International Journal of Innovative Research and Scientific Studies, 6(1) 2023, pages: 150-163

IJIRSS
International Journal of Innovative Research & Scientific Studies

ISSN: 2617-6548

URL: www.ijirss.com

Contraceptive use among people living with HIV and AIDS from selected communities in Siteki, Eswatini

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Abstract

Eswatini is among the countries with the highest prevalence of Human Immunodeficiency Virus (HIV) infection and Acquired Immunodeficiency Syndrome (AIDS) with a prevalence of 26% among sexually active adults. Strong reproductive health services including the use and provision of contraceptives are necessary to improve sexual health especially with HIV and AIDS (PLWHA). The study aimed to determine the socio-demographic characteristics, the preferred types of contraceptives, experiences with contraceptive use and the factors that influenced access to contraceptives for PLWHA in the selected communities. This quantitative survey used a structured, self-administered questionnaire to collect data from PLWHA aged 21-49 who are registered in support groups with the Swaziland AIDS Support Organization (SASO). The findings revealed that 82.3% of the respondents were using contraceptives and among these 69% were using barrier methods that could prevent both pregnancy and HIV infection. There were 11% of the respondents who did not desire to have children but were not using contraceptives. Generally, knowledge of contraceptive use was high and all the respondents knew that they must use condoms or dual methods to ensure safer sex and the prevention of a pregnancy. The findings of this study should assist health promoters in designing and implementing interventions that would address the barriers to contraceptive use among PLWHA.

Keywords: AIDS, Community, Condoms, Contraceptives, HIV infection, Knowledge, PLWHA.

DOI: 10.53894/ijirss.v6i1.1146
Funding: This study received no specific financial support.
History: Received: 10 October 2022/**Revised:** 17 November 2022/**Accepted:** 28 December 2022/**Published:** 2 January 2023

Authors' Contributions: All authors contributed equally to the conception and design of the study.
Competing Interests: The authors declare that they have no competing interests.
Transparency: The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained.
Ethical Statement: This study followed all ethical practices during writing.
Publisher: Innovative Research Publishing

1. Introduction

According to the Swaziland Demographic Health Survey, Eswatini (Swaziland) is among the countries with the highest prevalent rates of HIV infection and AIDS with a prevalence of 26% among sexually active adults [1]. Sero-sentinel surveillance data among pregnant women showed a prevalence of HIV infections at 42% [2]. Since the introduction of antiretroviral therapy, HIV has changed from being a fatal disease to being a chronic one [3] as more people on treatment are now surviving the illness. Health concerns that previously discouraged HIV positive people from having children are no longer an issue as more HIV positive people desire to have children [4]. The government of Eswatini declared HIV and AIDS a national disaster in 2003 and since that time, interventions have been implemented to create awareness of HIV and AIDS among the population. The major mode of transmission for HIV has been attributed to heterosexual relationships. Improving sexual health involves strong reproductive health services including the provision of contraceptives.

The global epidemic of HIV and AIDS is a well- known phenomenon. According to UNAIDS [5], the number of people living with HIV and AIDS (PLWHA) globally is 33.4 million and among these 31.3 million are adults. Sub-Saharan Africa is the epicenter of the epidemic being home to about 60% of the PLWHA worldwide [5] which represents an estimated figure of 22.4 million people [6]. In the sub-Saharan region, 59% of HIV positive are women in their reproductive years and about 75% of the global population of HIV positive women live in sub-Saharan Africa [5].

Eswatini is one of the fastest growing HIV epidemics with the prevalence among women increasing from 39.2% in 2006 to 42% in 2008 [2]. The dramatic rise in HIV rates has resulted in the country having 1,90, 000 (20%) PLWHA. Among these, 1,00, 000 (53% of PLWHA) are women and 15, 000 are children [1]. With high numbers of people affected, UNAIDS reports that the number of PLWHA is increasing due to the continued acquisition of HIV infection with 2.5 million people recently infected in 2007 worldwide [6]. In most developing countries, Eswatini in particular the focus of health care services is on the provision of prophylaxis against infection care for opportunistic infections and the delivery of antiretroviral treatment [4]. Less attention is given to appropriate reproductive health services for HIV positive men and women. The prevention of mother to child transmission programmes (PMTCT) have also provided HIV positive people with the option of experiencing biological parenthood. This change necessitates the need for renewed focus on the reproductive needs and contraceptive alternatives for PLWHA [7].

Contraception is a term used for the prevention of pregnancy and is also commonly known as birth control. Several contraceptive methods are available. Some are for men and others are for women. Some methods such as tubal ligation and vasectomy are permanent while others such as pills and injectable are reversible [8]. It is important to note that most contraceptive methods prevent pregnancy but do not prevent sexually transmitted infections (STIs) including HIV. Among the contraceptive methods, barrier methods, for instance condoms are 80-95% effective in preventing sexual HIV transmission when used consistently and correctly during every sexual act but are less effective in preventing pregnancy [9]. Pregnancies occur at a rate of 15 per 100 times when male condoms are used and 21 per 100 times when female condoms are used [9]. On the other hand, hormonal contraceptive and sterilisation are effective in preventing pregnancy but do not prevent heterosexual transmission of HIV. The combined use of a barrier such as a condom and a hormonal contraceptive method increases the efficacy of the contraceptive and thus minimizes HIV transmission risk [10]. According to UNAIDS [11], the reported prevalence of contraceptive use in the Southern African countries, Lesotho, and Botswana is 49%, 19% and 32% respectively. However, in Eswatini, the contraceptive prevalence is 51% [1] resulting in 75% of unwanted pregnancies [1] which are defined as a pregnancy that the female deemed undesirable of her own free will [12, 13]. In Eswatini, contraceptive counseling and HIV are guided by reproductive health policy guidelines that promote the prevention of mother-to-child transmission (PMTCT) [2]. Contraceptive counseling is emphasised for all pregnant women who seek antenatal care (ANC) because 97% of all pregnant women in Eswatini seek ANC at least once during pregnancy. The reproductive policy also emphasised dual contraception as part of the prevention of HIV transmission.

Despite the increase in promotion of contraceptive use and the availability of contraceptive methods, unintended pregnancies remain a global concern accounting for 30% of all known pregnancies [14]. The promotion of family planning services among HIV positive people can prevent infection, STIs including HIV and pregnancy. Moreover, if a couple chooses a barrier method, contraceptive use will prevent or slow transmission of the virus from one partner to the other. Contraceptive information is a major determinant of a positive attitude towards family planning method acquisition and sustained contraceptive use. Leon [15] states that family planning counseling implies that health workers should also assist clients in selecting an appropriate contraceptive method that best satisfies their needs and that clients should leave the counseling session knowing about the side effects of the chosen method and how to use it safely and effectively. This knowledge, according to Leon [15] is a major determinant of the continued adherence to contraceptive use by clients. The discrepancy between knowledge and practice raises questions about the type, availability, and accessibility of family planning services to people living with HIV. We seek to identify the factors that determine the use of contraceptives among people living with HIV and AIDS as well as determine their knowledge of available contraceptives and determinants affecting the accessibility to contraceptives in selected communities in Siteki, Eswatini.

2. Methodology

2.1. Study Design

This is a quantitative survey in which a structured, self-administered questionnaire was used to gather contraceptive use information from volunteer participants in selected communities in Sikeki, Eswatini.

2.2. Study Population and Setting

Siteki, the study site is situated in the Lubombo region (district) of Eswatini. The constituency consists of four

communities with a population of 15, 519 people as recorded by the 2007 census [1]. The study was performed in two communities in the constituency, which included Mlindazwe and Langa. The study population for this study consisted of adult PLWHA between the ages of 21-49 who were members of registered support groups and lived in Siteki, a community in Eswatini. According to the Eswatini AIDS Support Organization Register [16], the total population of the study was drawn from the registered support groups in Siteki which had 400 members (17 support groups. This population was feasible and accessible as these PLWHA had openly declared their HIV status and were registered members of support groups. Participation in the study was voluntary, all those who were in support groups and within the specified age range and willing to participate were enrolled in the study.

2.3. Inclusion Criteria

The eligibility criteria for participation in this study included: PLWHA registered in a support group who were between the ages of 21-49 and who voluntarily consented to participate in the study.

2.4. Exclusion Criteria

HIV positive people not affiliated with any support group in the Siteki constituency, PLWHA older than 49 years of age, PLWHA younger than 21 years and those who did not want to participate.

2.5. Sample size

The sample size was calculated using Epi-Info™ (Version 3.5.1) freely available from (http://www.cdc.gov/epiinfo/epiinfo.htm). Based on a population size of a total of 196 respondents (male and female) were the minimum to be enrolled in the study based on a +/- 10% margin of error at a 95% confidence level. A total of 230 questionnaires were distributed to people who volunteered to participate. The additional 34 questionnaires issued were to allow for a possible non-response rate and unusable questionnaires with incomplete data.

3. Data Collection

3.1. Data Collection Instrument

The data collection instrument was a 40-item questionnaire. In this study, a structured questionnaire (English version) with closed- ended and a few open-ended questions on the knowledge and use of contraceptives were used. The questionnaire was adapted from the general questionnaire used by the Eswatini (Swaziland) Reproductive Health Unit [17] which focuses on collecting data on contraceptive trends and barriers regarding the use of contraceptives. Adjustments were made to the questionnaire based on literature relevant to the target population. The authors compiled questions and recorded possible responses as gathered from the literature reviewed and respondents had to tick appropriate responses applicable to them and write personal comments where applicable. The instrument was also translated into the local language, Siswati and for those participants who were not able to read or write, the research assistants helped in clarifying and helping the participants to fill the questionnaire. Data was collected over a 5 day period.

3.2. Data Collection for the Study

The participants were accessed through the Eswatini (Swaziland) AIDS Support Organization (SASO) which provided the scheduled dates for meetings of the support groups. The objectives of the study were explained to the participants as well as what their involvement entailed. The study was for educational purposes and the information obtained was to be used to recommend strategies for addressing the issue of contraception among PLWHA. Questionnaires were then distributed among participants who voluntarily agreed to participate in the study. Two assistants were available to assist participants who were not able to read or write.

3.3. Reliability of the Instrument

The questionnaire used in this study was adapted from the general questionnaire used by the Eswatini (Swaziland) Reproductive Health Unit [17] which focuses specifically on collecting data on contraceptive trends and barriers to the use of contraceptives. The instrument was pre-tested before conducting the study.

3.4. Validity

The authors established rapport with the respondents, explained the purpose of the study to them and ensured anonymity. Open and closed ended questions were asked and options were made available so that the respondents could be reminded of some information that they may have forgotten. For example, question 17 of the questionnaire asked: “Which contraceptive are you currently using?” A list of contraceptives was provided and respondents only had to check the ones they knew.

3.5. Data Analysis

Brink, et al. [18] describe data analysis as categorizing, ordering, manipulating and summarizing the data and describing them in meaningful terms. In this study, the data collected were entered into an Excel sheet (Microsoft Office 2007) for easy analysis and management. The data was then analysed through the statistical computer program Stata and the Statistical Package for the Social Sciences (SPSS). Descriptive statistics were used for analyses such as frequencies and linear regression. The results were then presented in frequency tables and percentages. New variables were generated and participants were grouped into age groups and groups ranked as having low, medium, and high knowledge on

contraceptives for better analysis and comparison of the results. Questionnaires that were incomplete or filled by people outside the specified target group and age were discarded.

3.6. Ethical Considerations

The three fundamental ethical principles of respect for persons, beneficence and justice were observed throughout the study. The Medunsa Research Ethics Committee (MREC/H/67/2010:PG) and the Eswatini Ministry of Health Science and Ethics Committee both gave approval for this study.

4. Results

The purpose of the study was to investigate the use of contraceptives among PLWHA in support groups

(Siteki, Eswatini). The study attempted to determine the socio-demographic characteristics, the types of contraceptives used their experience with contraceptive use and the factors that influenced access to contraceptive use of the participants.

4.1. Demographic Characteristics of the Participants

The demographic data covered the gender, age, level of education, marital status and source of income and HIV status of the respondents**.**

4.2. Respondents Age

All respondents 100% (N=196) answered this question. The respondent's age ranged from 21 to 49 years. Of the respondents, 21.4 % (n=42) were between the age 21-25; 19.9% (n=39) were between the age range 26-30; 12.2% (n=24) were between the age 31-35; 17.9% (n=35) were between the age 36-40; 17.3% (n=34) were between the age 41-45; 11.2% (n=22) were between the age 46-49.

4.3. Respondents' Gender

All respondents answered this question 100% (N=196). Of all the respondents, 19.4 % (n=38) were males and 80.6% (n=158) females. The females outnumbered the males which could be an indication that more HIV positive women volunteered to participate in this study or that there are more females registered in the support groups.

4.4. Respondents' Level of Education

This question was answered by all respondents 100% (n=196). Of all the respondents, 9.7% (n=19) had never been to school; 33.7% (n=66) had primary education; 24% (n=47) had a secondary education; 25.5% (n=50) had a high school education; and 7.1% (n=14) had a university education.

4.5. Marital Status

All respondents answered this question 100% (n=196). Of all the respondents, 30.61% (n= 60) were single, 40.82% (n=80) were married, 4.6% (n=9) were separated, 9.7% (n=19) were cohabitating; and 14.3% (n=28) were widowed.

4.6. Source of Income

All respondents answered this question 100% (n=196). Of all the respondents, 34.18% (n=67) were self-employed; 8.1% (n=16) were farmers, 6.12% (n=12) were civil servants, 5.10% (n=10) were working in companies, 39.80% (n=78) were unemployed and 6.63% (n=13) were still in school.

4.7. Year HIV Positive Diagnosis

All respondents answered this question 100% (n=196). Of all the respondents, 0.5 % (n=1) knew their HIV status in 1996, 1.5% (n=3) in 1998, 1% (n=2) in 1999, 3.1% (n=6) in 2000, 2.1% (n=4) in 2001, 2.6% (n=5) 2002, 4.6% (n=9) in 2003, 3.1% (n=6) in 2004, 9.7% (n=19) in 2005, 13.8% (n=27) in 2006, 11.7% (n=23) in 2007, 21.9% (n=43) in 2008, 16.3% (n=32) in 2009, 8.2% (n=16) in 2010.

4.8. Demographics and use of Contraceptives

4.8.1. Age and Contraceptive Use

Among the respondents, 84% (n=164) were using contraceptives. Among these 19.5% (n=32) were aged 21-25; 20% (n=33) were aged 26-30; 13% (n=22) were aged 31-35 17.6% (n=29) were aged 36-40, 18.9% (n=31) were aged 41-45, and 10% (n=17) were aged 46-49 years (Table 1).

4.9. Marital Status and Contraceptive use

When the respondents' marital status was tabulated against contraceptive use, 84% (n=164) of the respondents were currently using contraceptives. Among these, 26% (n=43) were single, 47.5% (n=78) were married,5% (n=9) were separated; 10.9% (n=18) were cohabitating and 9.7% (n=16) were widowed (Table 2). The married respondents recorded a 47.5% use of contraceptives among the married users, 27% (n=21) used contraceptives for only prevention of pregnancy and not sexually transmitted infections.

Table 1.
Age of respondents currently using contraceptives (N=196).

Currently using contraceptives						
	Yes (N=164)		No (N=32)			
Age category in years	Frequency	%	Frequency	%	Total (N=196)	%
21-25	32	19.5	10	31	42	21.4
26-30	33	20	6	19	39	19.9
31-35	22	13	2	6	24	12.2
36-40	29	17.6	6	19	35	17.9
41-45	31	18.9	3	9	34	17.3
46-49	17	10	5	16	22	11.2
Total	164	100	32	100	196	100

Table 2.
Marital status and contraceptive use.

Contraceptives currently being used																		
Marital status	Pill		Injectable		Loop		Male condom		Female condom		Tuba ligation		Withdrawal		Dual method		Total	Total percent
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	(%)
Single	5	3	10	6	0	0	13	7.8	1	0.6	0	0	0	0	14	8.4	43	26
Married	6	3.7	10	6.1	2	1.2	36	22	2	1.22	0	0	3	1.83	19	11.6	78	47.5
Separated	1	0.6	1	0.6	0	0	5	2.75	0	0	0	0	0	0	2	1.1	9	5
Cohabiting	1	0.6	0	0	1	0.6	8	4.9	0	0	0	0	0	0	8	4.9	18	10.9
Widowed	2	1.2	4	2.44	0	0	7	4.3	0	0	1	0.6	0	0	2	1.22	16	9.7
Total	15	9.0	25	15	3	1.8	69	42	3	1.8	1	0.6	3	1.8	45	27	164	100

4.10. Level of Education and use of Contraceptives

Among the 100% (n=196) respondents in the study 84% (n=164) were using contraceptives. Among these 9% (n=15) had no education, 37% (n=60) had a primary education, 26% (n=42) had a secondary education; 21% (n=35) had high school and 7% (n=12) had a university education Table 3.

Table 3.
Level of education and use of contraceptives.

Contraceptives currently being used																		
Level of education	Pill		Injectable		Loop		Male condom		Female condom		Tuba ligation		Withdrawal		Dual method		Total	Total
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
No education	1	0.6	3	1.8	1	0.6	6	3.6	1	0.6	0	0.6	1	0.6	2	1.2	15	9
Primary	6	3.7	12	7.4	1	0.6	30	18.6	0	0	1	0.6	1	0.6	9	5.6	60	37
Secondary	5	3.1	4	2.5	1	0.6	15	9.3	1	0.6	0	0	1	0.6	15	9.3	42	26
High school	2	1.2	6	3.6	0	0	12	7.2	1	0.6	0	0	0	0	14	8.4	35	21
University	1	0.6	0	0	0	0	6	3.6	0	0	0	0	0	0	5	3	12	7
Total	15	9.2	25	15	3	1.8	69	42.3	3	1.8	1	1.2	3	1.8	45	27.5	164	100

4.11. Source of Income and use of Contraceptives

The use of contraceptives varied depending on various factors. A total of 33% (n=55) of the users of contraceptives were self-employed. The unemployed respondents had the highest number of non-users 44% (n=14) while those working in companies were all using contraceptives 6% (n=10) followed by civil servants and farmers who had 6% (n=2) non-users of contraceptives.

Table 4.
Respondents source of income and use of contraceptives (N=196).

Source of income	Currently using contraceptives			
	Yes		No	
	Frequency	%	Frequency	%
Self employed	55	33	9	28
Farmers	13	8	2	6
Civil servants	11	7	2	6
Company worker	10	6	0	0
Unemployed	67	41	14	44
At school	8	5	5	16
Total	164	100	32	100

4.12. Knowledge about Contraceptive use by PLWHA

Table 4 presents respondents' sources of income and use of contraceptives. To determine their knowledge, respondents were asked to tick off the number of contraceptives they know with from a list. The responses were categorized to determine the degree of knowledge, those who knew three contraceptives had low knowledge, those who knew four to six contraceptives was as moderate knowledge and those who knew between seven to nine contraceptives were categorised as having high knowledge. All the respondents 100% (n=196) answered this question. A total of 17.9% (n=35) of the respondents knew between 1-3 types of contraceptives, 47% (n=93) between 4-6 types of contraceptives and 34.7% (n=68) between 7-9 types of contraceptives. Among the users of contraceptives 18.29% (n=30) had low knowledge; 50.6% (n=83) had medium knowledge; 31.1% (n=51) had high knowledge. Those with low knowledge commonly used injection 33% (n=10) and condoms 37% (n=11) while 6.6% (n=2) were making use of the dual contraception method. Among those with a medium knowledge, half used condoms 51% **(**n=42); 25% (n**=**21) used dual contraception. Those who had high knowledge, the majority used dual contraception 43% (n=22); and 37% **(**n=19) used condoms. Most of the respondents 98.5% (193) answered the question on whether they had ever used contraception or not, 90.3% (n=177) once used contraception, 8.2% (n=16) never used contraception and 1.5% (n=3) did not answer the question.

4.13. Contraception used (Currently used) by the PLWHA

Not all respondents answered this question as some were not using contraceptives during the study period; those who currently used contraceptives were 83.7% (n=164). Of the 164 respondents (Table 5) that were currently using contraceptives 9.1% (n=15) were on the Pill; 15.2% (n=25) Injection; 1.8% (n=3) Loop; 42.1% (n= 69) Male condom; 1.8% (n=3) Female condom; 0.6% (n=1) tubal ligation; 1.8% (n=3) Withdrawal; 27.4% (n=45) Dual. Contraceptives that had zero recordings included spermicides and vasectomy (Table 5).

Table 5.
Contraceptives in use by respondents (N=164).

Contraceptives in use by respondents'	Frequency	Percent
Pill	15	9.1
Injectables	25	15.2
Loop	3	1.8
Male condom	69	42.1
Female condom	3	1.8
Tubal ligation	1	0.6
Withdrawal	3	1.8
Spermicides	0	0
Vasectomy	0	0
Dual	45	27.4
Total	164	100

4.14. Experiences with Contraceptive use among PLWHA

4.14.1. Ease of using Contraceptives

All the respondents using contraceptives answered this question 100% (n=177). Among these 80% (n=142) said it was easy to use contraceptives while 19.7% (n=35) indicated that they were finding it difficult to use contraceptives (Table 5).

4.14.2. Partner Support for Contraceptive use

A total of 84% (n=164) of the respondents who are currently using contraceptives answered this question. Among those, 83% (n=136) said they were not supported by their partners while 17% (n=28) were supported by their partners. Most of those supported by partners, 45.6% (n=62) were using condoms followed by 25.7% (n=35) that were making use of the dual method. Among those not supported by partners 35.7% (n=10) were using the dual method and 35.7% (n=10) were using condoms. This situation might account for inconsistency in the use of condoms because of the lack of support from their partners.

4.15. Side Effects of Contraceptive use

This question was answered by 128 people out of the 164 respondents that were currently using contraceptives. Some of the side effects that the participants experienced with using contraceptives include: 13.2% (n=17) complained of headache; 10.9% (n=14) a heavy flow, 14.7% (n=19) had no periods, 1.6% (n=2) experienced period cramp, 7.8% (n=10) have gained weight, 1.6% (n=2) have lost weight, 3.1% (n=4) complained of nausea, 6.2% (n=8) had itchy private parts; 2.3% (n=3) experienced a low libido; 0.8% (n=1) experienced longer periods, 3.1% (n=4) often forgot to take the contraceptive, 1.6% (n=2) had difficulty using the contraceptive, the reason being the experience of vaginal discharge in 33.3% (n=43) of the participants. Vaginal discharge was experienced by most of the respondents using contraception which may explain the inconsistency in the use of condoms. Among those with vaginal discharge, majority 65% (n=28) were using condoms and only19% (n=8) were using dual method.

4.16. Factors that Influence Access to Contraceptive Services

4.16.1. Availability of Health Facilities in the Area

All respondents (n=196) answered this question, with 70.9% (n=139) indicated that there was a facility available in their

area while 29.1% (n=57) had no facility in the area where they resided to access contraceptive services. Among those who were using contraceptives 100% (n= 164), 70% (n=114) had the facility in their area; 30.5% (n=50) did not have a health facility in their area.

4.17. Contraception Information during HIV and AIDS Post Counseling

All the respondents answered this question 100% (n=196). A total of 87% (n=170) have received information on contraceptives while 13% (n=26) indicated that they did not receive any information on contraceptives during post counseling on HIV and AIDS.

4.18. Source of Information on Knowledge about Contraceptives

All the respondents answered this question 100% (n=196), with 6.12% (n=12) receiving their information from the television; 16.84% (n=33) from the radio; 4.59% (n=9) from the newspaper; 56.63% (n=111) at the clinic; 13.27% (n=26) from friends and 2.55% (n=5) received their information from other sources.

4.19. Motivation to use Contraception

All the respondents that were currently using contraceptives answered this question 100% (n=164). Of the these, 12.1% (n=20) of the respondents were using contraceptives to prevent pregnancy; 27.4% (n=45) for the prevention of sexually transmitted infections; 5.5% (n=9) for child spacing and 55% (n=90) used contraception for the prevention of HIV.

4.20. Desire to have Children

All the respondents answered this question 100% (n=196). Of these respondents, 32.14% (n=63) desired to have children while 67.86% (n=133) indicated that they did not want any children or additional children. This was an important aspect of the study because the desire to have children or not has an influence on the use or non-use of contraceptives.

Table 6.
Marital status and the desire to have children.

Desire to have children						
Marital status	**Yes**		**No**		**Total**	
	N	**%**	**N**	**%**	**N**	**%**
Single	24	38	36	27	60	30.6
Married	23	37	57	43	80	40.8
Separated	2	3.2	7	5	9	4.6
Cohabitating	11	17.5	8	6	19	10
Widowed	3	4.8	25	19	28	14.3
Total	63	100	133	100	196	100

4.21. Marital Status and the Desire to have Children

All respondents answered the question regarding their desire to have children 100% (n=196), among the respondents 32% (n=63) desired to have children. Among those who desired children 38 % (n=24) were single and desired to have children; 37% (n=23) were married; 3% (n=2) were separated; 17% (n=11) were cohabitating; and 5% (n=3) were widowed. Most of the respondents who desired to have children were married, which may be a result of the marital role of reproduction (Table 6).

4.22. Desire to have Children and Contraceptive use

Among the 196 respondents, 84% (n=164) were using contraceptives; among these 33% (n=54) still had the desire to have children and 67% (n=110) did not desire to have children. Among those who were not using contraceptives 16% (n=32), 28% (n=9) desired children and were not using contraceptives; what is worth noting is that there were 72% (n=23) respondents with an unmet need. These are the people who are not using contraceptives, yet they do not want to have children.

4.23. Living Children and the use of Contraceptives

Most of the respondents, 78.5% (n=154) on contraceptive had previous children. Among these respondents with children 18% (n=29) had 1 child; 21.43% (n=33) had 2 children, 16.9% (n=26) had 3 children, 13% (n=20) had 4 children; 11.7% (n=11) had 5 children, 7.14% (n=11) had 6 children, 8.44% (n=13) had 7 children, 1.3 % (n=2) had 8 children and 1.3% (n=2) had 9 children.

4.24. Contraception Information and its use during Post Counseling

Among the 164 respondents using contraceptives (100%), 89% (n=146) received information regarding contraceptive during post counseling while 11% (n=18) did not receive information during HIV test post counseling. Most of the respondents whether receiving information on post counseling or not, predominantly used dual contraceptives and condoms. Predominantly, 36.6% (n=60) of those who received counseling were using condoms and 23.8% (n=39) were using dual contraception. Among those who did not receive information on contraceptive use during post counseling 5.49% (n=9) were using condoms and 3.66% (n=6) were using dual contraception.

4.25. Reasons for not using Contraceptives

Table 7 presents reasons for participants not using contraceptives. Among the 196 respondents, there were only 16% (n=32) who were not using any contraceptives. Reasons given for not using contraceptives included: 6.2% (n=2) had health concerns; 6.2% (n=2) had no partner support; 3.1% (n=1) found contraceptives to be expensive; 3.1% (n=1) indicated that the health facility was too far; 3.1% (n=1) wanted to have children; for 75% (n=24) lack of knowledge on contraceptives while 3.1% (n=1) had no steady sexual partner (Table 7).

Table 7.
Reasons for not using contraceptives.

Reason	Frequency	Percentage
Health concerns	2	6.2
No support form partner	2	6.2
Expense	1	3.1
Facility is far	1	3.1
Desire to have children	1	3.1
Lack of knowledge	24	75
No sex partner	1	3.1
Total	32	100

5. Discussion

5.1. Respondents' Age

The age group 21- 49 was selected to address the objectives of the study because the research report shows that this is regarded as the sexually reproductive years [19]. A drop in the number of respondents was observed in the age group between 31 and 35 years (12.2%, n = 24) and an increase was evident in the age groups 36 to 40 and 41 to 45 years with a representation of 17% of the total population for each age category. The study found that the highest number of HIV-infected participants were in the younger age groups and this agrees with the Eswatini Government Report [1] indicates a high prevalence among the age groups 20 to 24 (38% positive) and 25 to 29 (49% positive). It is also worth noting that this is the age bracket with the highest population which is important information for programme planning for reproductive interventions in Eswatini.

5.2. Gender

In the selected support groups of PLWHA in Siteki, female respondents out -numbered the males by 80.6% (n = 158) to 19.4% (n = 38). Although, the literature report shows that women are more likely to be HIV positive than men with a reported prevalence of 31% among women and 20% among men aged 15-49 years [20]. The findings of our study could be an indication that there is a higher registration of females in the support groups for PLWHA or that females were more willing to participate when compared to males.

5.3. Age

A report on HIV positive people indicates that age has an effect on the use of contraceptives. Chen, et al. [21] reported that when people are young and not married, they tend not to use contraceptives. According to our findings, 4 0 % (n=65) of contraceptives users are between the ages 21-30. Among the older respondents between the ages of 41-49, there was a decrease to 30% of contraceptive usage. Our findings are in line with the community health survey [17] which indicated a high usage of contraceptives among the age groups 20-24 and 25-29 at 51% and 54 % respectively and a decline in use among the age groups 40-44 and 45-49 at 36% and 25.6% respectively.

5.4. Education Level

People with a secondary level of education are expected to understand the issues of contraceptives and should have adequate knowledge of the methods available and places to access them. The community health survey of 2002 reports that 32.4% of females and 29.4% of males have a primary education, 58% of females and 59.9% of males had a secondary or higher education [17].The last population and housing census that was conducted in Eswatini in 2007 revealed that nationally, 17.8% of females had secondary education while only 0.7% had tertiary education [1]. In this study, the percentage of participants with secondary and high school education decreased with age while the proportion of those with no education 9.7% (n=19) with mainly older participants. When compared to the national results, there has been an increase in secondary education attainment while tertiary education remains low in this community. It is very important that health promotion programmes on contraceptives also incorporate education strategies that will reach the illiterate population that needs the information.

According to Todd, et al. [22], education contributes to knowledge and appreciation of health education information which results in the use of contraceptives. What is obvious from the results of our study is that as the level of education increases the respondents also have the knowledge to use the correct methods of contraception (condom or dual method). When comparing the level of education to the type of contraceptive use, the results showed that for those who had completed primary school, 65% (n=39) used either condom or dual method; among those who had completed secondary school, 71% (n=32) of them using contraceptives also used condoms or the dual method and those who had completed high school 74% (n=26) were using the correct contraceptives and among those at tertiary education almost all of them 92%

(n=11) using contraceptives were using the correct form of contraceptives.

5.5. Marital Status and Contraceptive use

In this study, half of those using contraception 47.5% (n=78) were married while a quarter (26%) were single. This scenario is important because although it is believed that those who are not in steady relationships are less likely to use contraceptives [23] the results of our study showed that even those in a steady relationship are not using contraceptives.

5.6. Source of Income

It has been shown that the socio-economic status of women may contribute to their inability to use contraceptives as they depend on men economically, thus fail to have control in sexual negotiations [10]. A large proportion, 39.8% (n=78), of the respondents in this rural community were unemployed. This study showed that the unemployed population was less likely to use contraceptives with 44% (n=14) of non-users of contraceptives being unemployed. Another category that had a substantial number of respondents not using contraceptives were participants who were still in school at 16% (n=5). Among the working-class respondents (companies and civil servants) 0% and 6% respectively, were not using contraceptives. This indicates that those in employment were more likely to use contraceptives.

5.7. HIV Status

Results of this study showed that there was an increase in the number of respondents who knew their HIV status for a certain period. A total of 21.9% (n=43) had been aware of their status since 2008; 16.3% (n=32) for 2009 and 8.2% (n=16) for 2010. There were 56% (n=105) respondents who were aware of their HIV status for more than three years. The Eswatini projections report [20] indicates that HIV prevalence has stabilised since 2008 which may explain the drop in those who knew their status from 2009 to 2010. The important reason for knowing HIV status in relation to contraceptives is that people living with HIV must make use of dual contraceptives to prevent transmission of the HIV virus to their partners.

5.8. Choice of Contraceptive use by PLWHA

This section answered the second objective of the study which was to determine which form of contraceptive was preferred by the respondents. The widespread use of condoms and dual methods of contraceptives is a positive sign about protection against reinfection and unintended pregnancies. According to MacPhail, et al. [24] women in long -term relationships appear to use contraceptive methods that offer protection from sexually transmitted infections and HIV infection. According to Eswatini Government Report [1] condom use in Eswatini is generally low because it is commonly used in casual sexual encounters with people perceived as high risk partners once the relationship has been formalized, men would have several sexual partners and not use protection or condoms. Condom use is lowest among married couples and long-term partners with only 12% of married women using them. The consistent use of condoms with partners, irrespective of marital status, is important for PLWHA.

5.9. Experiences with Contraceptive use among PLWHA

This section covers the third objective which was to gather information about the experiences of people living with HIV and AIDS in Siteki, Eswatini with contraceptives. It is important to note that most of the respondents who indicated that they were using contraceptives were married accounting for 47.5% (n=78) while those that had never used contraceptives were mostly from the group of singles at 81% (n=13). Contraception was used by 5% (n=9) of those who were separated. The results also indicate that 80.6% (n=158) of the respondents who showed that they were using contraceptive were females and 19.4% (n=38) were males. Reasons given for not using a contraceptive were that they did not have sexual partners, and some were not in relationships. A high use of contraceptives among married people was observed and the motivation for its use was for child-spacing and for the prevention of HIV and STIs. Notably, 27% (n=21) of the married respondents used contraceptives for prevention of pregnancy. There was a low use of contraceptives among single respondent who may not be in stable relationships and are prone to engage in casual sex which necessitates protection from sexually transmitted infections and unintended pregnancy.

5.10. Contraception Information during Post Counseling on HIV and AIDS

Information on contraceptives is important especially for PLWHA because they must use dual methods of contraception that will include a hormonal as well as a barrier method. This emphasis on a contraceptive method is critical for PLWHA as they have to protect themselves against reinfection. They also need to take care not to infect their partners and they must prevent unplanned pregnancies which may result in babies born with HIV. The majority 87% (n=170) of the participants in this study indicated that they received information on contraceptives during post counseling on HIV and AIDS while 13% (n=26) said that they did not receive any information on contraceptives. This is a good indicator of the integrated services and holistic information provided during post-test counseling for HIV. According to national statistics, 58% of the women who were receiving their contraceptives from public facilities were informed about the available choices including the side effects of methods before using contraceptives [1, 25]. Similarly, many of the respondents in this study received their contraceptives from the public facilities that gave them access to information on contraceptives.

5.11. Sources of Information about Contraceptives

It has been reported that information on contraceptives is mostly received through the radio, television and friends [26].

This study revealed that most of the respondents obtained their information from the clinic (56.63% n=111). This is attributed to the availability of health facilities in the area and the fact that these patients were visiting the facilities to obtain their antiretro viral drugs (ARVs). The radio and friends were their second and third sources of information on contraceptives at 16.84% (n=33) and 13.27% (n=26) respectively. This finding corresponds with another report which indicates that 69% women and men had exposure to family planning information through the radio and that 70% of women and 74% of men listen to the radio almost every day and only 33% gain information from newspapers [17]. The results of this study indicate that only a few respondents indicated that they received information from both the newspaper and television. This may indicate that health promoters do not make efficient use of all mediums or that respondents have infrequent access. This study revealed that there was widespread coverage and availability of information for the respondents. It has been shown that exposure to information varies according to demographic characteristics, rural women are less likely to be exposed to television and newspapers than urban women.

5.12. The Ease of Contraceptive use

Among the respondents currently using contraceptives, 84% (n=138) said using contraceptives was easy and 16% (n=26) said it was not easy. The usability of contraceptives may be explained by the fact that most of the respondents received their contraceptives from local health facilities where education was provided, and choices were presented to them. Difficulty in using contraceptives could result from the fact that the peers and pharmacies who provided information may not have explained in detail how to manage the side effects [27, 28].

5.13. Partner Support for Contraceptive use

Women who believe that their husband has a positive attitude toward contraceptives are more likely to use them - whereas women who do not talk to their husband about contraceptives are less likely to use them. In addition, partner dissatisfaction is a significant barrier to contraceptive use in Swaziland [29]. A report found that 6% of female respondents did not use contraceptives because of opposition from their partners [17]. Women report that their husbands or partners are the key decision makers in the family [25]. Reasons for non-use of contraceptives include pressure to have sex without the necessary protection, lack of communication among partners and side effects related to contraceptives [30]. The implication is that some women will adopt family planning despite the disapproval of their partners. Among the 164 respondents in this study who - were using contraceptives 83% (n=136) said they were supported by their partners while 17% (n=28) were not supported by their partners which means that among these respondents there is a high self-motivation to use contraceptives.

5.14. Side Effects of Contraceptive use

The side effects experienced due to the use of contraceptives do play a role in the initial decision to use contraceptives, the continuation with the chosen method as well as the satisfaction with the method. It has been shown that fear of side effects contributes to the low uptake of contraceptives. In a study conducted by Bailey [31] in Ghana, it was highlighted the that side effects of the non-use of contraceptives with more women increasingly citing it as a reason, increasing from 18% to 26% in 1998 and 2003. Similarly, another study in the USA stated that side effects are being cited by a majority of women as a barrier to use contraceptives [32]. A few possible side effect options like headache, heavy flow, no periods, period cramps, gained weight, lost weight, nausea, itchy private parts, low libido, longer periods, often forget it and difficulty in using the contraceptive were listed in the questionnaire to allow respondents to tick those they were experiencing. Among the listed side effects, the highest response indicated vaginal discharge at 33.33% (n=43) followed by no period (14.73%, n=19), headache (13.18%, n=17) and a heavy period (10.85%, n=14).

Tsedeke, et al. [33] reported that conditions that predispose women to vaginal discharge among others are the use of oral contraceptives and the presence of STIs especially when using only hormonal contraceptives without any barrier method such as a condom. The fact that 33.33% of the participants in our study experienced vaginal discharge as a side effect may be attributed to the gap in using the condom or dual method. The results also indicated that 27.44% (n=45) of the respondents were using dual protection and 42% (n=69) were using condoms that prevent them from contracting STIs. This leaves a gap of 21% of respondents who are not currently using a barrier method as contraceptive, and they may be exposed to STIs. The data presented 14.74% (n=19) of the respondents having no menstrual period as a side effect. Report indicates that women using injectables do experience menstrual period loss [34]. Our study shows that 15.24% (n=25) of the respondents were using injectables, which makes them prone to experiencing side effects. Another side effect that ranked high was headache as indicated by 13.18% (n=17). Steen and Shapiro [35] indicate that oral contraceptives and injectables may cause headaches and as 9.15% (n=15) of the respondents were taking the pill, their headaches could have been attributed to their choice of contraceptive.

5.15. Factors Influencing the use of Contraceptives by PLWHA

Research in the HIV and AIDS health care system has revealed that the unmet need for contraceptives among PLWHA is greater than in the general population as indicated by the greater numbers of unintended pregnancies among this specific group of people [36]. In Eswatini, there are reported cases of unintended pregnancies among women even those enrolled in antiretroviral therapy programmes. Some of the factors that could influence access to and use of contraceptive services are:

5.16. Knowledge of Contraceptives

Information about contraceptives is a major determinant of positive attitudes towards the use of contraceptives. People with less knowledge about the benefits of contraceptives are more likely to use them than those with less knowledge. In general, knowledge of the most readily available methods was widespread among the respondents to this study. The well-known contraceptive was the pill, injectables and condoms at 96%, 92% and 100% respectively. Very few people knew about vasectomy (1%) and spermicides (0.5%) as forms of contraception while 56% of the respondents knew about withdrawal. The knowledge of contraceptives was the highest among the younger age groups (21-30 years) with 19% (n=38) out of the 196 respondents knew about all nine types of contraceptives listed in the questionnaire. The findings of this study agree with the report of the Ministry of Health and Social Welfare (MH&SW) [17] on the awareness of the different contraceptive methods which reported that 99% of respondents were aware of condoms, 95% of the pill, 95% of injectables and 40% of the loop as common forms of contraception available at the local clinics. In this study, 18% (n=35) of the respondents had low knowledge about contraceptive methods but among them only 14% (n=5) were not using contraceptives. Whereas amongst those that had high knowledge 26% (n=51) a quarter, 25% (n=17) did not use contraceptives. Those who a had high degree of knowledge did not necessarily use contraceptives. This agrees with Tsedeke, et al. [33] who reported that knowledge does not translate to practice.

5.17. Reasons for using Contraceptives

The results show that 29% (n=48) of the respondents were only using contraceptives for the prevention of pregnancy and not for the prevention of infections. This is a significant representation of the total population covered in this study as it represents roughly a quarter of the total respondents. People who are not using condoms or other protective measures (whether HIV-positive or not) are a public health concern as they may continue to infect others. The need for integrating reproductive health services with HIV services to ensure reinforcement of information on family planning in general and contraception is necessary.

5.18. Marital Status

Cooper, et al. [4] reported that marital status contributes to the use or non-use of contraceptives as childlessness in marriage is often forbidden by cultural customs and traditions that afford childless women a lower status than those who have children. However, on the other hand, sometimes those women who are not in a steady relationship have more decision-making power than some women in traditional marriages or steady relationships because of the gender power of the male partner on contraceptive decisions (type, use or not using) [29]. The high figure for married couples were followed by those who were single at 26% (n=43) and those who were cohabiting represented 10.9% (n=18), those who were separated had the lowest representation at 5% (n=9). This is consistent with the findings of Fleischman [23] who reported that those do not engaged in regular sexual activity or having constant relationships tend not to use contraceptives.

5.19. Desire to have Children

People living with HIV and AIDS have the same desires as other population groups regarding the desire to have children and the younger they are, the more they desire to have children [4]. According to Tsedeke, et al. [33], HIV positive people desire to have children because in African culture, children are perceived as an asset. The desire to have children was important in this study because it influences the use or non-use of contraceptives [13]. About a third, 32.14% (n=63) of the Siteki respondents indicated that they desire to have additional children while 67.86% (n=133) do not want any more children. When comparing contraceptive use and the desire to have children results revealed that 28% (n=54) of the respondents were using contraceptives and desiring to have children, 5% (n=9) were not using contraceptives and desiring to have children and 56% (n=110) were using contraceptives b u t did not desire to have children. This is an indication that not desiring children was a strong factor that influenced the use of contraceptives.

The findings in the study also indicated that the desire to have children decreased with age as in the age group 21-25, 12% (n=23); and the age group 26-30, 10% (n=19) indicated that they want children. This agrees with Cooper, et al. [4] who said that people living with HIV who are young and not married do have a desire to have children especially with the availability of ARVs and PMTCT programmes. A relationship between age and the desire to have children was observed in the study which leads to low utilization of contraceptives. The low utilization of contraceptives due to the desire to have children was common among the younger age group as they may not be using contraceptives consistently because they want to have children.

5.20. Availability of Health Facilities in the Area

The availability and type of health facility in an area influence the uptake of contraceptives [37]. If there is a fully operational facility in the area, it enhances the ability to access different health services e.g. family planning, voluntary counseling and testing (VCT) and information sessions on possible choices for contraceptives that would enable clients to easily choose a method that best fits them. The health facility can also assist in managing the complications and side effects as they arise as opposed to getting contraceptives over the counter. In the Siteki district, three health facilities are available to provide family planning services including contraceptives. Results from the Siteki survey of the geographic or physical access to a facility indicated that 70.9% (n=139) of the respondents had a facility in the area where they are staying while 29.1% (n=57) had no facility in their area. The mean distance to the closest facility was 6 kilometers while those who indicated there was not a facility in the area referred to a mean travel distance of 15 kilometers to the nearest health facility. This agrees with the Ministry of Health and Social Welfare (MH&SW) [38] linkages report which indicated that 80% of

the population in Eswatini resides within 8 kilometers of a health care unit, and 60% of the population is able to access a health facility within an hour. The results of this study confirmed this in that there was no evidence that geographic access was constraining access to contraceptives.

5.21. Motivation to use Contraceptives

The findings of our study revealed that a majority (55.5%; n=90) of the respondents used contraceptives for the prevention of HIV reinfection. It is also important to note that the second largest group of respondents representing 27.4% (n=45) indicated that they were using contraceptives for the prevention of STIs. These results show that 83% (n=135) of the respondents were motivated to use contraceptives for the right reasons such as to prevent re- infections and new infections in partners. This finding corresponds with Cohen [36] and Galavotti and Schnell [39] who also found that the motivation to use contraceptives among people living with HIV is to prevent infection. However, 12% of the respondents used contraceptives because they wanted to prevent getting pregnant and agrees with the study of Mitchell and Stephens [34]. This category of respondents who choose contraceptives only to prevent pregnancy raises concern as they may not fully protect themselves against HIV infection.

5.22. Administrative Accessibility

Bertrand, et al. [40] describe administrative accessibility as the extent to which unnecessary rules and regulations that inhibit contraceptive choice and use are eliminated. There are very few rules and regulations associated with the provision of contraceptive services in Eswatini. The most restrictive of these rules are related to the permanent methods of contraceptives. This study revealed that permanent methods are not commonly utilised in the Siteki district as only one person had done tubal ligation and no participants had done vasectomy. One reason for this low uptake for married women requires consent from their husbands to undergo sterilization.

5.23. Economic Accessibility

Economic accessibility refers to the cost of reaching the service delivery or supply points and obtaining contraceptive services and supplies by the target population [40]. The findings of our study showed that cost was not a barrier to access and use of contraceptives as contraceptives are provided free of charge by the public health facilities where over 70% (n=116) received their contraceptives from clinics and only 29.1% (n=48) indicated that they received their contraceptives from the private sector.

6. Conclusion

Overall, a significant number of the target population in our study is on contraceptives, despite the demographics indicating that the majority of the respondents experienced few challenges such as lack of adequate education and unemployment. The male condom is the most used form of contraception in this population. This is also regarded as the correct method of contraception for PLWHA. The information they received during post counseling for HIV and AIDS may have influenced their decision to use a condom. Although knowledge of contraceptives was widespread, it was not put into practice as some respondents continued to use hormonal methods of contraception that could not prevent them from contracting sexually transmitted infections including HIV. Contraception is a key strategy for the prevention of heterosexual transmission of HIV and AIDS and unintended pregnancies especially in countries with a high prevalence of HIV and AIDS such as Eswatini. The results of this study indicated that contraceptive use and knowledge were high among people living with HIV and AIDS in selected communities in Siteki, Eswatini although some gaps were identified. As family planning and reproductive health are not only for population control but also for the improvement of health, welfare and human rights for those involved in sexual relations, interventions should make use of integrated approaches when addressing the use of contraceptives to ensure that people adopt the practice as knowledge alone does not lead to behavior change.

7. Limitations of the Study

The study was delimited to support groups of people living with HIV and AIDS. The data was collected from PLWHA registered in support groups. It had been possible to include the ntire population of PLWHA which was not possible due to limited resources. The study participants only included those in the reproductive age group 21-49 years. The findings of the study cannot be generalised to the entire population of PLWHA in the country.

8. Recommendations

The following recommendations are made based on the findings of this study.

The higher female representation in support groups necessitates a concerted effort to address gender and cultural barriers to HIV disclosure status and registration with PLWHA support groups. Stakeholders working on reproductive health programmes should upscale education and promotion of contraceptives, especially for PLWHA to ensure there is coverage of information on the correct methods amongst this group of people, emphasizing the use of barrier methods best suited for their status. Health education and promotion on contraceptive use should not only focus on family planning, but also include the prevention of unintended pregnancy and infection. Information should be made available to all people of reproductive age group with a particular emphasis on young people so that by the time they are sexually active they are equipped with knowledge about how to protect themselves from infection and pregnancy. Various government departments and NGOs should provide free posters, pamphlets and education materials on contraceptive use to clinics for display and

distribution. The low use of condoms among the single respondents is a cause for concern. The gap in those using condoms or dual methods indicates the need for greater promotion of condom and dual method use to offer protection against HIV, STS and pregnancy prevention especially for PLWHA.

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