



Original Research Article

Sexual Behaviour among Sub-Saharan African Migrant Women with HIV/AIDS in Belgium: A Qualitative Study

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ABSTRACT

Objective: HIV/AIDS among migrants from resource-limited countries remains a public health challenge in the European Union. There are about 13,352 people with HIV/AIDS receiving treatment in Belgium, of whom 4,550 are sub-Saharan African (SSA) migrant women. Yet research on the characteristics and sexual behaviour of these women remains patchy. We examine the sexual behaviour of SSA migrant women infected with HIV in Belgium.

Methods: We conducted a qualitative study through semi-structured in-depth interviews and observations with SSA migrant women with HIV/AIDS in Belgium between April 2013 and December 2014. Participants were recruited through purposive and snowball sampling if they 18 years and older, speaking French or English and receiving healthcare in Belgium. Thematic analysis was conducted to identify emerging themes and NVivo 8 was used to support data coding.

Results: Of 113 patients invited to participate, 40 participants aged 20-67 years were interviewed. Most strikingly, a majority of the interviewees remain sexually active and reported inconsistent condom use with intimate partners. Strong fertility desires embedded in African culture were reported as a barrier to safe-sex. We observed a wide range of educational levels. Many were employed and most were Christians.

Conclusion: SSA migrant women remain at high risk of HIV. Considering the diverse socio-demographic characteristics and risky sexual behaviour of most HIV-infected SSA women, tailored interventions are needed to control the spread of HIV/AIDS within the migrant as well as the general population. Continuous awareness campaigns about safe sex are needed to educate the general public, thus making HIV prevention a shared responsibility.

Keywords: HIV/AIDS, Sexuality, sub-Saharan African migrant women, Belgium.

INTRODUCTION

Sexuality is crucial to human rights and basic freedom and it is important for self-satisfaction and fulfilment [1] The World Health Organization (WHO) defines

sexuality as: “a central aspect of being human throughout life and encompasses sex, gender identities and roles, sexual orientation, eroticism, pleasure, intimacy and reproduction. (...)” [2]

Sexual functioning is an important aspect of quality of life related to health. [3,4] Previous studies have shown the link between physical health, mental health and sexuality. [5] Sexuality is one of the major aspects of an individual's life that may be subjected to change following the diagnosis of any chronic and life-threatening disease. [6] The diagnosis and treatment of chronic illness is a period of crisis and may impact sexuality. [7] Sexuality, self-image and self-esteem may be low priority because of experiences of illness. [8]

Advanced medical care has transformed diseases like hypertension, cardiovascular disease, some forms of cancer, [9] asthma, diabetes and HIV/AIDS into chronic illnesses for many patients. [10,11] Quality of life and sexual function become crucial as survival time increases for some patients. [12] Many people, particularly women, need time to understand, accept and adjust to the demands of a diagnosed illness in order to shape their sexuality. [13] Unlike other chronic diseases, HIV impacts sexuality as it is predominantly transmitted through sexual activity. [14,15] Studies have shown that HIV affects the sexual health and wellbeing of men and women but women infected with HIV/AIDS bear the burden of the disease and that of being women. [16] They are expected to be the custodians of the future generations. [17]

HIV diagnosis is associated with trauma, fear, anxiety and depression that may influence the quality of life and well-being of the patient. [18] HIV positive women have to make changes to fit current health conditions even when living in a resource-rich setting with access to primary healthcare and the availability of highly subsidized antiretroviral therapy (ART). [19] ART has considerably impacted the way women engage with and adapt to their sexual and reproductive lives after HIV positive diagnosis. [20] Despite the

seriousness and incurable nature of HIV, many women are now able to become mothers and maintain good sexual health and well-being with their partners [21] as a result of the treatment and care they receive.

Previous studies have shown that HIV accelerates sexual and reproductive health-related illnesses in resource-limited as well as in resource-rich settings. [22,23] Most people, especially women, may experience changes in sexual attitudes and behaviours after a HIV diagnosis. Sexuality is a key aspect of physical and psychological health, [24] but little is known about the sexual behaviours of SSA migrant women before and after being diagnosed with HIV/AIDS. ART may help to prevent further transmission of HIV but the prevalence of condom usage in this group of women is very low. [25-27]

There are about 13, 352 people receiving HIV/AIDS treatment and care in Belgium, of whom about 4,550 SSA migrant women. [28] It is important to address the sexual behaviours prevalent among this population in order to inform the refinement of prevention interventions for these women and the wider public. The aim of this paper is to explore sexual behaviour among SSA migrant women before and after HIV positive diagnosis, and address the main reasons for changing or not changing their behaviour while on ART.

MATERIALS AND METHODS

Study design and Sample

This paper is part of a longitudinal and qualitative study with SSA migrant women living with HIV/AIDS in Belgium between April 2013 and December 2014. Patient recruitment was done in two phases. In the first phase, potential participants were purposively selected and invited to participate in the study by the treating physicians and in the second phase, the main interviewer (AEA) recruited participants

using the snowballing technique among self-identified HIV patients. The purpose of the study was explained to the participants and where participants agreed to participate and be interviewed, an informed consent form was signed by each participant. The participants were African women, more than eighteen years old, diagnosed HIV positive more than three months ago and receiving treatment from any AIDS Reference Centres (ARC) in Belgium.

Data collection (Table 1)

Interviews were either conducted in any vacant consultation room of the ARC or any convenient venue selected by the patients. Data was collected through semi-structured in-depth interviews, notes from what was heard and observed during patients’ consultations with treating physicians and hospital records of the prospective participants. The main researcher (AEA) attended support group meetings at the invitation of some participants. During these meetings, notes were taken on what was observed and heard. Observation has been found to add richness and depth to data by describing what was seen and heard. [29]

Table 1: Data collection approach

Interviews	40
Observations during consultations	8
Observations during support group attendances	4
Hospital records (age, year of diagnosis confirmation)	40

Interview questions were designed to elucidate information on sexual behaviour before and after HIV positive diagnosis and on ART. During interviews questions were revised to include individual perceptions on the use of condoms to prevent HIV. Collected data were all anonymized. Participants were interviewed in either French or English as they preferred. The interviewer (AEA) requested permission from the patients beforehand to audio-tape each interview. Data saturation was reached

when no new information was obtained from the participants. Data will be preserved only for the purpose of referral, if need be, five years after the end of the study project.

Data analysis

Interviews were transcribed verbatim. Transcriptions and field notes from observations were reviewed and coded in preparation for thematic analysis. Open coding was used to retrieve themes in line with the study objective and, based on grounded theory, an inductive process used to identify themes as they emerge from the data. This is also known as the “bottom-up approach”. [29,30] Themes related to the topic were identified by constant comparison until saturation was reached. [31] Two researchers (AEA/RD) read and analyzed transcripts and then compared and discussed their findings until there was consensus about the codes and their meaning. [32] In this study, the use of thematic analysis was important in the identification of new themes that recurred in the data and that could eventually produce a bigger picture leading to universal observations. [33]

Ethical approval

All procedures were approved by the Ethics Committees of the Universitair Ziekenhuis Brussel (Approval number B.U.N. 143201215911) and the Institutional Review Board (IRB) of the Institute of Tropical Medicine, Antwerp, Belgium (Approval number IRB/AB/ac/141). The confidentiality of participants was respected by removing all identifying elements from data. Culturally sensitive words or questions related to sexual orientations and practices (homosexuality, lesbianism, or transgender) were omitted in the data collection process. Participants were free to withdraw from study at any time. There was no financial compensation.

RESULTS

In this section we will present participant characteristics. Three main themes that emerged from the participants'

discourses included the realities of sexual behaviour before diagnosis of HIV, changes in sexual behaviour after diagnosis and barriers to safe sex.

Table 2: Demographic details of participants (n=40)

VARIABLES		Frequency
Age range (in years)	20-29 years	3
	30-39 years	10
	40-49 years	15
	50+	12
Motherhood	One or more children	33
	No children	7
Reproductive intentions ¹	Became pregnant after diagnosis	14
	Fertility intention/desires	6
	Avoid pregnancy	1
Reported transmission to another ²	To child	1
	To Sexual partner	0
Intimate partner relationship	Having intimate partners	32
	No intimate partner	8
Reported mode of transmission	Heterosexual	37
	Homosexual	0
	Service-related	1
	Perinatal	1
	Unknown	1
Condom usage	Always	13
	Only to prevent pregnancy	3
	Not at all	24
Knowledge of HIV status	Before leaving Africa	5
	In Belgium	35
Sexual activity	Sexually active	29
	Complete abstention	7
	Interruption of sexual activities	4
Intimate partner HIV status	Positive	11
	Negative	20
	Unknown status	2
	No intimate partners	7

¹The figures represent the number of women with or without reproductive intentions after being diagnosed HIV positive. Pregnancies before diagnosis are not taken into account here.

²The figures represent reported transmission of HIV from an infected woman to another person (child, sexual partner or any other person).

Participant characteristics

Forty (Table 2) of 113 patients invited to participate in the study were interviewed. Fear of disclosing HIV-positive status was the main reason for refusing to be interviewed. Observations were conducted during patient consultations and support group attendances. The age range was between 20 and 67 years old. Thirty-two participants had intimate partners who were either husbands or regular intimate partners; eight were single with no intimate partner relationships. All but three (one unknown, one mother-to-child and one work-related) reported contracting HIV through

heterosexual transmission. More than half of the participants reported having high school or university education. In relation to employment status, three women reported not having any job because of their age (>60years), four were medically disabled; twenty-three women reported having a job and ten were in search of a job. Thirty-three of the women interviewed were mothers and thirty-nine had been receiving ART prior to interview. At the time of the interview only one woman was not on ART because she had doubts as to the efficacy of HIV therapy and a fear of visible side effects of treatment on the body, a concern that was mirrored by

many participants. Thirty-eight of the 40 participants were Christians. The duration of the interviews was between thirty minutes and two hours. Of the four support group meetings attended by the main researcher (AEA), one specifically focused on explaining to the women changes that could occur at certain periods (premenopausal/menopause) as they grow old with HIV/AIDS.

1. Sexual behaviour before HIV-positive diagnosis

Trust instable relationships:

With the exception of one participant who was infected through her mother, all other women reported that they were sexually active and knowledgeable about the seriousness of HIV as a contagious disease with no cure. Interviewees who were married or had regular intimate partners reported that condoms were never used during sexual activities before they became infected with HIV. Participants further explained that being married shielded them from the HIV disease. They believed that unprotected sex was normal in a stable relationship and they saw no risk of contracting HIV: as one said, *"HIV is for those who are not married or are unfaithful"*. (Participant 19, age 52)

Only one of the participants disclosed that she practiced risky sexual behaviour with men other than her husband. She indicated:

'My husband had many wives and mistresses. I too was not a saint. HIV could have come from me or from my husband. I can't blame my husband especially as I was happy during my 21 years of marriage' (Participant 39, age 52)

Male-dominated sexual decision-making:

Several participants reported that they could not make certain decisions, for example, when and how to have sex even when it was very evident to them that their partners had sexual relationships with other women. One said:

My husband was considered rich and he had other women despite the fact that we were in a monogamous marriage. He travelled a lot. I proposed using condoms but he refused, taking it as a sign of acceptance of his infidelities and questioning his manhood. Moreover, I wanted to have children. (Participant 22, age 55)

2. Sexual behaviour after HIV-positive diagnosis

Generally, participants reported contemplating condom use if in a union or abstinence if single. Many participants also reported that their partner's HIV status influenced their sexual behaviour after diagnosis. More than half of the participants admitted practicing unsafe sex regardless of their partner's HIV-status. However, one woman reported the unwillingness of her HIV-negative partner to use condoms. She said:

"I could not have any healthy sexual relationship with my husband because he was afraid of being infected even though we used condoms and he had promised that nothing was going to change after my HIV-positive diagnosis." (Participant 23, age 31)

A great majority (29/32) of the women in partner relationships claimed that HIV-positive diagnoses had not really changed their sexual behaviour and wellbeing. They viewed themselves as sexual beings and resumed sexual activities and intimacy after accepting the fact that HIV had become part of their lives. Many women reported that it was easier for them to resume their sexual activities with the support and encouragement of their intimate partners. One woman said:

I had a breakdown for about two weeks, and then I found out that I had my husband who supported me. He was there 24/7 for me and asked me not to tell anyone. Anyway, I never felt I had to tell anyone because he was completely there for me. I could always talk to him. I never feel that I have HIV until I go

to the hospital. It's the hospital visits that remind me—I have this thing [HIV] (Participant 2, age 43)

One of the three women who were sexually inactive because of their partner's ill health commented:

“My husband's ill health does not permit me to be sexually active. I have no problem with my sexuality but as he supports me with my HIV; I have to support him too” (Participant 22, age 55)

Motivation and personal responsibility to protect self and others

Many of the participants indicated that receiving and adhering to ART was a motivation to return to normality and accept personal responsibility to protect others from contracting HIV. Some also affirmed that changing sexual behaviour was not easy, as noted by one participant:

“We decided to use condoms. It was difficult in the beginning but with time it became part of the treatment processes. (Participant 39, age 52)

Another woman commented that fear of the infectiousness and transmission of HIV despite receiving ART made her refrain from sexual activities:

“I did not have normal sexuality after HIV-positive diagnosis because of fear. I was not sure I wouldn't infect the babies I had really wanted to have” (Participant 27 age 49)

3. Barriers to sexual activity and safe sex

Three main themes with regards to barriers to safe sex discussed by the participants included stigma, condom use and the desire to have children.

Stigma: Eight women reported decisions not to have intimate partners or continue with sexual activity after their HIV-positive diagnosis. When asked the reason for not being in a relationship, one said:

Considering the stigma that surrounds HIV/AIDS especially in our African community, I prefer to stay single. If a man is interested to have me as an intimate

partner and I tell him that I am HIV positive, he will turn his back and leave. I don't want to be humiliated. I don't really think about sex. (Participant 31, age 39)

One woman reported having lost interest in sex when her husband abandoned her because of her HIV positive status. This participant related that sex is no longer important:

I forgot about sexual activities after my husband abandoned me eight years ago. Despite the support and encouragement of my children to have another partner, I am still unable to accept another man. I don't know if my sexual parts exist. I live like a child, a baby. (Participant 4, age 48)

All participants reported that “looks and self-image” were very important. They all expressed concerns about HIV-related illnesses and the visible signs of side effects of HIV therapy on their bodies. “Looking good” was necessary to keep existing relationships or find new relationships, as commented by a participant:

“Dressing well and maintaining good hygiene is very important to me. I like to look attractive to others. I take care of the way I look” (Participant 3, age 50)

However, another participant blamed the way she now looks on HIV and ART and expressed her fear that she is no longer attractive:

“I have put on too much weight and I don't like the way I look. I used to be slim and pretty and did not walk with a limp before my HIV diagnosis and ART. How can people be attracted to me the way I look?” (Participant 6, age 48)

Inconsistent condom use

Twenty-four women indicated that they did not use condoms with their partners even in cases where the partners were unaware of their HIV positive status. One indicated:

“He does not know that I am HIV positive. I want to tell him but I ask myself what is the need to tell him...” (Participant 18, age 57)

However, a few participants reported that the introduction of condoms into their relationship contributed to the discontinuation of sexual activities. A participant said:

“My husband refused to use condoms and we don’t have any sexual relationship since I was diagnosed HIV positive four years ago” (Participant 40, age 28)

Many participants reported not using condoms because they believed they were no longer infectious, their partners were HIV positive or they did not want to disclose their HIV positivity to partners after being together for a long time and not using condoms.

“I am no longer infectious and I don’t use condoms with my partner but I make him do the HIV test regularly to be sure that he is not infected.” (Participant 3, age 50)

Desire to have a child

All participants had the perception that the ART improved sexual and reproductive health. Three women envisaged having children and saw motherhood as a motivating factor to continue being sexually active and live positively with HIV/AIDS. A woman with an HIV-positive partner said she asked her partner to stop using condoms because she wanted to become pregnant and eventually have a child. This participant verbalized her feelings:

We used condoms in the beginning of our relationship but because of the urgent need for me to have a child, I opted for unsafe sex. I could no longer wait, so I asked him to stop using condoms. I am depressed and strongly believe that having a child will reinforce my willingness to continue living. (Participant 1, age 23)

Fourteen women reported having had their children after their HIV positive status was revealed to them as affirmed by a participant:

I had four children within seven years of my being diagnosed HIV positive. I continued

living my sexuality as if nothing had happened to me. I was still in denial until the birth of my third child when the doctor told me that I needed to start treatment because my CD4 was very low. (Participant 32, age 35)

DISCUSSION

Our study reveals that a HIV diagnosis has little impact on the sexual behaviour of SSA migrant women in Belgium. Major findings include: low condom use, complete abstinence and temporary inactivity because of partners’ sexual incapacities. It is remarkable that most of the women did not use condoms with their intimate partners, findings which are also reported in previous studies. [34-36] Additionally, this study shows that ART can greatly improve the sexual and reproductive health of a majority of women, improve their chances of becoming mothers, a much desired African cultural norm as found in other studies [37,38] and help them regain their sexual assertiveness and self-esteem. [14]

Our study is one of the few qualitative studies to examine sexuality among SSA migrant with a growing number of HIV/AIDS cases in Belgium. The combination of interviews, observations and basic information as to year of diagnosis and age from hospital records strengthened data collection and analysis. In addition, the main researcher’s knowledge of the group’s culture helped to understand vulnerabilities in formulating questions for the interviews that were culturally acceptable. However, this study has several limitations. Firstly, the sampling of only English or French speaking SSA women did not provide an opportunity for women speaking other languages to participate in the study. Secondly, it is possible that participants’ narratives were biased and sexuality among non-participants might have differed from that of

participants. Thirdly, the sample was not designed to be statistically representative, necessitating cautious generalization of the findings. Despite these limitations, the study provides useful hints for targeting risky sexual behaviour, informing policy and fostering further research that takes into account the culture-dependent nature of attitudes to sexuality in SSA migrants.

There is no direct indication of age as a barrier to being sexually active or inactive. Our study shows that SSA migrant women with HIV/AIDS would like to be sexually active into old age, which is in line with earlier studies.^[39,40] Moreover, we also found out that changes in sexuality were not uniform and the sexual adjustment period was specific to each woman. Sexual satisfaction declined in the immediate post-test phase but later stabilized with knowledge and acceptance of HIV as a treatable and chronic disease, as has been seen elsewhere.^[41] Most of these women were engaged in married or other stable relationships and considered sexuality to be important in their lives.

The prevalence of sexual activity after HIV diagnosis depends on the individual condition of the women's health. This study also corroborates the observation in other studies that a conducive, caring and social environment is important for women in their efforts to incorporate the HIV illness into their roles as women and mothers.^[42] How they deal with challenges of HIV is related to the attitudes of their intimate partners. Having a responsive and participating partner, high self-esteem and sexual identity are important for women to incorporate HIV illness into their lives.

We also found out that male-dominated decision-making in sexual matters contributes to the inconsistent use of condoms, as in previous studies.^[43] Moreover, attitudes towards condom use remain negative if the initiative comes from

the woman. Condoms are used mainly to prevent pregnancy and occasionally used to prevent HIV transmission as evidenced by other studies.^[44] We also found out that fertility desires, notwithstanding the HIV status of the intimate partners, was a motivation to regain normality, in line with previous findings.^[45] Those of child-bearing age with or without children discussed their desire to have children with their treating physicians and the interviewer. However, some women were sexually inactive because of sexual incapacity and other health conditions in their partners.

The feelings of hopelessness, self-stigma, guilt and shame related to having HIV alluded to during interviews did not prevent a majority of SSA migrant women from being sexually active. Most of these women expressed the need for positive emotional, physical and social wellbeing and the possibility of having safe sexual experiences despite living with HIV/AIDS. Adherence to ART not only improves a participant's health, prevents death and leaving children motherless, but also makes it possible to have more children or become mothers for the first time. Maintaining good sexual functioning and sexual health are indispensable to quality of life.

CONCLUSION

Most SSA migrant women with HIV/AIDS remain sexually active after a positive HIV diagnosis. Unprotected sex is widely practiced, with a greater risk of HIV transmission or re-infection. The use of condoms is inconsistent in this group because of fertility desires or as a way to hide HIV positive status from an intimate partner. Efforts to promote HIV testing and awareness among SSA migrants in Belgium should be further strengthened and education programs focused on risk reduction and sexual empowerment should be culturally tailored. Patient-partner

counselling and education focused on safe sex may help inform HIV positive women in sexual decision making. Furthermore, research looking at the socio-cultural value placed on sexuality among SSA migrant women with HIV/AIDS would add value to this little-explored topic. Policy makers should revamp existing HIV prevention interventions that will enable HIV caregivers and others involved in HIV prevention to help women reformulate their life goals as the challenge to prevent HIV is more social and behavioural than medical.

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REFERENCES

1. Kismodi E, Cottingham J, Gruskin S, et al (2015) Advancing sexual health through human rights: The role of the law. *Glob Public Health* 10: 252-267. 10.1080/17441692.2014.986175 [doi].
2. World Health Organization (2006) Sexual and reproductive health: Defining sexual health. WHO, Geneva, http://www.who.int/reproductivehealth/publications/sexual_health/defining_sexual_health.pdf
3. Laumann EO, Paik A, Glasser DB, et al (2006) A cross-national study of subjective sexual well-being among older women and men: findings from the Global Study of Sexual Attitudes and Behaviors. *Arch Sex Behav* 35:

- 145-161. 10.1007/s10508-005-9005-3 [doi].
4. Lindau ST, Gavrilova N (2010) Sex, health, and years of sexually active life gained due to good health: evidence from two US population based cross sectional surveys of ageing. *BMJ* 340: c810.
5. Johansen PP, Zwisler AD, Hastrup-Svendsen J, et al (2013) The CopenHeartSF trial--comprehensive sexual rehabilitation programme for male patients with implantable cardioverter defibrillator or ischaemic heart disease and impaired sexual function: protocol of a randomised clinical trial. *BMJ Open* 3: e003967. [bmjopen-2013-003967](https://doi.org/10.1136/bmjopen-2013-003967) [pii];10.1136/bmjopen-2013-003967 [doi].
6. Tristano AG (2014) Impact of rheumatoid arthritis on sexual function. *World J Orthop* 5: 107-111. 10.5312/wjo.v5.i2.107 [doi].
7. Steinke EE (2013) Sexuality and chronic illness. *J Gerontol Nurs* 39: 18-27. 10.3928/00989134-20130916-01 [doi].
8. Golub SA, Gamarel KE, Rendina HJ (2013) Loss and growth: Identity processes with distinct and complementary impacts on well-being among those living with chronic illness. *Psychol Health Med* . 10.1080/13548506.2013.855318 [doi].
9. Vieira EM, Santos DB, Santos MA, et al (2014) Experience of sexuality after breast cancer: a qualitative study with women in rehabilitation. *Rev Lat Am Enfermagem* 22: 408-414. S0104-11692014000300408 [pii].
10. Kalichman SC, DiFonzo K, Austin J, et al (2002) Prospective study of emotional reactions to changes in HIV viral load. *AIDS Patient Care STDS* 16: 113-120. 10.1089/108729102317330454 [doi].
11. Yombi JC, Jonckheere S, Vincent A, et al (2014) Late presentation for human immunodeficiency virus HIV diagnosis results of a Belgian single centre. *Acta Clin Belg* 69: 33-39.

- 10.1179/0001551213Z.00000000014 [doi].
12. Oskay U, Can G, Basgol S (2014) Discussing sexuality with cancer patients: oncology nurses attitudes and views. *Asian Pac J Cancer Prev* 15: 7321-7326.
 13. Groenvold M (2010) Health-related quality of life in early breast cancer. *Dan Med Bull* 57: B4184. B4184 [pii].
 14. WHO (2006) Sexual, and Reproductive Health of Women Living with HIV/AIDS: Guidelines on care, treatment and support for women living with HIV/AIDS and their children in resource-constrained settings. 1-83.
 15. Gyawali K, Paneru D, Jnawali K, et al (2014) Human Immunodeficiency Virus Related Knowledge, Risk Perception and Practices among Married Women of Reproductive Age: A Cross-sectional Study from Mid-western Development Region, Nepal. *Ann Med Health Sci Res* 4: 786-790. 10.4103/2141-9248.141569 [doi];AMHSR-4-786 [pii].
 16. Gupta GR (2000) Gender, sexuality, and HIV/AIDS: the what, the why, and the how. *Can HIV AIDS Policy Law Rev* 5: 86-93.
 17. Nattabi B, Li J, Thompson SC, et al (2009) A systematic review of factors influencing fertility desires and intentions among people living with HIV/AIDS: implications for policy and service delivery. *AIDS Behav* 13: 949-968. 10.1007/s10461-009-9537-y [doi].
 18. Taniguchi T, Shacham E, Onen NF, et al (2014) Depression severity is associated with increased risk behaviors and decreased CD4 cell counts. *AIDS Care* . 10.1080/09540121.2014.880399 [doi].
 19. Jansson J, Wilson DP, Carr A, et al (2013) Currently available medications in resource-rich settings may not be sufficient for lifelong treatment of HIV. *AIDS* 27: 1245-1251. 10.1097/QAD.0b013e32835e163d [doi].
 20. Wamoyi J, Mbonye M, Seeley J, et al (2011) Changes in sexual desires and behaviours of people living with HIV after initiation of ART: implications for HIV prevention and health promotion. *BMC Public Health* 11: 633. 1471-2458-11-633 [pii];10.1186/1471-2458-11-633 [doi].
 21. Cliffe S, Townsend CL, Cortina-Borja M, et al (2011) Fertility intentions of HIV-infected women in the United Kingdom. *AIDS Care* 23: 1093-1101. 936082748 [pii];10.1080/09540121.2011.554515 [doi].
 22. Ezechi OC, Jogo A, Gab-Okafor C, et al (2010) Effect of HIV-1 infection and increasing immunosuppression on menstrual function. *J Obstet Gynaecol Res* 36: 1053-1058.
 23. Massad LS, Evans CT, Minkoff H, et al (2006) Effects of HIV infection and its treatment on self-reported menstrual abnormalities in women. *J Womens Health (Larchmt)* 15: 591-598. 10.1089/jwh.2006.15.591 [doi].
 24. Sobecki JN, Curlin FA, Rasinski KA, et al (2012) What we don't talk about when we don't talk about sex: results of a national survey of U.S. obstetrician/gynecologists. *J Sex Med* 9: 1285-1294. 10.1111/j.1743-6109.2012.02702.x [doi].
 25. Foss AM, Watts CH, Vickerman P, et al (2004) Condoms and prevention of HIV. *BMJ* 329: 185-186. 10.1136/bmj.329.7459.185 [doi];329/7459/185 [pii].
 26. MacPhail C, Terris-Prestholt F, Kumaranayake L, et al (2009) Managing men: women's dilemmas about overt and covert use of barrier methods for HIV prevention. *Cult Health Sex* 11: 485-497. 911735738 [pii];10.1080/13691050902803537 [doi].
 27. Muula AS, Thomas JC, Pettifor AE, et al (2011) Religion, condom use acceptability and use within marriage among rural women in Malawi. *World Health Popul* 12: 35-47.
 28. Sasse A, Van Beckhoven D, Verbrugge R (2014) Epidemiology of AIDS and

- HIV infection in Belgium. Belgian Scientific Institute of Public Health https://www.wiv-isp.be/Documents/WIV-ISP_Rapport_VIH-SIDA_2013_Print_Press.pdf
29. Pettigrew S.F (2000) Ethnography and Grounded Theory: a Happy Marriage? *Advances in Consumer Research* 27: 256-260.
 30. Miles, MJ, Huberman, A. M. (1994) *Qualitative data analysis: an expanded source book*. California: SAGE Publications. 337 p.
 31. Mason, M (2010) Sample Size and Saturation in PhD studies Using Qualitative Interviews. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research* 11.
 32. Bradley EH, Fennell ML, Pallas SW, et al (2011) Health services research and global health. *Health Serv Res* 46: 2019-2028. [10.1111/j.1475-6773.2011.01349.x](https://doi.org/10.1111/j.1475-6773.2011.01349.x) [doi].
 33. Braun V, Clarke V (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology* 3: 77-101. doi: [10.1191/1478088706qp063oa](https://doi.org/10.1191/1478088706qp063oa).
 34. Chimbiri AM (2007) The condom is an 'intruder' in marriage: evidence from rural Malawi. *Soc Sci Med* 64: 1102-1115. [S0277-9536\(06\)00512-0](https://doi.org/10.1016/j.socscimed.2006.10.012) [pii]; [10.1016/j.socscimed.2006.10.012](https://doi.org/10.1016/j.socscimed.2006.10.012) [doi].
 35. Muula AS (2010) "I can't use a condom, I am a Christian:" salvation, death, and... naivety in Africa. *Croat Med J* 51: 468-471.
 36. Nkomazana N, Maharaj P (2013) The prevalence of condom use among university students in zimbabwe: implications for planning and policy. *J Biosoc Sci* 45: 643-659. [S0021932012000788](https://doi.org/10.1017/S0021932012000788) [pii]; [10.1017/S0021932012000788](https://doi.org/10.1017/S0021932012000788) [doi].
 37. Nduna M, Farlane L (2009) Women living with HIV in South Africa and their concerns about fertility. *AIDS Behav* 13 Suppl 1: 62-65. [10.1007/s10461-009-9545-y](https://doi.org/10.1007/s10461-009-9545-y) [doi].
 38. Sofolahan YA, Airhihenbuwa CO (2013) Cultural expectations and reproductive desires: experiences of South African women living with HIV/AIDS (WLHA). *Health Care Women Int* 34: 263-280. [10.1080/07399332.2012.721415](https://doi.org/10.1080/07399332.2012.721415) [doi].
 39. Addis IB, Van Den Eeden SK, Wassell-Fyr CL, Vittinghoff E, Brown JS, Thom DH (2006) Sexual activity and function in middle-aged and older women. *Obstet Gynecol* 107: 755-764. [10.1097/01.AOG.0000202398.27428.e2](https://doi.org/10.1097/01.AOG.0000202398.27428.e2) [doi].
 40. Huang AJ, Subak LL, Thom DH, et al (2009) Sexual function and aging in racially and ethnically diverse women. *J Am Geriatr Soc* 57: 1362-1368. [JGS2353](https://doi.org/10.1111/j.1532-5415.2009.02353.x) [pii]; [10.1111/j.1532-5415.2009.02353.x](https://doi.org/10.1111/j.1532-5415.2009.02353.x) [doi].
 41. Lin H, Ding Y, Liu X, et al (2013) Changes in sexual behaviors among HIV-infected individuals after their HIV diagnosis in a rural prefecture of Eastern China. *PLoS One* 8: e59575. [10.1371/journal.pone.0059575](https://doi.org/10.1371/journal.pone.0059575) [doi]; [PONE-D-12-37862](https://doi.org/10.1371/journal.pone.0059575) [pii].
 42. Barnes DB, Murphy S (2009) Reproductive decisions for women with HIV: motherhood's role in envisioning a future. *Qual Health Res* 19: 481-491. [19/4/481](https://doi.org/10.1177/1049732309332835) [pii]; [10.1177/1049732309332835](https://doi.org/10.1177/1049732309332835) [doi].
 43. Patel SN, Wingood GM, Kosambiya JK, et al (2014) Individual and interpersonal characteristics that influence male-dominated sexual decision-making and inconsistent condom use among married HIV serodiscordant couples in Gujarat, India: results from the positive Jeevan Saathi study. *AIDS Behav* 18: 1970-1980. [10.1007/s10461-014-0792-1](https://doi.org/10.1007/s10461-014-0792-1) [doi].
 44. Dombrowski JC, Harrington RD, Golden MR (2013) Evidence for the long-term stability of HIV transmission-associated sexual behavior after HIV diagnosis. *Sex Transm Dis* 40: 41-45.

10.1097/OLQ.0b013e3182753327
[doi];00007435-201301000-00008 [pii].
45. Liamputtong P (2013) Women,
Motherhood and Living with

HIV/AIDS: A Cross-Cultural
Perspective. Bundoora, VIC, Australia:
Springer. 314 p.

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