

Factors influencing utilisation of female condom among healthcare providers in Tshwane, South Africa

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Abstract

This article describes the factors influencing the utilisation of the female condom (FC2) among healthcare providers, which is part of a study that aimed at developing strategies to improve the utilisation by the patients of FC2 in prevention of STIs, HIV and AIDs and unplanned pregnancies. Like other women in the world, female healthcare providers are also biologically two to four times more vulnerable to STIs, HIV and AIDs infections than men. Women are also vulnerable to unplanned pregnancies. However, the utilisation of FC2 by healthcare providers is still inadequate. A qualitative, exploratory and descriptive research approach was used in this study. Purposive sampling was used to select the participants, because only healthcare providers responsible for the provision of FC2 were selected. In-depth individual interviews were used during data collection. Data were analysed following the qualitative data analysis methods. Factors influencing the utilisation of FC2 were identified as the main category during data analysis. The study confirmed that the healthcare providers are unable to utilise the FC2 because of: the shape and size of the FC2; complexities of the female genital organs hindering procedure; partners' reaction to FC2; and cultural background around accepting FC2 use. The development of strategies to enable healthcare providers to use FC2 was recommended, in order to ensure protection and prevention of STIs, HIV and AIDs and unplanned pregnancies among healthcare providers.

Keywords: Female condom, HIV and AIDs, healthcare providers, STIs, unplanned pregnancies, utilization.

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Introduction

Healthcare providers can play an important role in influencing clients to initiate and maintain the use of FC2 (Mantell et al., 2011). FC2 is the only tool designed to be selected, controlled and used by women as a Human Immune Deficiency Virus- (HIV) and Acquired Immune Deficiency Syndrome (AIDs) reduction strategy because it increases the ability of women to initiate and negotiate for safe sex (Choi, Wojcicki & Valencia-Garcia, 2004). Women are biologically two to four times more vulnerable to HIV and AIDs infection from sexual intercourse than men are. The reasons are that women have a larger vaginal surface area;

there are more viruses in sperm than in vaginal secretions and micro lesions can occur during intercourse, which may be entry points for the virus (Matthew, Cherish & Rees, 2008). Besides this, more than four-fifths of new infections in women result from sex with husbands and primary partners (Matthew et al. 2008). It is now well recognised that unequal power in relationships between men and women, women's lack of economic, social and political power in society, unequal access to resources (including healthcare), and gender norms and stereotypes underlie women's vulnerability to STIs and HIV and AIDs related infections and pose obstacles to both men and women in adopting behaviours to protect themselves from HIV and AIDs (Jewkes, Sekweyiya, Morrell & Dunkle, 2011).

This situation calls for an urgent need to develop strategies that address women's disproportionate risk of infection, enable them to negotiate safe sex and provide tools such as FC2 to protect them from infections. Studies have revealed that female condoms are impermeable to HIV, are stronger than latex condoms, provide less loss of sensitivity and cover more of the genitalia than male condoms do (Harrison, Bachman, Freeman & Inciardi, 2001). Furthermore, FC2 has a dual purpose, because it prevents and protects women from unplanned pregnancies, sexually transmitted infections (STIs), HIV and AIDs and also enhances sexual pleasure for both partners and empower women with confidence (Welbourne, 2006). Many women are still faced with a strong patriarchal society and social norms that expose them to gender inequality and gender-based violence, which prevents women from negotiating safe sex (Jewkes et al., 2011).

Despite the documented evidence of vulnerability for women to acquiring STIs, HIV and AIDs, having unplanned pregnancies, and not enjoying the benefits of using female condoms, the utilisation of FC2 by healthcare providers is still inadequate. The health care providers continue to issue FC2 and encourage other women to utilise them. Meanwhile, the health care providers themselves do not use the condom adequately. The inadequacy of the health of healthcare providers to use FC2 may place them at risk of STIs, HIV and AIDs infections, as well as unplanned pregnancies. In addition, the accessibility, availability and acceptability of FC2 remain very low in South Africa. As a result, the rate of STIs and the incidence of HIV and AIDs and unplanned pregnancies are still very high.

According to Shisana et al. (2014), about 39 million of the population in Sub-Saharan Africa are living with HIV and AIDs. It is estimated that 65% of these people are in Sub-Saharan Africa. Five-and-a-half million South Africans are living with HIV and AIDs, which is the largest number for any single country in the world. The greatest burden of HIV and AIDs is among young women as compared to young men. About 11.5% of healthcare providers between 23-34 years old are living with HIV and AIDs. A high prevalence rate of 13.7% was

among nurses in 2006 (Connelly et al., 2007). Hence, there is a need to develop strategies that might enable health care providers to improve on the utilisation of the FC2 with the aim of reducing the transmission of STIs, HIV and AIDs and the incidence of unplanned pregnancies.

Methodology

A qualitative, exploratory and descriptive research method was used to gather in-depth information and narratives during data collection. Factors affecting the utilisation of FC2 by health care providers were explored and described.

Population and sampling

The study targeted health care providers in the Tshwane District who work at clinics and hospitals and who are fully trained and certified in their respective profession and have been practising for at least three years. A total number of twenty-six participants were involved in the study. They are allied health care workers (N=3), clinic nurses (N=3), Lay counsellors (N=7), Lecturers (N=7), nursing students (N=3) and support workers (N=3). A purposive sampling method was used. The reason for using purposeful sampling is that the researchers judgementally selected the participants as they had the information needed. To be included in the study, participants had to provide written informed consent.

Setting

The study was conducted in Gauteng Province, within the Tshwane District. In-depth individual interviews were conducted at the offices of the participants. Different clinics with healthcare providers who were fully trained and certified to work with FC2 and had been practising for at least three years were used in the selection of participants.

Data collection method

Data were collected using in-depth individual interviews with the health care providers. In-depth individual interviews assisted the participants to express and clarify factors influencing utilisation of FC2 (Burns & Grove, 2009). A semi-structured interview guide, with some guiding questions, was used as a guide during interviews.

Data analysis

A qualitative method of data analysis was used (Polit & Beck, 2008). Tesch's method of data analysis as described by Creswell (1998) was followed. Data

were transcribed verbatim from the tape recorder. Raw data was sent to an independent co-coder who was familiar with qualitative research. Information from the participants and the observational notes were reduced to certain patterns, categories and sub-categories. Literature control was done to support the categorised data.

Measures to ensure trustworthiness

The following measures were adhered to in order to ensure trustworthiness: credibility, dependability, confirmability, and transferability. Credibility was ensured through appropriate methods of selecting participants and data, prolonged engagement, persistent observation, triangulation, peer debriefing and member checks. Data that reflected the views, opinions and emotions of participants were collected; hence, dependability was achieved (Lincoln & Guba, 1985). Confirmability was achieved, as the findings of the study reflected the participant's voices and the conditions of the enquiry, and not the biases, motivations or perspectives of the researcher (Polit & Beck, 2008). The findings obtained from the healthcare workers regarding the factors influencing utilisation of FC2 are unlikely to be transferable to all healthcare workers in Gauteng, because the study is conducted in Tshwane clinics and hospitals only.

Ethical considerations

Principles of ethics were adhered to throughout the study. The privacy and confidentiality of study participants were prioritized and protected. To ensure this, ethical clearance was sought from the University of Pretoria Ethics Review Board and the Gauteng Provincial Department of Health. The study enrolled adult female health care providers. The participants provided written informed consent after they had thoroughly read the study information sheet. To further ensure the privacy of participants, the study results were kept securely in a locked cabinet located in an office accessed only by the research team.

Results

Various categories and subcategories were identified and supported with reference to the literature. The results of the study are presented under the headings, categories and sub-categories shown in Table 1.

Table 1: Categories and sub-categories

Main Category	Sub-Categories
Factors influencing utilisation	<ul style="list-style-type: none"> ● The shape and size of the FC2 ● Complexities of the female genital organs hindering procedure ● Partner’s reaction to FC2 ● Cultural background around accepting FC2 use

Main category: Factors influencing utilisation

There are multiple factors that may influence utilisation of FC2 by health care providers. These factors may be personal and interpersonal. Factors influencing utilisation emerged as the main category during data analysis. The following sub-categories emerged during data analysis to substantiate the main category: the shape and size of FC2; complexity of female genital organs hindering procedure; partner’s action to FC2; inadequate knowledge of FC2 use; and the cultural background around accepting FC2 use.

Sub-category 1: The shape and size of the FC2

The participants in this study showed much concern about the undesirable size and shape of the FC2 but not its structure. However, some participants provided comments on the structure, which too was not desirable. One participant said:

“It [FC2] is not easily acceptable, the way it [FC2] is structured; the shape says no!”

Another participant said:

“By [just] looking at it [FC2] was scary and even the shape looks horrible.”

Additionally, the undesirability was perpetuated by the two rings which are on the upper and lower pouch of the FC2 (Smit et al., 2006, Schwartz et al., 2008). The participants commented that the rings made them hesitant to try the FC2: One participant said:

“The thought of the rings that goes inside and the other that stays outside put me off.”

Supporting this statement the other participant said:

“I was like wow, how am I going to use this? The rings looked scary.”

Participants indicated that the shape of FC2 brings about the possibility of penile misrouting during sexual intercourse. One participant said:

“I fear he will deliberately go to the side and avoid entering inside the condom.”

The sense that we got from the participants’ responses was that they preferred the male condom to the FC2:

“[With male condom] it is evident when he puts it [male condom] on I can see it [male condom] and there is no way that it’ll go out.”

Sub-category 2: The complexity of the female anatomy hindering the procedure

The participants added that the complex anatomy of the female vagina hinders the procedure and technique of the way the condom is inserted. Women usually struggle to insert the condom. The frustration was expressed as follows:

“Because they are not convenient, the way they are structured and the way our complex body is structured it is not easy to use them. No one ever came to demonstrate the use of female condom to us. But if one understands the structure of her body, it would be safer to use female condoms as compared to male condom”.

The participants also found the insertion and use of the FC2 complicated as compared to the use of the male condom. One participant expressed this greater complexity as follows:

“Like I’ve said, the posture, the sex organs of a woman, it is difficult for one to understand that I’ve reached the cervix. With male condom, the penis is straight, you just open insert and push back”.

The statement was supported by the majority of participants. One of them put it well when she said:

“The male condom is convenient for me. When you are ready you just put it on. With femidom, you must twist, you must push, you must wait for certain duration before it adapts to your body. I also think it’ll embarrass me if I can’t insert it correctly”.

This was echoed by another participant:

“The female condom hinders the process and the erection of the penis and the procedure of love making is affected: you must squat, make an 8, push up and 2 rings, one inside and one outside? The man will be waiting for you. It is really complicated.”

“It’s time consuming for me as compared to a male condom. The male condom is convenient for me, when you are ready you just put it on. With femidom, you must twist, you must push, you must wait for certain duration before it adapts to your body. I also think it’ll embarrass me if I can’t insert it correctly”.

It was also expressed that the participants felt that the FC2 was uncomfortable, noisy and that it sometimes made sex unpleasurable.

“The first time I tried using them I felt uncomfortable; I think I used them wrongly. Because I used it instantly and it hurt me”.

“Most clients who used it say it makes noise, the friction is too noisy, but I never tried it. But I think it is advantageous to young women who are still going out.”

Some of the participants felt that the complexity of the vagina made you feel unsafe as you were usually not sure if you had inserted it properly and if you would be able to remove it.

“I am just concerned that when you put it in, it’ll get stuck inside. I remember there was 2 rings and a sponge ‘I just wondered for how long the outer ring is to stay outside, and I’m scared it will slip inside. This is why I say training will make us feel better about it.”

“If I wanted to use the female condom, is it guaranteed that it won’t get lost inside my vagina? You know that a vagina is a receiver; I’m scared it’ll disappear inside me.”

The participants indicated that although the condom comes with a leaflet that has clear instructions providers may find it difficult to comprehend.

“Yes it is self-explanatory and has pictures to demonstrate the procedure. It is written in English and the second language. So it covers for people who cannot read as well. It is simple to use. They still complain about wrong insertion.”

Sub-category 3: Partner’s reaction to female condom

Partner’s reaction to condom use emerged as the third sub-category of factors affecting utilisation of FC2 among health care workers. The participants came up with various comments on how partners react to the use of FC2. One of the participants expressed that:

“He was the one who complained that it is making too much noise. When I told him about it he was willing to try since I told him that we may even use it as our pregnancy prevention method since he always told me he does not like the male condoms. And when we got to use them it was a bad experience.”

The excerpts above show that the participant was worried about her partner who complained about the noise the FC2 made, as it made a noise during sex. The participant also added the importance of using a condom as a means of prevention of pregnancy.

Another participant attested that:

“The other thing that discouraged me was my partner’s reaction towards it, but I know that it is beneficial like male condoms. But we are separated with that partner. I think because I used it wrong and we were both uncomfortable about “this thing” so he ended up calling it “this thing”, not by its name. Even when I tried to explain to him the reason for the discomfort, he was reluctant to use it again. But I’m no more in that relationship so I stopped using it.”

The transcripts set out above indicate that condom use in certain families may result in family disorganisation as well as divorce, in extreme situations. Some partners avoid using FC2 as it affects partners planning for their families. The participant further mentioned that women are afraid of their partners. This was expressed as:

“He told me that he does not want to use the condom because we are trying for the baby. I only have one child and would love the second baby. We did test for HIV and tested negative so I would love it to stay that way.” According to my knowledge I think women are afraid to talk to their partners about using a condom. Most of their partners are working outside town and who knows what they do when they are out there? The ladies want to protect themselves from being infected by their husbands.”

One participant mentioned that:

“I only used it once to see how it feels. For me it was okay but my partner complained. I just told him I wanted to try the female condom because he always complained when I asked him to put on a male condom. But he also complained that he is not comfortable with it”.

One participant further indicated that:

“He said it’s not the same as not using the condom and that he can feel that there is something in. He preferred sex without a condom. (Laughing) as I’ve already said, my partner didn’t want it. But to stay safer we test regularly for HIV.”

Sub-category 4: Cultural background around accepting condom use

The data that emerged regarding the influence of culture on FC2 use was based on the role that socialisation plays in developing female status in sexual relationships. Cultural background was seen as a predictor for FC2 use, as females are socialised to be subordinate to their partners and, as such, the partners do not accept the female condom as a dual method or dual protection. The participant verbalised as follows:

“Ahem, I think black women are being raised in a submissive way. They don’t see themselves taking a lead in sexual activities. So when you educate about FC2 they become hesitant on how are they going to introduce the condom to their partner. I think we still need to break that challenge with education. That’s all I can say about female condoms.”

Another participant confirmed cultural background as a limiting factor for FC2 use and said:

“There are females who still believe that it’s human nature for males to advance sexually to them and they don’t have those rights, so it is for the males to put on the condom not them. I have noticed that African ladies have the submission character to everything and they can’t even tell their partners that they are ready; they want to have sex tonight”.

Socialisation is a way of transferring norms and values to younger generations. Therefore, some females tend to be silent when coming to making sexual advances. They become most silent if they are confronted with an issue to negotiate FC2 use with sexual partners. Health care providers were also socialised under similar norms where female subordination was promoted and are at present facing males’ refusal to use an FC2 or male condom. This becomes risky behaviour as not using condoms exposes females to unsafe sex practice and related consequences.

The same participant presented a positive side when socialisation promoted emancipatory cultural in the following statement:

“For the liberal ladies who can advance for sexual activities it [female condom] is very well accepted.”

Another participant (56 years old) indicated that some females are liberated and emancipated from a subordinate position and said:

“I do consider using it; I don’t follow culture as sure. Coming to the family planning, prevention of infections, and our culture does not allow us to use them but due to the health risks I do use them.”

Risks to health, among others HIV and AIDS, challenged those cultural practices. Changes should happen. Some females who are liberated are able to negotiate FC2 use. Furthermore, some health care providers fall under this category and are able to negotiate and use FC2. The ability to negotiate and use FC2 is a breakthrough for safer sex practice and promotion of female condom use for dual protection and prevention of STIs, as verbalised by this 56-year-old health care provider.

Discussion

The FC2 is made of thin and soft polyurethane with upper and lower flexible rings (Smit, Beksinska, Vijayakumar & Mabude, 2006; Schwartz et al., 2008). The lower ring is specifically designed for insertion while the upper ring is to secure the FC2 when in situ (Smit et al., 2006; Schwartz et al., 2008). Accordingly, FC2 has only one size made to fit the majority of women (Schwartz et al., 2006; Smit et al., 2008). The shape was designed in relation to the anatomical structure of the vagina. Participants in this study were not convinced by the shape and the security offered by the rings especially when thinking about the possibility of penile misrouting (Coffey et al., 2006; Macaluso et al., 2007) during utilisation.

The findings reflect that the complexity of the female anatomy hinders the procedure of condom insertion and also disturbs sexual intercourse. Participants also cited the procedure of insertion as complex and challenging as compared to the insertion of a male condom. The timing of insertion and the procedure of squatting was described as something that could put a man off as it delays the sexual act. Female condoms are viewed by clients as uncomfortable and noisy. These findings are commensurate with those of other studies that have shown that the condom may be disturbed by many factors such as invagination, breakage, spillage, imagination and misdirection (Beksinska et al., 2013).

Our findings suggest that the majority of participants as health care providers emphasise that their partners generally react negatively towards FC2 use. These reactions focused on personal, interpersonal, general feelings and myths about the use of FC2. Carvalho, Goncalves, Faria, Shoveller, Piccinini, Ramos and Medeiros (2011) emphasises that the reasons why partners fail to use condoms is because condoms break or slip off easily, leaving partners unprotected. Coyle, Franks, Glassman and Stanoff (2012) agree that condom slippage and breakage are common in sexual practice. These experiences are sometimes personal or interpersonal, as individuals use their assumptions to avoid condom use. The study findings show that dissemination of sexual health information is lacking, as men use their assumptions to back up their decisions. Additionally, Afro-info (2010) suggests that the majority of men are scared that women may trade with

their sperm for their own personal reasons. These same authors also state that one does not enjoy sex with a problem that may, at the end, lead to partner abuse.

Kapadia et al. (2007) attest that female sex partners of male injection-drug users are unaware that their partners are at a high-risk for HIV acquisition. These partners enter into extra-marital affairs without protecting themselves by using condoms. Although these actions become part of partner practice in sexual health, female health care providers as partners should be made aware that the use of FC2 is necessary because it will reduce the rate of infection. Kapadia et al. (2007) further indicate that men with multiple partners may at some stage perceive that their partners are also engaging in sex outside their relationship and therefore use condoms to protect themselves. It is therefore evident that both health care providers and their partners do not trust each other when it comes to sexual activity.

Poole and Gause (2011) describe males and females as culturally entrenched concepts and most descriptors are traditionally originated. Traditional constructions of sexuality and gender include roles and practices that are grounded in normed expectations of what it means to be a man or a woman. Some of these expectations or descriptors for men include 'strength', 'athleticism', 'individuality' and 'rational approaches to problems'. For women, they comprise 'softness', 'care taking', 'dependence' and emotional responses to problems." These descriptors become determinants when decisions regarding safer sex practice – specifically condom use – are to be made. As such, females' softness and dependence paves the way for males to be decision makers regarding condom use.

The socialisation of males and females based on a specific culture results in cultural capital, which is built around social learning. Cultural capital refers to "people's symbolic and informational resources for action" (Abel, 2008). These resources are behavioural norms, values and knowledge that are "accumulated over time in different social circumstances during which cultural transfusion happens" (Abel, 2008). The subordination of females and domination by males is transfused as cultural practices directing expected behaviour in most relationships between males and females, which includes sexual relationships and the use of condoms. A study by Selikow, Ahmed, Flisher, Mathews and Mukoma (2009) confirmed that females find that they are in a subordinate position. For this reason pursuing safer sex by the use of condoms either by females or males, for example, will culturally defy the male's position and the procreation duties of a female. Another limiting factor for females in addition to their cultural background was found to be low education, as being in possession of information acted as a motivation for change among African American women (Holmes et al., 2008).

Limitations

The study was conducted in Tshwane clinics and hospitals only. As a result the study results might not be generalized to other settings.

Recommendations

Few recommendations regarding this article have been outlined. It has been suggested that awareness campaigns regarding the importance of using the female condom might be of utmost importance in the promotion of health among healthcare providers. The healthcare providers as counsellors for contraceptive use and issuing of condoms are bound to have information and know more on why the FC2 is shaped the way it is. They should be able to demonstrate the possibility of modifying the FC2 – for example, by removing the inner ring after insertion.

In order to achieve utilisation of the FC2, strategies that would enable healthcare providers to utilise the female condom on a regular basis should be developed. There is a need to empower the healthcare providers with knowledge and skills on how to use female condoms. It is crucial also to enable the healthcare providers to change their attitudes towards the use of female condoms. More opportunities to learn need to be created. Regular utilisation of the FC2 might promote the health of healthcare providers, including their partners.

Conclusion

The study confirmed that there is a need to develop strategies that might enable healthcare providers to use FC2 in order to be protected from STIs, HIV and AIDs and unplanned pregnancies. Additionally, this study initiates intensive dialogues that can be held by healthcare providers on the importance of using FC2 despite its shape and size, more so because the anatomy of their genital organs places them at risk and vulnerable to STIs, HIV and AIDs and unplanned pregnancies.

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References

Abel, T. (2008). Cultural capital and social inequality in health. *Journal of Epidemiology Community Health*, 62, 1-5.

Afro-info (2010). Cameroon: Mixed feelings over use of Female condoms. Retrieved from <http://africa-info.org/ang/index.php?option=com-content&view=article&id=510:cam...> Accessed on 2014/04/29.

Beksinska, M.E., Piaggio, G., Smit, J., Wu, J., Zhang, Y., Pienaar, J., Greener, R., Zhou, Y. & Joanis, C. (2013). Performance and safety of the second-generation female condom (FC2) versus the Woman's, the VA worn-of-women, and the Cupid female condoms: A randomised controlled non-inferiority crossover trial. *The Lancet*, 1(3), 146-152.

Burns, N. & Grove, S. K. (2009). *The Practice of Nursing Research, Appraisal, Synthesis and Generation of Evidence* (6th ed.). St Louis, MO: Elsevier.

Carvalho, F.T., Goncalves, T.R., Faria, E.R., Shoveller, J.A., Piccinini, C.A., Ramos M.C. & Medeiros, L.R.F. (2011). Behavioral interventior promote condom use among women living with HIV. *Cochrane Database of Systematic Reviews*, 9, CD007844. DOI:10.1002/14651858.

Choi, K.H., Wojcicki, J. & Valencia-Garcia, D. (2004). Introducing and negotiating the use of female condoms in sexual relationships: Qualitative interviews with women attending a family clinic. *AIDs and Behavior*, 8 (3), 251-261.

Coffey, P.S., Kilbourne-Brook, M., Austin, M.G., Seamans, Y. & Cohen, J. (2006). Short-term acceptability of the PATH Woman's Condom among couples at three sites. *Contraception*, 73, 588 – 593.

Connelly, D., Veriava, Y., Roberts, S., Tsotetsi, J., Jordan, A., DeSilva, E., Rosen, R. & DeSilva, M.B. (2007). Prevalence of HIV infection and median CD4 counts among health care workers in South Africa. *South African Medical Journal*, 97 (2), 115-123.

Coyle, K.K., Franks, H.H., Glassman, J.R. & Stanoff, N.M. (2012). Condom use: Slippage, breakage, and steps for proper use among adolescents in alternative school settings. *Journal of School Health*, 82(8), 345-352.

Creswell, J.W. (1998). *Qualitative Inquiry and Research Design Choosing Among Five Traditions*. London, Thousand Oaks: Sage Publications.

Harrison, L.D., Bachman, T., Freeman, C. & Inciardi, J.A. (2001) The acceptability of the female condom among US women at high risk from HIV, culture, health and sexuality, *An International Journal for Research, Intervention and Care*, 3(1),101-118.

Holmes, L., Ogunbade, G.O., Ward, D.D., Garrison, O., Peters, R.J., Kalichman, S.C, Lahai-Momoh, J. & Essien, E.J.: (2008). Potential markers of female condom use among inner city African American Women. *AIDS Care: Psychological and Socio-medical Aspects of AIDS/HIV*, 20 (4) (Suppl 8), 470-477.

Jewkes, R., Sikweyiya, Y., Morrell, R. & Dunkle, K. (2011). Gender inequitable masculinity and sexual entitlement in rape perpetration South Africa: Findings of a cross –sectional study. *PloS ONE*, 6(12), e29590. Doi:10.1371/journal.pone.0029590

Kapadia, F., Latka, M.H., Hudson, S.M., Golub, E.T., Campbell, J.V. Bailey, S., Frye, V. & Garfein, R.S. (2007). Correlates of consistent condom use with main partners by partnership patterns among young adult male injection drug users from five US cities. *Drug and Alcohol Dependence*. 91(1), 56—63.

Lincoln, Y.S. & Guba, E.G. (1985). *Naturalistic Inquiry*. Newbury Park, CA: Sage.

Macaluso, M., Blackwell, R. Jamieson, D.J., Kulczycki, A., Chen, M.P., Akers, R., Kim, D. & Duerr, A. (2007). Efficacy of the male latex condom and of the female polyurethane condom as barriers to semen during intercourse: A randomized clinical trial. *American Journal of Epidemiology*, 166 (1), 88-96.

Mantell, J.E., Brooke, S., Sue, K., Hoffman, S., Theresa, M., Kelvin, E. & Zena, A. (2011) Healthcare providers: A missing link in understanding acceptability of the female condom. *AIDS Education and Prevention*, 23 (1), 65-77. Doi:10.1521/aeap.

Matthew, F.C & Rees, H.V. (2008). Vulnerability of women in Southern Africa to infection with HIV: biological determinants and priority health sector interventions *AIDS*, 22, (suppl 4), S27-S40.

Polit, D.F. & Beck, C.T. (2008). *Generating and Assessing Evidence for Nursing Practice* (8th ed.). Philadelphia, PA: Lippincot Williams & Wilkins.

Poole, J. & Gause, C.P. (2011). Sexualities in rural spaces: conservatism and fundamentalism as curriculum. *International Journal of Humanities and Social Science*, 1(15), 39-45.

Selikow, T.A., Ahmed, N., Flisher, A.J., Mathews, C. & Mukoma, W. (2009). I am not "umqwayito": A qualitative study of peer pressure and sexual risk behavior among young adolescents in a Cape Town, South Africa. *Scandinavian Journal of Public Health*, 37(Suppl. 2), 107-112.

Shisana, O., Rehle, T., Simbayi, L.C., Zuma, K., Jooste, S., Zungu, N., Labadarios, D., Onoya, D. & Wabiri, N. (2014). South Africa National HIV Prevalence, HIV prevalence, Incidence and Behaviour survey 2012. Cape Town, South Africa: *Human Science Research Council Press*.

Schwartz, J.L., Barnhart, K., Creinin, M.D., Poindexter, A., Wheelless, A., Kilbourne-Brook, M., Mauck, C.K., Weiner, D.H. & Callahan, M.M. (2008). Comparative crossover study of the PATH woman's condom and the FC female condom ®. *Contraception*, 78, 465-473.

Smit, J., Beksinska, M., Vijayakumar, G. & Mabude, Z. (2006). Short-term acceptability of Reality ® polyurethane female condom and synthetic latex prototype: A randomized crossover trial among South African women. *Contraception*, 78, 394-398.

Welbourne, A. (2006). Sex, life and the female condom: some views of HIV positive women. *Reproductive Health Matters*, 14 (28), 32-40.