

Assessment of Knowledge, attitude and level of utilization of reproductive health services by HIV infected women in Minna metropolis – Nigeria

Michael Ochigbo Onyilo¹, MB.BS, MPH, Chindo Ibrahim Bisallah²,
MBBS, MPH, MPA, PhD

^{1,2}Department of Medicine, Heart to Heart Clinic, General Hospital Minna
Corresponding Author: Michael Ochigbo Onyilo,

Abstract

Background: In Nigeria, 58% of the estimated number of people living with HIV were women in 2015. The National reproductive health policy approved in 2010 has the goal of ensuring availability and access of women to full sexual and reproductive health information and quality services. However, little research has been conducted in Nigeria on the utilization of reproductive health services of HIV infected women. **Objective:** The objective of this study is to assess the knowledge, attitude and the level of utilization of reproductive health services by HIV infected women in Minna metropolis. **Methods:** A cross sectional descriptive study was used. A questionnaire titled: Knowledge, attitude and utilization of reproductive health services among HIV infected women in Minna metropolis was administered to 355 randomly selected HIV infected women receiving treatment at the hospitals. The outcome variables were knowledge, attitude and utilization of reproductive health services. Data collected was analysed using SPSS version 22. Frequency, proportions and Chi Square were used to report the findings.

Results: The level of awareness regarding various reproductive health matters ranges from 9.3% to 26.3% with family planning and contraception been the highest. The knowledge of respondents on reproductive health matters was 198(55.8%). Attitude of respondents revealed that 211 (59.4%) support the use of family planning, 249 (62.7%) approve the use of condom and 226 (63.7%) rated the need for sexuality education in secondary schools as very important. Findings also revealed that none of them have carried out cervical cancer screening. Most of the respondents have not used any form of contraceptive methods, only 3.4% have used condoms and antenatal care attendance was 80.3%. **Conclusion/ Recommendation:** The level of awareness and knowledge of HIV positive women about reproductive health was low. Though, the attitude of respondents was above average, but the utilization of various reproductive health services was very poor. There is need to introduce a health education and counselling platform for women on highly active antiretroviral therapy (HAART) attending clinic to improve their level of awareness, knowledge, attitude and utilization of various reproductive health services.

Keywords: Knowledge, attitude, reproductive health services, HIV positive women

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I. Introduction

The HIV/AIDS epidemic is one of the major factors that have significantly affected the health of people worldwide. At the end of 2015, about 36.7 million people were living with HIV/AIDS globally¹. Adolescent girls and young women aged 15-24 years accounted for 20% of new HIV infections worldwide among adults in 2015¹. In high prevalence areas like Sub-Saharan Africa, adolescent girls and young women accounted for 25% of new HIV infections and women accounted for 56% of new HIV infections among adults¹. In Nigeria, 58% of the estimated number of people living with HIV were women in 2015². Anti-retroviral therapy has greatly improved the health outcomes and quality of life of people living with HIV/AIDS including women. Young women living with HIV may eventually desire to have their own children especially when their health improves. Although the health benefits and the improved quality of life resulting from this antiretroviral therapy is commendable, there are still social problems regarding women's decision making about having children³. Every individual have equal right to access sexual and reproductive health services regardless of their HIV status; yet more often than not, the rights of HIV- positive women and adolescent girls are not recognized or given priority⁴. It has been documented that even though all women have equal rights to sexual and reproductive health services, women living with HIV may require additional care and counselling because HIV has been proven to accelerate the natural history of some reproductive health illnesses and may complicate

some, this may eventually affect their fertility⁵. Improving reproductive health services for women, prevention and treatment of HIV are important factors in poverty reduction and improving the socio-economic development of communities and nation⁵.

In Nigeria, the National reproductive health policy approved in 2010 has the goal of ensuring availability and access to full sexual and reproductive health information and quality services⁶. Achieving desired and intended fertility, including prevention of mistimed and unwanted pregnancies through the provision of high-quality services for family planning, including infertility services is also an important component of the policy brief⁶. However, little research has been conducted in Nigeria on the utilization of reproductive health services of HIV infected women. In the National HIV/AIDS reproductive health survey 2012 (NARHS-Plus), the percentage of female respondents who reported ever having sex within the last 12 months prior to the survey was 83% compared with 78% of the male respondents. Also the percentage of the females using any method of contraceptive was 13% while only 10% of the female respondents reported ever using any form of modern method of contraception⁷.

Studies conducted in Nigeria has shown that many HIV positive women attending anti-retroviral therapy (ART) clinics reported that they desire to have children^{8,9}. Also younger age in HIV positive women is associated with a greater desire for pregnancy compared to older women^{9,10}. Women who have demonstrated higher levels of personalized stigma and negative self-image were more likely to choose to become pregnant. This may be a result of wanting to have someone to love or to love them back¹¹. Also pregnancy state can also be perceived to mean a non-infectious state¹¹. It has been shown that HIV can potentially affect all the dimensions of women's sexual and reproductive health – pregnancy, childbirth, breastfeeding, abortion, use of contraception, exposure to, diagnosis and treatment of STIs and their exposure to sexual violence⁵.

Family planning services provides a platform for HIV positive women to avoid unwanted pregnancies. Hence this should be an important component of programs to prevent HIV among infants⁵. Integrating reproductive health services into HIV programs is of paramount importance because it enhances the public health aspect by preventing unwanted pregnancies in women with HIV who do not wish to become pregnant¹⁰. This will in turn reduce the number of infants born with HIV and the number of children orphaned due to AIDS¹⁰. HIV positive women who do not use family planning stands the risk of unintended pregnancies which may result in mother to child transmission, giving rise to new HIV infections¹². About 150,000 children became infected with HIV in 2015¹³. An estimated 1.8 million children under the age of 15 years were living with HIV in the same year¹³. A study conducted in Malawi on the use of family planning by HIV positive women revealed that Women's knowledge of their HIV-positive status was found to be a significant predictor of their family planning practice¹². Other predictors in the study that is associated with family planning use are education and parity. Those with secondary school and above qualification and those with 3 to 4 children and more than 4 alive were significantly associated with current use of family planning¹². Another study has also revealed that parity is a factor that influences the attitude of women towards the utilization of health care services¹⁴.

In Nigeria, low level of reproductive health knowledge among adolescents and limited access of young people to youth friendly health services have been identified as an underlying factor contributing to the rising trend of HIV/AIDS¹⁵. Lack of accurate information about sexual health has led to many myths and misconceptions which have in turn led to stigma and discrimination against people living with HIV/AIDS¹⁶. This will increase the rates of infection in the countries of Sub-Saharan Africa and other parts of the world¹⁶. Inadequate knowledge remains a major barrier for adolescents: An in-depth study of four Sub-Saharan African countries found that 60% or more of adolescent men and women believed common misperceptions or had poor knowledge about HIV; one-third or more did not know of a source for contraception¹⁷. Pregnancy desires have been associated with knowledge of prevention of mother to child transmission of HIV (PMTCT). A study demonstrated that among HIV positive women, PMTCT knowledge and younger age of the mother were associated with pregnancy desires¹⁸. This could be due to the success stories associated with HIV positive women giving birth to HIV negative babies through PMTCT services. Other studies have also shown that knowledge of reproductive health services does not translate into utilization. A study carried out in Rawanda and Zambia among sero-discordant couples revealed that despite high levels of contraceptive knowledge, use of methods to prevent pregnancy remained low¹⁹. The study demonstrated that knowledge of any modern contraceptive method is high with a range of 90-99.8% indicating that they know at least one type of modern contraception¹⁹. Health workers could also contribute to the stigma and discrimination that people living with HIV often encounter especially at the facility level. This can affect their desire to access reproductive health services. Studies have shown the negative attitudes of health workers in educating HIV positive women on reproductive health matters¹⁴. A study carried out on women living with HIV in South Africa revealed that current HIV services for women of reproductive age does not seem to address pro-actively issues of pregnancy and HIV progression³. This was attributed primarily to the inconsistent verbal and non-verbal cues that women receive from the nurses and other health care workers which hinder them from pro-actively seeking pre-conceptual advice or getting pregnant³. There is a need to create more awareness on reproductive health rights of

women living with HIV among health workers. The objective of this study is assess the knowledge, attitude and the level of utilization of reproductive health services by HIV infected women in Minna metropolis.

II. Methodology

Study area, setting and population

The study was carried out in General Hospital and Divine Mercy Hospital Minna from September to November 2018. These are the two hospitals offering comprehensive HIV/AIDs services in Minna. Minna is the capital of Niger state located in the North central part of Nigeria. It has a population of 202,151 from the 2006 population census data²⁰. The population comprises of 105,265 males and 96,886 females²⁰. They are made up of mainly Christians and Muslims.

The study was conducted among HIV infected women, within the Reproductive age group of 15 and 49 years receiving treatment in these hospitals. At the time of the study, a total of 1,886 HIV positive women were receiving treatment (ARVs) in these hospitals. The HIV clinic runs from Mondays to Fridays every week except during public holidays. An average of 40 HIV positive women come for drug pick up on each clinic day.

Study design and sample size estimation

The study was a hospital based cross sectional study that lasted for two months.

The sample size was calculated from this formula²¹:

$$n = \frac{Z^2 \cdot 1-\alpha/2 \cdot P(1-P)}{d^2}$$

Where n=Minimum sample size

Z α = u = Critical ratio or standard normal deviation for percentage point of the normal distribution corresponding to the two sided significance level (e.g. if the significance level is 5%, z α =1.96), d=5%, since the confidence level was specified as 95%, Hence d, which is the tolerable error margin will be 5% (i.e. the level of precision). p=72%. This was the prevalence of the utilization of contraceptive services from a similar study²².

Substituting in the equation above:

$$n = \frac{(1.96)^2 \times 0.72 \times (1-0.72)}{(0.05)^2}$$

n = 310. The sample size was further adjusted by 15% to compensate for non- response rate. Hence final sample size n, was 310 + 45 = 355.

Sampling method

The two facilities; General Hospital Minna and Divine Mercy Hospitals were purposively selected because they were the only facilities in Minna offering comprehensive HIV/AIDS services. One is a public health facility and the second one is a faith based. Within these facilities, HIV positive women were selected by systematic random sampling method. Since the sample size was 355 and the number of clients on treatment was 1,886, the sampling fraction was 0.2. Hence, every 5th client was selected for the study. Any client who does not meet the inclusion criteria (age, informed consent) was exempted and the next eligible client was selected for the study. Very ill patients and those who refuse consent were excluded from the study.

Data collection

The instruments that were used for data collection were semi-structured questionnaires. Each questionnaire had 5 sections covering demographic data, knowledge of reproductive health issues, sources of information on reproductive health matters, attitude towards reproductive health issues and utilization of reproductive health services. Data on the above was collected via an interviewer administered questionnaire before the commencement of each clinic day. Ethical approval for the study was obtained from the research and ethics committee, General Hospital Minna. Institutional verbal consent and informed consent from each participant was obtained at each facility before the commencement of the study. Three research assistants were recruited for the study. Two of them were from the Hospital's medical record staff and one from a support group member (people living positively with HIV/AIDS). They are fluent in the local language and this made translation easier. They had a three-day training exercise for comprehension, use of appropriate language and the acquisition of skills for the exercise. They were also given a brief education on reproductive health issues. Two of them carried out the interview in General Hospital Minna while the remaining person went to Divine Mercy Hospital. Pretesting of the questionnaire was done in an independent facility prior to the commencement of the study.

Data analysis

Data collected was analyzed using SPSS version 22. Frequencies and proportion as well as chi-square were used to report the findings and statistical significance was achieved when P value was < 0.05.

III. Results

Table 1: socio-demographic characteristics of the respondents

| Variables | Frequency (n) | Percentage (%) |
|--------------------------|---------------|----------------|
| Age in years | | |
| <20 | 34 | 9.6 |
| 21 – 30 | 159 | 44.8 |
| 31 – 40 | 134 | 37.7 |
| 41 - 50 | 28 | 7.9 |
| Educational level | | |
| None | 61 | 17.2 |
| Primary | 59 | 16.6 |
| Secondary | 124 | 34.9 |
| Tertiary | 106 | 29.9 |
| Others | 5 | 1.4 |
| Occupation | | |
| Civil servant | 92 | 25.9 |
| Farmer | 24 | 6.8 |
| Trader/businesswoman | 140 | 39.4 |
| Artisan | 10 | 2.8 |
| Others | 37 | 10.4 |
| None | 52 | 14.6 |
| Marital status | | |
| Married | 200 | 56.3 |
| Single | 89 | 25 |
| Widowed | 49 | 13.8 |
| Divorced or separated | 17 | 4.8 |
| Religion | | |
| Islam | 178 | 50.1 |
| Christianity | 175 | 49.3 |
| Traditional | 2 | 0.6 |

Table 1 shows the sociodemographic characteristics of the respondents. 44.8% are with the age group of 21 to 30 years, only 17.2 % have not had any formal education, otherwise majority have had either primary, secondary or tertiary education. 25.9% are civil servants, while 39.4% are traders or business women. 56.3% of the respondents are married, while the remaining are either single, widowed or divorced. Approximately 50% of the respondents are either Christians or Muslims.

Table 2: Distribution of respondents on their awareness of reproductive health matters.

| Reproductive health components | No. | Percentage |
|--|-----------|----------------|
| Family planning/ contraception | 332 | 26.3 |
| Sexuality education | 224 | 17.7 |
| Reproductive health rights | 149 | 11.8 |
| Cervical cancer screening | 118 | 9.3 |
| Unsafe abortion | 247 | 19.5 |
| | Responses | |
| Sources of information on reproductive matters | No. | Percentage (%) |
| Radio | 287 | 16.6 |
| Television | 337 | 19.4 |
| Hospital /health care facilities | 250 | 14.4 |
| Public lecture/symposia/workshops | 100 | 5.8 |
| Newspaper | 129 | 7.4 |
| Magazines | 94 | 5.4 |
| Journals | 61 | 3.5 |
| Friends/relatives | 219 | 12.6 |
| School | 105 | 6.1 |
| religious gathering | 147 | 8.5 |
| Others | 4 | 0.2 |

Table 2. Shows the awareness of respondents on reproductive health matters. 194(15.3%) of respondents have ever heard of reproductive health. 332(26.3%) have had of family planning and 224(17.7%) have heard of sexuality education. Concerning reproductive health rights, 149(11.8%) have heard of the term. 118(9.3%) have ever heard of cervical cancer screening and 247(19.5%) have heard of unsafe abortion. The main sources of information include: Television 19.4%, radio 16.6%, hospital/health care 14.4%. Others are

friends and relatives 12.6%, newspapers 7.4%, lectures/symposia/workshops 5.8%, religious gatherings 8.5%, school 6.1% and journals 3.5%.

Table 3: Knowledge of Respondents on Reproductive Health Matters

| Reproductive Health Components and their Interpretations | Responses | Frequency | Percentage |
|--|----------------------|-----------|------------|
| Reproductive Health | Correct | 198 | 55.8 |
| | Incorrect | 157 | 44.2 |
| Family Planning | Correct | 267 | 75.2 |
| | Incorrect | 88 | 24.8 |
| Sexuality Education | Correct | 228 | 64.2 |
| | Incorrect | 127 | 35.8 |
| Reproductive Health Rights | Correct | 254 | 71.5 |
| | Incorrect | 101 | 28.5 |
| Cancer of the Cervix Screening | Correct | 99 | 27.9 |
| | Incorrect | 256 | 72.1 |
| Sexually Transmitted Infection (STIs) | Correct | 256 | 72.1 |
| | Incorrect | 99 | 27.9 |
| HIV Screening | Correct | 229 | 64.5 |
| | Incorrect | 126 | 35.5 |
| Roles of Mother-to-Child Transmission of HIV | During Pregnancy | 109 | 21.4 |
| | During Delivery | 181 | 35.6 |
| | During Breastfeeding | 192 | 37.7 |
| | I don't know | 27 | 5.3 |

Table 3 shows the knowledge of respondents on reproductive health matters. 198(55.8%) of the respondents were able to answer correctly when asked what they understood by the term reproductive health while the remaining 157(44.2%) gave wrong answers. When asked about their knowledge on family planning, 267(75.2%) answered correctly while 88(24.8%) were unable to give the correct answers. In terms of their knowledge on sexuality education, 228(64.2%) gave the wrong answer. 254(71.5%) respondents gave the correct responses when asked about their knowledge on reproductive health rights. The remaining 101(25.5%) gave wrong responses. Majority of the respondents, 256(72.1%) do not know what screening for cervical cancer is. The remaining 99(27.9%) answered correctly. With regards to their knowledge on sexually transmitted infections, 256(72.1%) gave the correct responses while 99(27.9%) gave wrong responses. On their knowledge of HIV screening, 229(64.5%) answered correctly while 126(35.5%) gave the wrong responses. When asked to identify the routes of mother to child transmission of HIV, majority of the respondents were able to identify at least one route. Only 27(5.3%) could not identify any route.

Table 4: Knowledge of specific methods of Family planning, sexual transmitted infections and ways of prevention of STI

| Methods of family planning | Responses | Percentage (%) |
|--|-----------|----------------|
| Injectable method | 170 | 24.5 |
| Oral pills | 179 | 25.8 |
| Condom use | 180 | 26.0 |
| IUCD | 30 | 4.4 |
| Natural method | 72 | 10.4 |
| None | 61 | 8.9 |
| Sexually transmitted infections (STI) | | |
| Gonorrhea | 184 | 32.1 |
| Syphilis | 100 | 17.4 |
| HIV | 139 | 24.2 |
| Others | 72 | 12.5 |
| None | 79 | 13.8 |
| Ways of prevention of STI | | |
| Abstinence | 78 | 16.8 |
| Faithfulness | 64 | 13.8 |
| Use of condom | 205 | 44.2 |
| Others | 54 | 11.6 |
| None | 63 | 13.6 |
| Total | 464 | 100.0 |

Table 4 shows the knowledge of respondents on specific methods of family planning. Majority of respondents were able to identify at least injectable, oral pills and condom use as specific methods of family planning. Out of the respondents, 180 (26.0%), 72 (10.4%) and 30 (4.4%) identified condom use, natural methods and intra uterine contraceptive device (IUCD) as family planning methods respectively while 61(8.9%)

respondents were not able to identify any method. The table also displays the knowledge of respondents on specific types of sexually transmitted infections (STIs). 184 (32.1%) respondents were able to mention gonorrhoea as a STI. 139 (24.2%) identified HIV as a STI and 100 (17.4%) mention syphilis, whereas, 79 (13.8%) respondents could not identify any STI. Additionally, the table reveals the knowledge of respondents on ways of prevention of STIs. 205 (44.2%) respondents were able to mention condom use as a method of prevention of STIs. This could be due to the constant health talks in the clinics on the importance of the use of condom as a method of dual protection. Other respondents mentioned abstinence 78 (16.8%) and faithfulness 64 (13.4%) as ways of prevention of STIs.

Table 5a: Attitude of respondents regarding reproductive health matters

| Attitude towards family planning | Frequency | Percentage |
|---|-----------|------------|
| Opposed to it | 24 | 6.8 |
| In support of it | 211 | 59.4 |
| Dislike it | 39 | 11.0 |
| Indifferent to it | 29 | 8.2 |
| Enthusiastic about it | 52 | 14.6 |
| Total | 355 | 100.0 |
| Approval for use of condom | | |
| Yes | 249 | 62.7 |
| No | 78 | 21.9 |
| Undecided | 28 | 8.4 |
| Total | 355 | 100.0 |
| Rating on the need for sexuality education | | |
| Very important | 226 | 63.7 |
| Important | 83 | 23.4 |
| Useless | 9 | 2.5 |
| Not important | 29 | 8.2 |
| Barely important | 6 | 2.3 |
| Total | 355 | 100.0 |

Table 5a shows the attitude of the respondents towards family planning. 211(59.4%) respondents were in support of family planning while 24(6.8%) were opposed to it. 52(14.6%) were enthusiastic about it while 29(8.2%) were indifferent to it. It also revealed that majority of the respondents, 249(62.7%) approved the use of condom while 78(22.0%) disapproved condom use. 28(7.9%) respondents were undecided. Furthermore, the rating of the need for sexuality education in secondary schools indicated that 226(63.7%) of respondents regarded the need for sexuality education in secondary schools as very important, 83(23.4%) regarded it as important and 9(2.5%) regarded it as useless.

Table 5b: Attitude of respondents regarding reproductive health matters

| Distribution of the feeling of respondents on the importance of cervical cancer screening | Frequency | Percentage |
|--|-----------|------------|
| Yes | 169 | 47.6 |
| No | 43 | 12.1 |
| Indifferent | 143 | 40.3 |
| Total | 355 | 100.0 |
| Opinion of respondents on whether FGM should be stopped | | |
| Agree | 173 | 48.7 |
| Disagree | 74 | 21.9 |
| Indifferent | 108 | 30.4 |
| Total | 355 | 100.0 |
| Distribution on the attitude of respondents towards unsafe abortion | | |
| Strongly disapprove | 116 | 37.7 |
| Dislike it | 192 | 54.1 |
| Indifferent to it | 33 | 9.3 |
| In support of it | 12 | 3.4 |
| Enthusiastic about it | 2 | 0.6 |
| Total | 355 | 100.0 |

Table 5b shows the distribution on the feelings of respondents on the importance of cervical cancer screening. 169(47.6%) respondents feel that cervical cancer screening is important while 43(12.1%) feels it is not. Moreover, 143(40.3%) are indifferent. Additionally, the table shows the distribution of the opinion of respondents on whether female genital mutilation should be stopped. 173(48.7%) agreed that it should be stopped while 74(20.8%) disagreed. 108(30.4%) respondents were indifferent. Similarly, the table shows the distribution of attitude of respondents towards unsafe abortion. 116(32.7%) showed a strong disapproval to

unsafe abortion while 12(3.4%) are in support of it. 194(54.1%) said they dislike it and 33(9.3%) are indifferent.

Table 6. Distribution of respondents on the utilization of some selected reproductive health activities.

| Reproductive Health Activities | Practice of Reproductive Health Activities | | | | | p-value |
|---|--|-----------|-------|-------|-------|---------|
| | Types of contraception | Yes | % | No | % | |
| Contraception/Family Planning | Pills | 59 | 16.6 | 296 | 83.4 | 0.00 |
| | IUCD | 6 | 1.7 | 349 | 98.3 | |
| | Use of Condoms | 12 | 3.4 | 343 | 96.6 | |
| | Injectable | 33 | 9.3 | 322 | 90.7 | |
| | Others | 13 | 3.7 | 342 | 96.3 | |
| HIV Screening | | 355 | 100 | 0 | 0 | |
| Unsafe Abortion | | 6 | 1.7 | 349 | 98.3 | |
| Cervical Cancer Screening | | 0 | 0 | 355 | 100 | |
| Attendance of ANC at the last pregnancy | | 214 | 80.29 | 52 | 19.71 | |
| Preferred place of delivery | | Frequency | | % | | |
| | Home | 29 | | 8.2 | | |
| | Health facility | 293 | | 82.5 | | |
| | TBA home | 15 | | 4.2 | | |
| | Spiritual houses | 18 | | 5.1 | | |
| | Total | 355 | | 100.0 | | |

Table 6 shows the distribution of respondents on the utilization of some selected reproductive health activities. It shows that all respondents have carried out HIV screening. However, none of them have had cervical cancer screening. 6(1.7%) of the respondents have done unsafe abortions. Most of the respondents have not used any of the contraceptive methods. There was a statistical significant difference between those that used contraception and those that did not use any. Only 3.4% of the respondents have used condoms. This is important in terms of the spread of HIV and prevention of sexually transmitted diseases (STIs). It also reveals the attendance of antenatal care in last pregnancy by respondents (For those applicable). 80.3% of the respondents said they attended ANC in their last pregnancy while 19.71% did not. The table revealed the distribution of respondents on their preferred place of delivery. 293(82.5%) indicated a health facility, 29(8.2%) mentioned home, 15(4.2%) mentioned traditional birth attendants' homes while 18(5.1%) mentioned spiritual houses.

IV. Discussion

In this study, majority of the respondents are within the age group of 21 to 30 years. This is contrary to the finding of a study on sociodemographic characteristics of HIV/AIDS patients conducted in Port Harcourt which indicated that most of the participants were within 30 to 39 years²³. However, at the national level majority of women living with HIV/AIDS are within the age group of 15–24 yr²⁴, much younger than those found in this study. About 25% of the study population are single while 56.3 % are married. This is consistent with the study that identified HIV prevalence to be highest among married women compared to never married women based on a retrospective data obtained from 2012 Nigerian population-based HIV/AIDS and reproductive health survey²⁵. This suggest that married women are more likely to be infected with HIV than those that are single, making it a risk factor to HIV infection. Furthermore, 17.2% of the respondents have not had any form of western education and approximately 40% are engaged in trading and other forms of businesses. The proportion of Christians to Muslims was approximately same. The risk of infection has no relationship to religion, meaning that been a Christian or Muslim carries equal risk of HIV infection.

In this study, the level of awareness regarding various reproductive health matters ranges from 9.3% to 26.3% with family planning and contraception been the highest. A study among HIV patients receiving treatment and care in PHC centers in South Africa indicated that 13 % of the respondents were not aware of the various reproductive health options available²⁶ which is contrary to our study. Even though the reasons women living with HIV/AIDS seek contraception are mostly the same as those for women not infected with HIV, considerations should be given to women living with HIV/AIDS in family planning counselling and for the selection of contraceptive methods. Comparatively, a similar study conducted in India, Punjab district among respondents most of them girls (67%) were not aware about the meaning of reproductive health. Amongst contraceptive methods, 62.5% knew about condoms²⁷ which was higher than the awareness level in our study.

Studies on the knowledge of reproductive health among HIV patients on antiretroviral medications are scarce. However, our study revealed that 55.8% of respondents are knowledgeable about reproductive health matters, though knowledge on specific reproductive health methods varies. In this study, knowledge of family planning and contraceptives methods among respondents was 75.2%. This is slightly below the findings as reported from a study on knowledge level of contraceptives among women in the Northwestern Nigeria of

85.6% as having good knowledge²⁸. In our study knowledge of cervical cancer screening among respondents was 27.9%. This was consistent with the report of a similar study where vast majority (79.1%) of HIV patients recruited for the study had no idea of risk factors to cervical cancer, its symptoms and only few have ever had a pap smear test done²⁹. Knowledge of sexually transmitted disease among respondents was as high as 72.1%. However, because of scarcity of studies on knowledge of STDs among HIV patients, the best comparison was done from a study among secondary school adolescents which revealed that 80.9% of respondents had average knowledge of sexually transmitted diseases³⁰.

The attitude of respondents from our study revealed that 59.4% are in support of family planning and 62.7% approve the use of condoms. A similar study conducted among HIV positive women attending ANC clinic revealed that most participants (87%) intended to use family planning³¹, by extension are in support of the use of family planning, above the findings of our study. However, only 8% indicated condoms as a preferred FP method³¹ contrary to the findings of our study. Additionally, 47.3% of respondents understood the need for cervical cancer screening, contrary to the report of a study on cervical cancer screening utilization among HIV patients in Ethiopia which showed that only 29.5% agreed to the need of cervical cancer screening³². Also 48.7% of the respondents in our study are of the opinion that FGM should be stopped. This is in agreement with the survey conducted on the opinion of women regarding FGM, which reported that 63.7% would support legislation against the menace³³.

The utilization of contraceptive and family planning services among respondents in our study revealed pills (16.6%), IUCD (1.7%), condoms (3.4%) and injectable contraceptives (9.3%). Comparatively a study conducted among HIV positive women attending family planning clinic in a university hospital in Ethiopia revealed a higher rate of the usage of IUCD (28.4%) and condom use (26.7%)³⁴. The use of oral pills (7%) was low and injectable (25.8%)³⁴ was higher in contrast to the findings of our study.

Shockingly, utilization of cervical cancer screening of the respondents in our study was 0%. This is contrary to the report of a study on the uptake of cervical cancer screening of 10% among HIV positive patients receiving antiretroviral therapy in a university referral hospital in Ethiopia³⁵. Antenatal care attendance was 80.3%. This was higher than the report of a study on the factors associated with the underutilization of ANC in Nigeria which revealed an average of 53.5% ANC attendance³⁶. Majority of our clients in this study (82.5%) prefer health facility for delivery, while the remaining 17.5% choose to deliver at home and in spiritual houses despite the danger associated with mother to child transmission of HIV. Similar study conducted in a public health facility in Kenya among HIV positive women revealed that an estimated 25.8% prefer home delivery³⁷.

V. Conclusion

The level of awareness about reproductive health matters and services of HIV positive women receiving antiretroviral medication attending clinic within Minna metropolis was low. More than fifty percent of respondents have knowledge of reproductive health and various reproductive health services. Though, the attitude of respondents towards reproductive health services was above average, the utilization of various reproductive health services was very poor.

VI. Recommendation

There is need to introduce a health education and counselling platform for women on HAART attending clinic to improve their level of awareness, knowledge, attitude and utilization of various reproductive health services. This is expected to assist in reducing mother to child transmission of HIV, unwanted pregnancy and protecting discordant couples from infecting their partners.

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