to meeting women's needs for contraceptive methods.

There is a growing body of evidence from sub-Saharan Africa about whether HIV/AIDS status affects women's fertility desires, and the evidence is mixed. Researchers from several different studies found that women who know they are HIV positive do not want more children. Using DHS data from Zambia, Swaziland, Zimbabwe and Lesotho Johnson et. al. found that women with an HIV positive test result received in the prior year were less likely to want a/another child compared to HIV negative women or women who hadn't received their test result (Johnson, Akwara, Rutstein, & Bernstein, 2009). Upon receiving an HIV diagnosis, HIV positive women in Rwanda and Zimbabwe were more likely to report that they did not want any more children compared to HIV negative women (Allen, et al., 1993; Feldman & Maposhere, 2003; Grieser, et al., 2001). Authors of several studies found that positive HIV status actually increases women's fertility desire, particularly for women on anti-retroviral treatment (ART) or for women who do not have children. Researchers in South Africa, Kenya and Uganda showed that HIV positive women on ART were more likely to want more children than women not on treatment (Cooper, Harries, Myer, Orner, & Bracken, 2007; Maier, et al., 2008; McCarraher, et al., 2008). HIV positive women who have no children are still likely to want at least one child because of social expectations that women should bear children, although this expectation varies across societies (Cooper, et al., 2007; Hirsch, 2007). Researchers from Zambia, Zimbabwe, Cote d'Ivoire, Kenya, Rwanda, South Africa and Tanzania found HIV status did not affect fertility desire because social, cultural and health factors outweighed HIV status on decisions about childbearing (Baylies, 2000; Gregson, Zhuwau, Anderson, & Chandiwana, 1998; Rutenberg, 2006).

Researchers from several sub-Saharan African countries found that when clients learn their HIV status it affects their contraceptive use; however, in most studies, increases in contraceptive use did not persist long-term. In a prospective cohort study of women in Lilongwe, Malawi examining HIV status and contraceptive use up to one year after diagnosis, researchers found initial increases in use, but decreases in use over time (Hoffman, et al., 2008). Researchers in Kigali, Rwanda found HIV positive women had initial higher contraceptive use compared to HIV negative women, but half of HIV positive women and one-third of HIV negative women discontinued use after one year (Allen, et al., 1993). In another study of HIV sero-discordant couples in Lusaka, Zambia researchers documented initial increases in contraceptive use, but no impact on pregnancy incidence, and high levels of user failure and discontinuation (Mark, et al., 2007). In a multi-country population based analysis of DHS data from Zambia, Swaziland, Zimbabwe and Lesotho, Johnson et. al. found that women who were aware of their HIV positive status were more likely than HIV negative women or HIV positive women who were not aware of their status to use contraception (Johnson, et al., 2009). In a study of PMTCT attendees in KwaZulu Natal, researchers found that the odds of condom use were higher for HIV positive compared to HIV negative Zulu women post-partum and the effect persisted up to two years (Ngubane, et al., 2008). The authors of a second study in South Africa examining any modern contraceptive use in the post-partum period in a PMTCT population in Eastern Cape found no differences in contraceptive use between HIV negative and positive women, but

the authors did not control for demographic variation among women (Peltzer, Chao, & Dana, 2008).

We conducted an exploratory study to understand whether or how knowledge of HIV status affects antenatal clinic attendees' planning of pregnancies, their intentions to have more children, their decisions to use modern contraceptive methods, and their experiences attaining contraceptive methods and related reproductive health services at a public health clinic. We contribute to the existing literature about the need for discussion of fertility intentions and contraceptive use between clients and providers, in order to better promote and deliver reproductive health care to clients in public clinics. The findings are of interest to public health and medical practitioners working in antenatal care, contraception and HIV/AIDS prevention and their clients. We also highlight where providers can improve access to needed reproductive health services for women, including sterilizations and abortions.

## Methods

### Study Site

The study site is a government antenatal clinic located in an urban township outside the city of Durban in the province of KwaZulu Natal (KZN). Almost all antenatal clinic (ANC) attendees are black Zulu South Africans. Each year, there are approximately 9,000 first time ANC attendees (ages 16–40 years) at the clinic (Maman, et al., 2007). HIV prevalence at the ANC clinic increased from 4% in 1990 to 46% in 2004 (Maman, et al., 2007). Since 2001, 21,369 women have been offered HIV testing at the clinic, of which 18,163 (85%) agreed to test and 8,173 (45%) were HIV positive (Maman, et al., 2007).

### Sample

Data are from in-depth interviews with 10 HIV negative and 8 HIV positive women aged 18 or older attending the clinic for postnatal care. The purpose of the interviews was to describe factors that influence women's decisions about family planning and the role of HIV sero-status in their decisions to use contraceptive methods. Women were recruited purposively based on HIV status and whether they were currently using modern contraception or not. Interviewers trained and experienced in research ethics and methods recruited the participants. We developed semi-structured interview guides in English and translated them into Zulu. Trained interviewers conducted in-depth interviews in Zulu in a private room at the ANC clinic. We audio recorded the interviews, and the interviews were then transcribed and translated into English. We checked interview transcripts for content, quality and accuracy of the transcription and translation. All participants gave informed consent and Institutional Review Boards at the University of North Carolina at Chapel Hill and the University of KwaZulu Natal approved the study methods.

### Analysis

We uploaded interview transcripts in English into the qualitative software package AnSWR (CDC, 2007). We created a codebook using deductive themes derived from the interview guide as well as inductive themes emergent from the data (Berg, 2004). Using deductive qualitative analyses, we focused on fertility intentions, contraceptive decision-making and

health facility factors influencing these decisions, and we compared differences and similarities between HIV positive and HIV negative interviewees. We created matrices to compare women based on HIV status and theme-related characteristics (Bernard, 2000).

## Findings

### Demographics

We interviewed eighteen women; ten women were HIV negative and eight were HIV positive. The average age of HIV negative women was 28 years old (range: 19–38) and for HIV positive women was also 28 years old (range: 18–37). Only one HIV negative woman was married, and all other 17 women were not married. HIV negative women had an average of 12 years of education (range: 0–15 years) and HIV positive women had an average of nine years of education (range: 6–12 years). Among HIV negative women, the average number of children was 2.0 (range: 1–5), and for HIV positive women 2.4 (range: 1–4). Two HIV negative women had children by a previous partner, whereas five HIV positive women had children by a previous partner. For HIV negative women, only four of ten women had planned their current pregnancy and for HIV positive women only one of eight women had planned her current pregnancy. Nine of the ten HIV negative women and all eight HIV positive women wanted no more children after their current pregnancy. Nine of ten HIV negative women reported contraceptive use at the time of the interview; two reported consistent dual protection (use of a hormonal method and a barrier method), and one reported consistent hormonal method use and inconsistent barrier method use. Seven of eight HIV positive women reported contraceptive use at the time of the interview; three reported consistent dual protection and one reported consistent hormonal contraceptive use and inconsistent barrier method use. One HIV negative woman and three HIV positive women considered an abortion during their current pregnancy, but none had one.

### Fertility Intentions

Seventeen of 18 women interviewed did not want any more children, regardless of their HIV status. Women cited several different reasons for wanting to end childbearing, including: they had already reached their ideal family size, previous pregnancies and births were difficult, they had children from a previous relationship and did not want more, they did not want more children unless they got married, they wanted to remain HIV negative, or they were HIV positive and did not want to infect their children. Half of the HIV positive women said that because of their HIV positive status, they did not want more children. The women feared that additional children would accelerate their disease progression, that they might transmit the virus to their babies, and that they would die and leave their children alone.

Two women explained:

If I [had] more children, as I am HIV positive, what if I [got] sick now, who would take care of my children?

(#15, Older, HIV positive, 2 children, 10 years of education)

I no longer want any, and I'm sick, why would I want another child. It's okay for now because I have two children...if you are sick [HIV positive] and you are

having a lot of children, your sickness just gets worse. It might happen that the child you give birth to while you are sick will get sick.

(#14, Younger, HIV positive, 2 children, 7 years of education)

Two other HIV positive women said that learning their HIV status did not change their fertility plans because they had already planned not to have any more children.

Nine of ten HIV negative women did not want more children after their last pregnancy, and learning their HIV status did not change that, but rather enhanced their motivation to remain HIV negative and not become pregnant again. One woman explained:

If it wasn't for my pregnancy, I wouldn't have known that I was negative. So now I don't want to be pregnant again.

(#4, Younger, HIV negative, 1 child, 15 years of education)

Another woman recognized that not having more children was important to maintaining her HIV negative status because her partner could expose her to HIV if she tried to get pregnant:

(Does knowing about your status have an impact in this decision whether or not to have more children?) Yes, because I wouldn't know what my partner's status is. HIV is not something that takes years to contract. It's something you can get in a second. You cannot rely on your partner not to get the disease. I have to avoid getting pregnant to avoid testing HIV [positive].

(#10, Older, HIV negative, 3 children, 15 years of education)

Although almost all women interviewed did not want more children, there was more variation in desire for more children among women's partners, according to women's reports. Five couples agreed that they did not want any more children, 6 couples disagreed (he wanted more children, she did not), and in 7 couples she did not want more children but there was no information from the male partners. HIV infected women reported ambivalence about discussing fertility intentions with their male partners because it necessitated discussions about HIV status and contraceptive use. Some women were afraid of this discussion because they would have to disclose their HIV status or contraceptive use, and these disclosures might result in negative consequences, such as partner abandonment. One woman expressed this fear:

(You said you have not talked to him about not wishing to have more children and you are saying you will never talk to him about such. Why don't you want to discuss this with him?) That is because he will know I am HIV [positive]. (Why don't you want him to know?) I still want him to support me. Maybe if I tell him I am HIV [positive] he will run for his dear life. He will run away.

(#15, Older, HIV positive, 2 children, 10 years of education)

## Women's Decisions to Use Contraceptives

A majority of women interviewed reported that they decided whether or not to use contraception on their own. When women did consult their partners about contraceptive use, they said they still made the final decision. Women who did consult their partners in their contraceptive decision-making described them as largely supportive. For women who did not inform their partners about their contraceptive use, it was because they perceived that their partner would somehow interfere with their decision, or their disclosure of contraceptive use would negatively affect them in some way.

Five women reported that they decided to use contraception themselves without consulting their partners. One woman decided on her own and then told her partner:

(Who usually makes decisions about family planning in your relationship?) I do.  
(What do you usually say when talking to him?) I told him that I'm using contraceptives and that I don't know what he'll do. He just laughed at me. He said nothing.

(#2, Younger, HIV negative, 1 child, 12 years of education)

On the contrary, the other four women who decided on their own to use contraceptives did not tell their partners. One woman did not want to disclose her contraceptive use because she and her partner differed in their desire for more children:

(Have you talked to your partner about family planning?) I don't want to lie. He doesn't know. (Kindly tell me some reasons you decided likewise?) You know what, he wants a third child, and unfortunately, I don't. That is why I decided against telling him. (When you came here to the clinic for the first time, for family planning, who made the decision as to what form of family planning you'll use?) It's your decision. Nobody does that for you.

(#7, Younger, HIV negative, 2 children, 11 years of education)

Other reasons women cited for not disclosing their contraceptive use to their partners included: a perception that their partners would interfere with their decision to use contraceptives, that their partners would learn of their HIV positive status if they bring up contraceptive use, or simply because they believe it is their right and their choice to prevent unwanted pregnancies.

Eight other women discussed contraceptive use with their partners before starting a contraceptive method, but ultimately, the women still made the final decision. These women were different from the previous women described because they *did* consult their partners in the decision-making process, however, like the other women the final decision was theirs. One woman explained that she and her partner should be equally comfortable with contraception, but in the end the decision was hers because she had the most at stake:

We then decide on what's comfortable [for] the both of us. But when it comes to family planning in particular, I have to be the one that's more comfortable. At the

end of the day I'm the one who has to fall pregnant. Not him. He can run away if he chooses to...but then sometimes I do take decisions without consulting him and I would just tell him that I'm doing this and that...

(#8, Younger, HIV negative, 2 children, 12 years of education)

There was no information about the contraceptive decision-making process with the partners of the five other women.

Women faced difficulties negotiating condom use with their male partners even when male partners were supportive of other contraceptive methods. One woman explained her situation:

He sometimes refuses [to use condoms]. At times, he says he does not believe in condoms. He uses it whenever he feels like [it] but sometimes he doesn't use it. He would say, I can go for family planning but he will not use a condom. He would say it's not nice having candy with it's wrap on.

(#13, Older, HIV positive, 3 children, 11 years of education)

This participant's partner was HIV negative, however, he didn't believe her HIV positive test result, and therefore didn't think condom use was necessary. HIV negative women faced the same dilemmas with condom use with their partners as HIV positive women. An HIV negative woman described this:

I don't want to lie. Sometimes we use a condom and sometimes we don't. When I ask him to use condoms, he'll ask if I don't trust him. I'll tell him that 'I don't trust you'. According to me, we would be using condoms every time we have sex. Sometimes when I ask him to use a condom, he'll say 'Ag...you don't trust me'. He'll then tell me that he's only committed to me.

(#7, Younger, HIV negative, 2 children, 11 years of education)

### **Women's Consideration of Abortion**

Four women considered an abortion during their last pregnancy, but none had one. For one HIV positive woman, she couldn't raise enough money to pay for the procedure:

I called him later, after a couple of months, and told him to give me the money. He said I should ask people to [lend me the money]. He ignored me and I said 'Do you think people could [lend] me 500 Rand? No one could [lend] me 500 Rand.' I was still pregnant and [we were] seeing each other. (If he gave you enough money, would you....?) I would go there and do it. [have an abortion] (Would you [have gone there]?) Yes, I would have.

(#17, Younger, HIV positive, 3 children, 12 years of education)



For another HIV positive woman, she would have had to tell her partner she wanted an abortion in order to ask him for the money:

I started thinking about having an abortion. I didn't want to tell him and would sometimes hide that I was pregnant. I had two minds about the pregnancy. I wanted to abort, but still I would have had to get the money from him to do that. He would have asked what I wanted to do with the money...he would have asked where I was going...

(#15, Older, HIV positive, 2 children, 10 years of education)

Another HIV positive woman considered an abortion because she feared her child would be born disabled, but a nurse later explained to her that the child would be normal, so she decided not to have the abortion. One HIV negative woman considered an abortion but a friend convinced her that it was too dangerous, so she did not have one.

### Women's Experiences at the Public Health Facility

The government facility where women were interviewed offers women two injectable contraceptive methods, Depo Provera and Nursisterate, as well as hormonal contraceptive pills and condoms. All contraceptive methods are free of charge at government facilities. Most of our participants preferred the injectable method because of its convenience, invisibility and frequency (an injection is only needed every 2 or 3 months). Some women used hormonal contraceptive pills, however, one woman mentioned that if others see a woman taking any type of pill, they assume that the pills are for the treatment of HIV/AIDS and therefore others assume she is HIV positive, which may lead to stigma.

Women's experiences with health facility staff asking about desire for future pregnancies and discussion of contraceptive options were varied. One woman had a good experience:

I think that the nurses do ask, so that you don't do something which will act against your system. For example, I used Depo after my first pregnancy and I always had a headache. I then came back here in the clinic and they gave me pills. They asked me what I am using. I told them that I was using Depo provera but it made me sick, and they gave me the other injection.

(#6, Younger, HIV negative, 2 children, No formal education)

Three women interviewed said that they did not discuss with a healthcare provider whether they wanted to have more children after their most recent pregnancy. One woman described her experience:

(Have you talked to the clinic staff about having other children?) No, I haven't (Why haven't you?) Because they've never asked us.(What could lead you into talking to them about that?) Maybe they could have if I tested [HIV] positive. But now they didn't say anything.

(#9, Younger, HIV negative, 2 children, 11 years of education)

Other women complained of long waiting times in the government clinic and poor treatment by clinic staff. One woman preferred private medical service because of this:

I prefer going to private doctors than to a public clinic. Even though a public clinic is for free, there you wait forever. I wouldn't advise people to go there. The type of treatment that they give to patients is not up to standard. They treat you like you are going to receive a free service anyway; you are not going to pay. If you use a government facility you can't complain because they would say 'you are receiving a free service, then why are you complaining?'

(#8, Younger, HIV negative, 2 children, 11 years of education)

Several women experienced problems with sterilization services. Two women wanted to be sterilized but weren't. One woman requested to be sterilized twice, but the procedure was never done, and she has had two subsequent pregnancies. She explained:

I'm okay with these five [children]. I need to do a medical procedure to prevent me from having other children. When I delivered the one before this one, I told myself that I was going to have a medical procedure to prevent me from falling pregnant ever again. I told them to do it. I don't know what happened because here I am today with another baby. I ended up not having that operation, I don't know what happened. With this one also, I asked them to do it. They said I should come back after six months and they will do it.

(#5, Younger, HIV negative, 5 children, 7 years of education)

Another woman was forced to sign a sterilization authorization before they would perform her caesarean section, even though she did not want to be sterilized. She attributed this to the fact that she was HIV positive:

Actually what I think they should have told me is that if you are HIV positive, you have to undergo a medical procedure to prevent you from getting pregnant. Actually it's not supposed to be done the way they did it. I think they felt irritated. They must have thought 'this one has AIDS, and she would infect us all here in the hospital'. They were not supposed to have done what they did; they were forcing me, knowing my state of health. They forced me, told me to sign the papers, I had no choice, I wanted to deliver my baby. I'm sure I'll never have another baby because I was forcefully made to have a medical procedure to prevent me from falling pregnant again.

(#18, Younger, HIV positive, 2 children, 7 years of education)

## Discussion

Almost all women interviewed did not want any more children after their current pregnancy and this did not differ by HIV status. Authors of studies in several different sub-Saharan African countries also found that HIV sero-status has little effect on fertility intentions

(Baylies, 2000; Gregson, et al., 1998; Rutenberg, 2006). Particularly in societies where childbearing is highly valued and confers social status to women, fertility desire is likely to remain unchanged, regardless of HIV status (Cooper, et al., 2007; Hirsch, 2007). Authors of a study conducted in Cape Town, South Africa found that women wanted at least one child, even if they were HIV positive (Cooper, et al., 2007). In the Zulu tradition, some women want to prove their fertility because they feel that this increases their marriage prospects. Proven fertility may increase the likelihood of attracting a partner who can pay *lobola*, or a bride price, and thus solidify a woman's position in society (Kaufman, deWet, & Stadler, 2001). In our study, women had experienced at least one pregnancy, thus already proving their fertility.

Women were the dominant decision-makers about contraceptive use. Half of the women decided on their own to use modern contraceptive methods with or without informing their partners, and another third of women discussed contraceptive use with their partners, but ultimately decided for themselves. This is different from other sub-Saharan African countries where women must first seek the permission of their partner or husband before initiating modern contraceptive use (DESA, 2010; Mumtaz, Slaymaker, & Salway, 2005). Women in our study did acknowledge the difficulty of condom use where their male partners were opposed to using the method, and this is reflected in the reported low levels of dual protection by both HIV positive and negative women in our study. This is common for women throughout the world because in many settings women lack the autonomy to insist on condom use, and our findings support this phenomenon in this setting (DESA, 2010; Mumtaz, et al., 2005).

It is important to note that Apartheid, a government system of racial segregation and repression in South Africa that lasted from 1948–1994, greatly affected partnership formation for black South Africans, which in turn affected contraceptive use by black South African women (Burgard, 2004; Coovadia, Jewkes, Barron, Sanders, & McIntyre, 2009). Black South African family formation was disrupted when the imposed migrant labor system under Apartheid forced the separation of families (Coovadia, et al., 2009). Men were forced to migrate to urban areas to work and women and children were relocated to rural Bantustans. Since the 1950's, labor migration made traditional payments needed to marry (*lobola*) unaffordable and co-habitation without marriage became common (Coovadia, et al., 2009). Today, 40% of black households are headed by females who typically live with their children and without a co-habiting or marital partner (Department of Health, 2007). This historical context may partially explain why contraceptive decision-making is different for black South African women.

Even though women reported low fertility desire and high levels of modern contraceptive use, only five women planned their current pregnancy, and at least five women became pregnant, even though they reported modern contraceptive use at the time of the pregnancy. There were likely a combination of user/method failures and health facility issues contributing to unintended pregnancies among women in our study. Even where contraceptive use is high, unintended pregnancies still occur because no modern method is 100% effective (Grimes, et al., 2006). Because of this, there is a need for low or no cost safe abortion, as women expressed in our study. Women talked about not having the money for

an abortion, but this was likely for a clandestine abortion or at a private clinic. Women are afraid to seek abortions at public health facilities in South Africa, even though they are legal and low cost, because many providers are unwilling to perform the procedure and it is highly stigmatized (Dickson, et al., 2003; Varkey, 2000).

Women said that they did not discuss fertility desires or contraceptive use with healthcare providers, despite the fact that they were in antenatal care. The authors of other studies in rural and urban KwaZulu Natal found that ANC clients needed contraceptive advice but were not receiving it and that one third of family planning and ANC clients were at high to medium high risk for HIV infection, but received no information about HIV (Maharaj & Cleland, 2005); and that women were rarely counseled on a range of family planning methods and had little opportunity to ask questions about family planning (Gatsinzi & Maharaj, 2008). In our study we found women highly motivated to use contraception, but healthcare providers did not always discuss their fertility intentions or contraceptive use. This lack of discussion is reflected in women's inability to attain sterilizations, abortions or other desired reproductive health services. Such services are low or no cost to women, but are not promoted. Improving client provider interactions where clients and providers are equally comfortable discussing these health topics may be an important area for intervention in this setting.

Our study is limited by its size and the findings should not be generalized beyond the study site. The findings are based on women's self reported behaviors and may suffer from social desirability bias, although we tried to minimize this by interviewing participants in Zulu by trained interviewers who built rapport with interviewees. The findings from this study are useful for understanding the antenatal clinic experience for women in this particular setting and their ability to attain desired services. We interviewed women early in the post-partum period, and their fertility and contraceptive intentions may be different immediately post-partum than at later time points.

## Conclusion

Women in our study were highly motivated to end childbearing and to use modern contraceptive methods available to them, regardless of HIV status. The decision to use modern contraceptive methods, except condoms, was predominately their own; however many women did consult or inform their partners about their contraceptive use. We found that healthcare providers did not always discuss fertility intentions and contraceptive methods with clients. Many women in the study did not plan their current pregnancy and several women likely experienced contraceptive or user failure. These findings suggest a need to strengthen modern contraceptive and abortion counseling for healthcare providers, so that they address the topic with clients, and for clients, so that they use contraceptive methods consistently and correctly and are better able to plan their pregnancies or access abortion services if they desire them. Additionally, dual protection is quite low and HIV prevalence high, so it is imperative that interventions include men in order to improve condom use in couples. Finally, additional research is needed at the health facility level to understand why patients are unable to access needed reproductive health services. In

particular, there is a need to assess whether forced sterilization is a common occurrence and to put procedures in place to stop this unethical practice.

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