

**SEXUAL AND REPRODUCTIVE HEALTH NEEDS AND PRACTICES: A  
COMPARATIVE STUDY OF HIV DISCORDANT AND CONCORDANT COUPLES  
ACCESSING CARE AT COMPREHENSIVE HEALTH CENTERS IN A  
SOUTHEASTERN STATE IN NIGERIA.**Chinomso C. Nnebue<sup>1,2\*</sup>, Adaeze N. Anaekwe<sup>1</sup>, Chidebe O. Anaekwe<sup>1</sup> and Alphonsus C. Obi-Okaro<sup>1</sup><sup>1</sup>Department of Community Medicine, Nnamdi Azikiwe University Teaching Hospital, Nnewi, Nigeria.<sup>2</sup>Department of HIV Care, Nnamdi Azikiwe University Teaching Hospital, Nnewi, Nigeria.

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**ABSTRACT**

**Background:** A comprehensive picture of the sexual and reproductive health needs and practices of HIV-discordant couples is key in improving the efficacy of interventions for them. **Objective:** To compare the sexual and reproductive health needs and practices of HIV discordant and concordant couples in comprehensive health centers in Anambra state, Nigeria. **Materials and methods:** This was a cross-sectional comparative study of 289 (148 HIV-concordant and 141 HIV-discordant) couples, selected using multistage sampling technique. Quantitative data were collected by interview using semi-structured questionnaire and analysed with statistical package for social sciences version 22.0. Chi-square and fishers exact tests were used to determine statistically significant associations between variables. A p value  $\leq 0.05$  was significant. Qualitative data were elicited by focus group discussions. **Results:** More concordant couples 142(49.3%), compared to 122(42.4%) discordant counterparts were sexually active ( $p = 0.001$ ); more discordant couples had sexual concerns to share ( $p = 0.05$ ); 74(26.3%) concordant couples compared to 68(23.5%) discordant ones, had children post HIV diagnosis ( $p = 0.255$ ); while, 77(26.6%) concordant couples desire to have children compared to 70(24.2%) discordant ones ( $p = 0.731$ ). Eight (2.8%) concordant and none of the discordant couples, practiced artificial conception methods, ( $p = 0.007$ ), the primary reason for not practicing artificial methods, among concordant couples was the feeling it was unnecessary, while for discordant couples, was poor knowledge ( $p = 0.01$ ). **Conclusion:** This study found variations in use of condoms; knowledge and or practice of family planning methods, emergency contraception, artificial contraception as well as sexual concerns to share among discordant and concordant couples. We recommend that these findings be factored in designing novel couple-level intervention strategies.

**KEYWORDS:** couples, sero-discordance, HIV, sexual and reproductive health practices, Nigeria.**1. INTRODUCTION**

Sexual needs include: the right to decline or accept sex; to practice safe sex, to decide who to have sex with without being judged; to start a new relationship; to be in control of one's own sexuality; to sex education information on sexual rights; to sexual pleasure and to be able to take legal action against sexual harassment and abuse.<sup>[1]</sup>

On the other hand, reproductive health needs include: the right to decide whether and when to conceive without being judged; to decide on the number and spacing of children; to education on labor, delivery and breastfeeding; to quality antenatal care; to equal access to reproductive health care, regardless of social, economic or political status; to family planning information and decision making over the type of contraception; to access HIV and sexually transmitted

infection preventive methods; to safe delivery, assisted conception; to feed the baby the way the women want and to be able to make an informed decision.<sup>[1,2]</sup>

Sexual and reproductive health practices of HIV discordant and concordant couples have been linked to factors stemming from fear of infecting the sexual partner(s) and or unborn child(ren) with HIV; feeling of guilt and shame, as well as emotional cum psychological distress often aggravated by stigma related to HIV and reduction in desire for or interest in sexual relations.<sup>[2,3]</sup> In settings like our study area where tradition places high value on childbearing, the burden associated with HIV infection may be greater.<sup>[2,4,5]</sup> More so, pregnancy naturally requires unprotected sexual intercourse with its attendant risks such as vertical and horizontal transmission in serodiscordant couples and the additional risk of transmission of a drug resistant strain of HIV in

seroconcordant partnerships.<sup>[6,7,8]</sup> However, with the increasing availability of highly active antiretroviral therapy and resultant improvement in the quality of life of HIV-positive clients, the number of discordant and concordant couples who have renewed interests in sexual relations and the desire to have children is increasing too.<sup>[3]</sup> These advancements have enabled women living with HIV/AIDS to take pregnancies to term with low risk of transmitting the virus to the fetus.<sup>[9]</sup> Chances of infecting the child may be reduced to nearly zero if the protocol to preventing vertical transmission is followed to the letter.<sup>[10]</sup>

More than eight in every ten women living with HIV and their partners are in their reproductive years.<sup>[11]</sup> Couples will continue to want children even post-diagnosis with HIV. Others may wish to regulate their fertility, so that they can decide whether to try for a pregnancy and when.<sup>[12]</sup> Therefore, fertility-related needs of men and women in HIV concordant and discordant partnerships could weigh on reproductive decisions they make. These may differ substantially, even from those of couples who are HIV negative.<sup>[12,13]</sup>

There is increasing recognition that existing public health policies and programs often fail to respond to the sexual and reproductive health issues concerning PLWHA.<sup>[14,15]</sup> There is also dearth of information on successful service models targeted at meeting the sexual and reproductive needs of HIV discordant couples.<sup>[14,16]</sup> Where studies were done, they focused on women of reproductive age attending the adult HIV clinic, with the exclusion of their male partners.<sup>[4,6]</sup> To our knowledge, no previous studies conducted in our study setting compared the sexual and reproductive health needs and practices of HIV discordant and concordant couples. The findings of this study would help in bridging the knowledge gaps that presently exist in the area of HIV discordance, enable discordant couples make informed sexual and reproductive health decisions as well as build mutually supportive relations. In addition, effective and evidence based strategies addressing the needs of men and women living with HIV and of discordant couples who desire more children are apt. This study was thus designed to compare the sexual and reproductive health needs and practices of HIV discordant and concordant couples in comprehensive health centers in a Southeastern state in Nigeria.

## 2. MATERIALS AND METHODS

### Study area, period and design

This institutional based cross sectional comparative study was conducted between January and April 2013 at two comprehensive health centers (CHCs) in Southeastern state in Nigeria.<sup>[17]</sup> Each of these centers hosts a 30 to 35 bed facility which employs various cadre of health workers. At the time of this study the first facility runs a HIV clinic twice a week, had 482 PLWHA accessing care and has an average weekly attendance of 60 patients per clinic. One hundred and twenty of the

couples are in discordant relationships, 140 couples are in a concordant relationships, while 70 people are single adults and 12 are below 18 years. The second facility operates a linkage system with the first CHC, as both facilities are manned by the same group of doctors on a rotational basis. The center presently runs a HIV clinic twice weekly, has 700 PLWHA accessing care and an average weekly attendance of 100 patients. One hundred and eighty of the couples are in discordant relationships, 180 couples are concordant, 120 adult singles and 40 teenagers.

### Study population and sampling technique

The target population consisted of the HIV discordant and concordant couples accessing care at the CHCs. Couples who had been in a sero-discordant/ concordant sexual relationship for at least six months; both partners had disclosed his/ her status to the other partner and both partners were aged 18 years or older met the inclusion criteria. Those in sero-discordant /concordant relationships for more than six months who did not give their consent were excluded.

Minimum sample size was calculated using formula for comparison of 2 proportions.<sup>[18]</sup> Proportion of sexual and reproductive health needs in discordant couples=50% since there is no documented literature comparing the sexual and reproductive health needs of discordant and concordant couples, were considered to determine the final sample size at 131. Anticipating a response rate of 90%, ( $f = \% \text{ of response} = 90\% (0.9)$ ) to make up for non-response, the study sample size was calculated as  $n/f^{[19]} = 131/0.9 = 145$  couples per group.

Multistage sampling technique was used to conduct this study. Firstly, from the four comprehensive health centers in the State, two were chosen by simple random sampling using balloting. Secondly, from the clinics, the sampling frames of the discordant and concordant couples accessing care were obtained. This consisted of the lists of these couples accessing care at these clinics. At the time of the study, the total number of discordant couples at the two comprehensive centers was 300 while the number of concordant couples was 320. For the discordant couples, simple random sampling using a table of random numbers was employed to select the 145 couples from the sampling frame. Same was done to obtain the sample size from the concordant couples sampling frame.

### Data collection and analysis

Pre-tested, interviewer-administered semi-structured questionnaires and a focus group discussion guide were used to obtain quantitative and qualitative data respectively. The questionnaire for this study was adapted from that used by the Human Sciences Research Council South Africa and the Global Network of people living with HIV/AIDS.<sup>[20]</sup> All those who gave consent and whose appointments fell within the study period were interviewed while those whose appointments fell

outside the study period, had their interviews fixed with them at a convenient time and place. Responses to questions on safe sex practices and the need for more education on it, use of condoms, knowledge of and practice of artificial reproduction methods, sexual activity, need for awareness on screening of reproductive health cancers etc. and the reasons for these actions were used to assess the reproductive health needs and practices of sero concordant and sero discordant couples.

### **FOCUS GROUP DISCUSSION**

Four focus group discussion sessions involving 10 participants each were held in all, two for each health facility. One consisted of five concordant couples and another five discordant couples in both health facilities. The discussions were held at the health facility on the first Saturday of the month, after the support group meetings. This was to ensure privacy of the participants. The discussion lasted for one hour and involved the moderator, recorder and observer.

To ensure data quality, training of data collection team, field monitoring of data collection was done. Meeting of data collection team at the end of every day to share experiences, submit completed forms and solve field problems was ensured. At the end of the study, one of the questionnaires could not be traced during analysis hence only 289 questionnaires were analysed. The data were reviewed and entered into the computer. Data were cleaned by carrying out range as well as by consistency checks. Descriptive and analytical statistics of the data were carried out using statistical package for social sciences (SPSS) Windows version 22.0.<sup>[21]</sup> Descriptive data were presented as simple frequencies and percentages. Frequencies of the variables was assessed using univariate analysis, while bivariate analysis, using chi-square and fishers exact tests, were employed in testing associations between several variables, comparing concordant and discordant couples. Level of significance was set at 5% or less.

Information from the qualitative interviews was analysed using thematic content analysis. This involved open coding using the participant's own words and phrases, examining language used by each partner or couple; categorizing all the information and finally generating an analytic schema. The data from the focus group discussions recordings were transcribed, coded and themes and sub themes were then generated from them. The common and overlapping themes (sexual and reproductive health including reproductive choices and practices) were then extracted to generate an analytic schema.

### **Ethical consideration**

The study has been examined and approved by the Nnamdi Azikiwe University Teaching Hospital Ethics Committee Nnewi, Nigeria. A written informed consent was also obtained from each participant for the conduct and publication of this research study and assurance of

confidentiality given. Study participants were free to refuse or withdraw from the study at any time without any penalty. The aim of the study was explained to the participants prior to interview. All authors hereby declare that the study has therefore been performed in accordance with the ethical standards laid down in the 1964 Declaration of Helsinki.

## **3. RESULTS**

### **3.1 QUANTITATIVE STUDY RESULTS**

**Table 1 highlights the socio- demographic characteristics of respondents.** Data were obtained from 289 respondents, consisting of 148 HIV-concordant and 141 HIV-discordant couples. The mean age (SD) of all respondents was 37.8(9.8).

**Table 2 shows the sexual needs and practices of concordant and discordant couples.** One hundred and forty two (49.3%) concordant couples, compared to 122 (42.4%) discordant counterparts were sexually active ( $\chi^2 = 7.3$ ,  $p = 0.001$ ). Sixty one (22.9%) of them do not use condoms ( $\chi^2 = 0.705$ ,  $p = 0.401$ ). At least one of the partners in 22 (7.5%) concordant couples, compared to 8(3%) discordant counterparts had arousal difficulty ( $\chi^2 = 4.525$ ,  $p = 0.033$ ). More discordant couples had sexual concerns to share ( $\chi^2 = 3.827$ ,  $p = 0.05$ ).

**Table 3 shows reproductive cancer screening practices among concordant and discordant couples.** Two hundred and twenty nine (79.2%) of couples, had both partners unscreened, but more concordant couples had at least one partner that had screened ( $\chi^2 = 6.438$ ,  $p = 0.011$ ). However, 280(96.9%) couples had perceived need for improved effort on reproductive organ screening ( $p = 0.166$ ).

**Table 4 shows reproductive intentions among concordant and discordant couples.** Seventy four (26.3%) concordant couples compared to 68(23.5%) discordant counterparts had children post HIV diagnosis ( $\chi^2 = 1.3$ ,  $p = 0.255$ ), while. 77(26.6%) concordant couples compared to 70(24.2%) discordant couples, desire to have children ( $\chi^2 = 0.12$ ,  $p = 0.731$ ).

**Table 5 summarizes the knowledge and practice of family planning, emergency contraception, safe sex and artificial conception among concordant and discordant couples.** Only 9(3.2%) concordant couples, compared to 3(1.1%) discordant couples, had good knowledge of family planning methods by at least one of the partners ( $\chi^2 = 2.752$ ,  $p = 0.097$ ). Comparatively, more concordant couples 29(10%) than discordant couples 9(6.6%), had good knowledge of emergency contraception ( $\chi^2 = 6.125$ ,  $p = 0.047$ ). Eight (2.8%) of concordant couples compared to none of the discordant couples, practiced artificial conception methods, ( $p = 0.007$ ). More concordant couples did not practice the artificial methods, due to feeling of it as unnecessary, while discordant couples did not practice, due to poor knowledge of it ( $\chi^2 = 11.31$ ,  $p = 0.01$ ).

**Table 6 shows practice of family planning methods among HIV couples.** Fewer concordant couples 101 (35.1%) practiced safe period compared to 112 (38.9%) discordant couples ( $\chi^2 = 5.16, p = 0.023$ ). There were no statistically significant differences in practice of other types of family planning methods (withdrawal, IUCD, condoms, conjugation, pills, injectables and sterilization), comparing concordant and discordant couples.

### 3.2 QUALITATIVE STUDY RESULTS

The theme generated from focus group discussion is sexual and reproductive health choices and practices. The couples assented to still having sexual relationships even post-diagnosis but agreed that they had to be conscious to protect themselves at all times, removed the fun and the spontaneity from the whole experience. Childbearing was kind of relegated to the background as some of the couples feared infecting the unborn child.

*“We have tried to use condoms since we discovered we had this ailment but sexual activity is no longer the same as it used to be”* (Couple 4, Concordant, Neni).

*“My husband seems to have lost interest in sexual intercourse since I was diagnosed HIV positive, it is quite painful”* (Couple 3 Woman, Discordant, Ukpo).

*“We have decided not to have any more children to avoid them getting infected with the virus. We will make do with the two we have now”* (Couple 2, Discordant, Neni).

*“I am pregnant now and I plan to breastfeed. I would just make sure I stick to my drugs as I have been told.”* (Couple 4 Discordant Woman Neni).

*“We would still try to have children, but we would try to be careful with our timing so as to prevent the child from getting infected”* (Couple 5 Discordant Ukpo).

**Table 1: Sociodemographic characteristics by relationship status of HIV discordant and concordant couples in comprehensive health centers in a Southeastern state in Nigeria. (N=578)**

Characteristics		Concordant Couples		Discordant Couples		Group Total n (100%)
		male concordant n (%)	female concordant n (%)	male discordant n (%)	female discordant n (%)	
Age Groups	18-24	0 (0.0)	18 (85.7)	0 (0.0)	3 (14.3)	21 (100)
	25-29	21 (13.4)	59 (37.6)	17 (10.8)	60 (38.2)	157 (100)
	30-34	36 (35.6)	28 (27.7)	20 (19.9)	17 (16.8)	101 (100)
	35-39	36 (29.8)	14 (11.6)	43 (35.5)	28 (23.1)	121 (100)
	40-44	18 (34.6)	10 (19.2)	16 (30.8)	8 (15.4)	52 (100)
	45-49	18 (25.4)	15 (21.1)	23 (32.4)	15 (21.1)	71 (100)
	50-54	12 (48.0)	2 (8.0)	8 (32)	3 (12)	25 (100)
	≥55	7 (48.3)	2 (10.5)	13 (47.4)	7 (21.0)	30 (100)
Educational Level	Nil	1 (20.0)	0 (0.0)	3 (60.0)	1 (20.0)	5 (100)
	Primary	50 (32.0)	36 (23.1)	34 (21.8)	36 (23.1)	156 (100)
	Secondary	58 (21.4)	83 (30.6)	56 (20.7)	74 (27.3)	271 (100)
	Tertiary	39 (26.7)	29 (19.9)	48 (32.9)	30 (20.5)	146 (100)
Occupation	Farmer	12 (38.7)	4 (12.9)	10 (32.3)	5 (16.1)	31 (100)
	Civil Serv.	97 (28.2)	81 (23.6)	82 (23.8)	84 (24.4)	344 (100)
	Trader	28 (24.5)	30 (26.3)	32 (28.1)	24 (21.1)	114 (100)
	Others	11 (15.7)	18 (25.7)	16 (22.9)	25 (35.7)	70 (100)
	Unemployed	0 (0.0)	14 (77.8)	1(5.5)	3 (16.7)	18 (100)
Marriage Type	Monogamy	132 (50.3)		130 (49.6)		262 (100)
	Polygamy	15 (55.6)		12 (44.4)		27 (100)
Religion	Pentecostal	34 (47.8)		37 (52.2)		71(100)
	Anglican	39 (49.4)		40 (50.6)		79 (100)
	Rom. Cath.	56 (53.8)		48 (46.2)		104 (100)
	Jeh. Wit	3 (60.0)		2 (40.0)		5 (100)
	Sabbath	9 (52.9)		8 (47.1)		17 (100)
	Moslem	0 (0.0)		1 (100)		1 (100)
	Trad.	7 (63.6)		4 (36.4)		11 (100)

Table 2: The sexual needs and practices of HIV discordant and concordant couples in comprehensive health centers in a Southeastern state in Nigeria.

	Concordant couples n (%)	Discordant couples n (%)	Chi-square statistic	degrees of freedom	P – value
Yes	142 (49.3)	122 (42.4)	7.3	1	0.001
No	6 (2.1)	18 (6.3)			
≥ 3	56 (20.9)	63 (23.9)	2.65	1	0.104
< 3	85 (31.7)	64 (23.9)			
Yes	110 (41.4)	95 (35.7)	0.705	1	0.401
No	29 (10.9)	32 (12.0)			
Yes	20 (7.5)	8 (3.0)	4.525	1	0.033
No	120 (44.9)	119 (44.6)			
Yes	114 (39.7)	117 (40.8)	1.1	1	0.295
No	32 (11.1)	24 (8.4)			
Yes	6 (2.1)	4 (5.0)	3.827	1	0.05

Table 3: Cancer screening among HIV discordant and concordant couples in comprehensive health centers in a Southeastern state in Nigeria.

		concordant couples n (%)	discordant couples n (%)	Chi- square statistic	degrees of freedom	P – value
2	At least one partner has screened	37 (13.0)	19 (6.7)	6.438		
<b>Ever screened for reproductive organ cancer</b>	Both partners have not screened	108 (37.9)		6.438	1	0.011
	Yes	145 (50.3)	135 (46.9)	fisher's exact		
	No	2 (0.7)	6 (2.1)			
<b>Perceived need for improved effort on reproductive organ cancer screening</b>		121 (42.5)		fisher's exact		0.166

**Table 4: Reproductive intentions of HIV discordant and concordant couples in comprehensive health centers in a Southeastern state in Nigeria.**

		concordant couples n (%)	discordant couples n (%)	Chi-square statistic	degrees of freedom	P – value
have children	Yes	119 (41.6)	107 (37.4)	0.68	1	0.409
	No	28 (9.8)	32 (11.2)			
Had children after HIV diagnosis	Yes	74 (26.3)	63 (22.4)	1.3	1	0.255
	No	68 (24.2)	76 (27.0)			
Plans to have more children	Yes	77 (26.7)	70 (24.3)	0.12	1	0.731
	No	71 (24.7)	70 (24.3)			
plans to breastfeed	Yes	26 (17.4)	22 (14.8)	0.037	1	0.84
	No	53 (35.6)	48 (32.2)			

**Table 5: Knowledge and practice of family planning, emergency contraception, safe sex, and artificial conception methods among HIV discordant and concordant couples in comprehensive health centers in a Southeastern state in Nigeria.**

		concordant couples n (%)	discordant couples n (%)	Chi-square statistic	degrees of freedom	P – value
Knowledge of family planning method	Complete in at least one partner	9 (3.2)	3 (1.1)	2.752	1	0.097
	Partial or none in both partners	138 (48.4)	135 (47.4)			
Practice of family planning method	Yes	143 (49.0)	130 (45.3)	1.48	1	0.224
	No	5 (1.7)	9 (3.10)			
Knowledge of emergency contraception	complete	29 (10.0)	19 (6.6)	6.125	2	0.047
	Partial	71 (24.6)	88 (30.4)			
	None	48 (16.6)	34 (11.8)			
Practice of emergency contraception	Yes	10 (3.5)	3 (1.0)	3.55	1	0.059
	No	138 (47.9)	137 (47.6)			
Safe sex practice	condom use	131 (48.3)	119 (43.9)	2.82	1	0.093
	Abstinence	7 (2.6)	14 (5.2)			
Awareness of artificial conception methods	At least one partner	114 (39.9)	104 (36.4)	0.57	1	0.451
	Both not aware	32 (11.2)	36 (12.6)			
Knowledge of artificial conception methods	Complete in at least one partner	6 (2.1)	6 (2.1)	0.005	1	0.941
	Partial or no knowledge in both	141 (49.0)	135 (46.9)			
Practice of artificial conception	Yes	8 (2.8)	0 (0.0)	fishers exact		0.007
	No	140 (48.6)	140 (48.6)			
Reason for non-practice	Feel it's unnecessary	102 (35.8)	84 (29.5)	11.31	3	0.01

<b>of artificial conception method</b>	Have poor knowledge of it	21 (7.4)	31 (10.9)			
	Unnatural or against religious belief	9 (3.2)	20 (7.0)			
	Feel it's expensive	13 (4.6)	5 (1.8)			

**Table 6: Practice of family planning methods among HIV discordant and concordant couples in comprehensive health centers in a Southeastern state in Nigeria.**

		<b>Concordant couples n (%)</b>	<b>Discordant couples n (%)</b>	<b>Chi-square statistic</b>	<b>degrees of freedom</b>	<b>P - value</b>
<b>safe period</b>	Yes	101 (35.1)	112 (38.9)	5.16	1	0.023*
	No	47 (16.3)	28 (9.7)			
<b>Withdrawal</b>	Yes	22 (7.6)	22 (7.6)	0.04	1	0.841
	No	126 (43.8)	118 (41.0)			
<b>IUCD</b>	Yes	11 (3.8)	16 (5.6)	1.352	1	0.245
	No	137 (47.6)	124 (43.1)			
<b>Condom</b>	Yes	135 (46.9)	132 (45.8)	1.003	1	0.317
	No	13 (4.5)	124 (45.8)			
<b>Conjugation</b>	Yes	5 (1.7)	2 (0.7)	fisher's exact		0.449
	No	143 (49.7)	138 (47.9)			
<b>Pills</b>	Yes	23 (8.0)	15 (5.2)	1.463	1	0.226
	No	125 (43.4)	125 (43.4)			
<b>Injectables</b>	Yes	1 (0.3)	1 (0.3)	fisher's exact		1
	No	147 (51.0)	139 (48.6)			
<b>Sterilization</b>	Yes	0 (0.0)	3 (1.0)	fishers exact		0.114
	No	148 (51.4)	137 (47.6)			

#### 4. DISCUSSION

This comparative study assessed the sexual and reproductive health needs and practices of HIV discordant and concordant couples in the Comprehensive health centers in a South-eastern state in Nigeria. Our study findings showed that about half (49.3%) of concordant couples, compared to (42.4%) of discordant counterparts were sexually active.

The index study revealed that out of these sexually active couples, about four in ten, (41.4%) concordant couples as against (35.7%) from discordant couples use condoms. Also, Buchacz *et al.*, in a cross-sectional survey conducted elsewhere, reported that as much as 45% of HIV discordant couples engaged in unprotected sexual acts.<sup>[22]</sup> These figures are higher than those reported by Kaiser *et al.*, in Kenya, where only 16.3% of concordant couples and 6.6% of discordant couples had used condoms consistently in the last six months.<sup>[23]</sup> These discrepant results could be due to differences in the research designs, nature of population and sample size used in our study and theirs. It could also be supported by studies that posited that the risks of HIV infection in serodiscordant relationships increase when there is a desire to have children and condom use during sexual act is rarely.<sup>[24,25,26,27]</sup> However, considering the high fertility rates in the part of the country where the current research was carried out, our finding is encouraging, should be sustained and improved on. This is irrespective of the assumption by most couples that the use of condoms removes the fun from sexual acts and leaves the parties involved dissatisfied as was corroborated by the FGD findings of our study thus, *"We have tried to use condoms since we discovered we had this ailment but sexual activity is no longer the same as it used to be. "From our study findings, more discordant couples had sexual concerns to share. This finding is similar to that in a study done elsewhere, in which HIV discordant couples highlighted their unique challenges and concerns, which included intimacy issues and reproductive decisions.*<sup>[28]</sup> These concerns are related to the factors which have affected intimacy in the couples, which include difficulty in initiating sex, problems with arousal, decrease in libido, etc. *"My husband seems to have lost interest in sexual intercourse since I was diagnosed HIV positive, it is quite painful."* The low number expressing these concerns might be related to the prevailing societal sociocultural dynamics with regards to sexual and reproductive health issues. In our study setting, sexual matters are seen as issues of high privacy and an exclusive preserve of couples.

The index study found statistically significant differences in reproductive cancer screening practices among concordant and discordant couples. While more concordant couples had at least one partner that had screened, screening uptake for reproductive organ cancers was generally poor among them. This is in keeping with studies by Ezem<sup>[29]</sup> in Owerri and Udigwe<sup>[30]</sup> in Nnewi both in Southeastern Nigeria, where

at most seven in hundred respondents had ever screened for a reproductive organ cancer specifically cervical cancer. Ajape *et al.*, also reported that the demand for prostate cancer was low.<sup>[31]</sup> Despite the poor screening practices, the index study found that (96.9%) couples had perceived need for improved effort on reproductive organ screening. Also the most self-reported primary reason for poor screening uptake among respondents is poor knowledge.<sup>[29,30,31,32]</sup> Therefore, with sustained and effective health education the level of screening uptake could get to a high.

Our study findings showed that about a quarter respectively, (26.3%) of concordant couples and (23.5%) of discordant counterparts had children post HIV-diagnosis. Also, almost the same proportion (26.6%) of concordant couples desire to have children compared to (24.2%) discordant couples. This finding negates those of studies elsewhere, which reported higher proportions,<sup>[4,5,33]</sup> as well as statistically significant differences between the reproductive intentions of the respondents in discordant relationships and their concordant counterparts.<sup>[4,33,34]</sup> Bonnenfant *et al.*,<sup>[33]</sup> in reported that women in discordant relationships were more likely to cease desiring children than those in concordant relationships, while HIV positive men in discordant partnerships were likely to cease desiring children.

The findings of this study showed that comparatively, only (3.2%) of concordant couples as against (1.1%) of discordant couples, had good knowledge of family planning methods by at least one of the partners. Though this finding was not statistically significant, a comparative study by Grabbe *et al.*,<sup>[35]</sup> reported that discordant couples in Rwanda and Zambia show high knowledge of contraceptive but low usage of these contraceptive methods. Comparatively, the findings of this study also found statistically significant differences in couples that had good knowledge of emergency contraception as well as in the practice of artificial conception methods among these two groups. This is in keeping with a cross-sectional study in the Niger Delta area of Nigeria where a number of the respondents were unaware of reproductive options.<sup>[5]</sup> The poor knowledge identified in this study may be associated with the cultural practice in the study area, which is generally not receptive to other methods of conception and delivery, except the natural method. It must also be noted here that the poor knowledge and practice shown especially by discordant couples in this study should be a source of concern for healthcare providers. The high premium placed on children in our study area, often translates to a compelling intention by the couples placing themselves at high risk in order to exercise their parenthood. This is still corroborated by another study.<sup>[4,5]</sup>

More concordant couples did not practice the artificial methods, due to feeling of it as unnecessary, while discordant couples did not practice, due to poor

knowledge of it. A study by Ohl *et al.*,<sup>[36]</sup> has posited that artificial conception methods can be used as a low cost alternative for discordant couples.

From our study findings, almost all the couples (99.7%) perceived the need for provision of safe sex education to HIV couples. This is despite the health education package which is offered to HIV positive patients before enrolment into treatment proper. This might be attributed to the timing of these packages. These messages are usually given prior to the commencement of the treatment of the patients. At this point, the patients are still under the shock and threat of the ailment and are seeking for immediate relief. However as they stabilize on treatment, recover and begin to function normally, there is the tendency to relax and not practice the things taught in this health education packages. Our study findings showed that among couples who practiced safe period, fewer were concordant (35.1%) compared to (38.9%) discordant counterparts. This is corroborated by findings in a study by Nwokocho.<sup>[37]</sup>

#### Limitations and strength of the study

Firstly, studies based on self-reports of sexual issues through questionnaires are prone to a number of biases that could affect the validity and reliability of the results. Also, HIV/AIDS and sexual issues are very sensitive and could limit free expression of respondents, who may have given socially desirable answers. Assurance of confidentiality of the respondents, the training of research assistants to be painstaking in answering possible questions raised by respondents during data collection, as well as the simplicity and direct nature of the questions in the questionnaires minimised these effects. A major strength of this study was the high response rate (99.2%) was obtained from this study.

#### CONCLUSIONS

This study assessed the sexual and reproductive health needs and practices of HIV discordant and concordant couples in the Comprehensive health centers in a Southeastern state in Nigeria and found that many couples studied were sexually active. There was high reproductive intentions. More concordant couples had knowledge of family planning methods, knowledge and practice of emergency contraception cum artificial contraception methods. Also, more concordant couples had at least one partner who had been screened of any form of reproductive organ cancer. More discordant couples had sexual concerns to share.

We therefore recommend an improved multi- sectoral approach in sustained provision of sexual and reproductive health education packages to help reinforce the messages and improve the practice by clients. There is need for provision of appropriate reproductive and sexual health services and support for these couples. These should include: couple based HIV testing and counselling, condom promotion, contraceptive use and safe conception strategies.

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