

## Husband-Wife Agreement and Concordance on Sexual Decision Making, Positive Self Management and Health Promotion Among Couples Living with HIV in Calabar, Nigeria

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### ABSTRACT

Spousal agreement is important for couples with HIV because of shared risk for health outcomes. Although high spousal agreement (concordance) is expected on most issues because of close daily contact and common living conditions, studies have shown discrepancies between husbands' and wives' reports on several family issues. Understanding spousal concordance on HIV-related issues offers opportunity to develop interventions that promote better health for both partners. This study assessed the extent of spousal agreement on reproductive decision making, self-management, and health promotion; and determined how spouses' responses reflect their partner's attitude and preferences on such issues. Mixed method was used to collect qualitative and quantitative data from 25 purposively selected, consenting couples living with HIV and attending two HIV Counselling & Testing clinics in Cross River State, Nigeria. Husband-wife pairs were interviewed separately and concordance was calculated. Ethical clearance was obtained from relevant gatekeepers as well as informed consent from participants. Significant male domination in reproductive decision making was identified. Concordance was poor for decision making power of the wife on sexual/reproductive issues (24%, kappa 0.16), changes in sexual relations (28%, kappa 0.22); communicating sexual and fertility issues with spouse (28%, kappa 0.24), and mutual support (35% (kappa 0.40); while strong concordance existed for starting medication & adherence to ART (72%, kappa 0.60), health promotion (85%, kappa 0.80) and self-management (89%, kappa 0.81). Spousal agreement is therefore poor for sex-related matters but good for health promotion and self-management. Partner agreement on HIV-related issues contributes to a fuller understanding of decision making among spouses. Knowledge of this by health providers is critical for effective counselling and interventions for couples with HIV.

### Keywords

Husband-wife concordance, Partner agreement, Sexual decision making, Self-management, Couples with HIV.

### Introduction

A high degree of spousal agreement (concordance) is expected on most issues because of close daily contact, shared vision and common living conditions. There has been evidence of matching and compatibility in many areas of behaviour among spouses, who tend to influence the dynamics of each other's behaviour due to endogamy and homogamy [1]. The magnitude of such

compatibility/agreement may differ according to culture. However, studies have shown discrepancies in reports by spouses on several family issues, especially in developing countries where gender is generally regarded as an important power source in sexual and reproductive decision making [2]. Available studies [3,4] show that in many developing countries males often dominate over family decision making especially on issues such as sexual relations, reproduction, family size, and contraceptive use.

Spousal agreement is especially important in HIV because of shared risk for health outcomes. For couples with HIV it is

paramount to make rational, conscious and mutually-acceptable decisions on sexuality, fertility, self-management and health promotion as these have implications for couple's overall health and well-being. Moreover, HIV affects psychological function and social relations, and therefore requires lifetime changes in physical health and sexual relations [5,6]. People living with HIV/AIDS vary in their self-management of the disease depending on the social support they receive, especially from partners [7]. Being a chronic illness HIV requires a self-management model that ensures couple engagement and informed decision making [8], and allows couples to effectively manage the risk of infection and re-infection within the relationship.

In Nigeria few studies exist on spousal agreement among couples living with HIV on sexual decision making, disease-specific self-management and health promotion. This study therefore examines spousal agreement and concordance among couples with HIV, on issues like reproductive decision making, spousal attitudes and preferences, practice of self-management and health promotion. It also determines how individual partner's HIV-related decision making is influenced or modified by spouse's attitude and preferences in Calabar, Nigeria.

This study is significant by establishing the patterns and degree of spousal agreement between couples living with HIV in Nigeria using one State as a case study. Results provide data for counselling and care of couples with HIV, and add to available data in the cognate area. Understanding spousal agreement on HIV-related sexual and reproductive issues offers an opportunity for health planners and policy makers to develop interventions that promote greater health for both partners. It also offers opportunity for people working in HIV care to develop tailored, mutually-benefitting self-management and health promotion interventions that promote positive living and better health for couples.

## Methods

Mixed method was used to collect comprehensive data on spousal agreement. Qualitative methods elicited perception of couples' individual lived experiences in terms of reproductive decision making, and relationship with the spouse. Quantitative method dealt with self-report of individual sexual/reproductive decision making, decision making power of the wife on sexual/reproductive issues, self-management, and health promotion. Twenty five consenting couples living with HIV and who mutually knew their HIV status for one year or more, were purposively selected. Couples were attending two HIV Counselling & Testing (HCT) clinics in Calabar, Cross River State, Nigeria. Two of the male participants had 2 wives each resulting in 23 men, 25 women (25 couples). Ethical clearance was obtained from the State Agency for the Control of AIDS (SACA). Participation was voluntary, anonymity and external confidentiality were respected; and internal confidentiality of members of the dyad (husband-wife pairs) was maintained by not sharing data collected from one spouse with the other spouse. Where one partner was seen at the clinic, permission was obtained to see the other partner to participate in the study, and the pair were enrolled if both partners gave consent. The study was

carried out in Calabar from July 2015 to June 2016. Calabar is the capital of Cross River State, a coastal state of Nigeria bordering Cameroon on the east and the Atlantic Ocean on the south. The population of the State is 3.738 million, with a population density of 100-150 per square kilometre (highest in Calabar). The HIV infection rate for Nigeria is 3.1%, and 4.4% for Cross River State [9].

Qualitative data were collected using un-structured interview, and narratives were recorded with consent on audio-tapes and field notes. Quantitative data collection involved the use of guided pre-tested questionnaire with Cronbach coefficient of 0.85. Items on the questionnaire required participants to rate, on a scale of 1 to 4, certain variables like decision making on sexual and reproductive issues, decision making power of the wife, spouse's preferences and attitude towards sexual and reproductive issues, self-management and health promotion (1 signified the lowest score and 4 the highest on each item). Data on perception and attitude were also ordinal and were weighted from 1 to 4 on each item (1 signified total disagreement and 4 signified total agreement). Husband-wife pairs were individually interviewed on the same day and the degree/percentage of concordance was calculated. Confidentiality of data from dyad members was maintained. Interviews were done in places chosen by the couples (at home or in the office).

Analysis of quantitative data was on SPSS 18.0, and descriptive statistics are presented. Cohen's Kappa statistic (k) was used for dyadic analysis to determine the level of agreement/concordance between couples (with weighted kappa for ordinal data). A p-value of 0.05 was considered statistically significant. For qualitative data, narratives were transcribed 'verbatim' and analysed using NVivo 7.0 with themes identified. Rigor of qualitative data was ensured through performing independent transcriptions, the first being 'verbatim' transcription by two different coders with calculation of inter-coder reliability; followed by the use of detailed transcription techniques with conversation analysis. This ensured "credibility" and "trustworthiness" of data. Transferability was achieved through triangulation of data sources.

## Results

### Characteristics of study participants:

Table 1 shows the characteristics of the 25 couples in the study, 23 participants were male and 25 female (with two of the men having two wives each). The mean age of husbands was  $42.3 \pm 7.4$ ; and of wives was  $31.3 \pm 5.6$ , with mean age difference between husband and wife pairs being 5.3 (range of 5 to 9). Educational level was predominantly secondary education, with 64% couples having differences in educational background. In terms of HIV sero-status, 7 couples were sero-discordant and 18 couples were sero-concordant.

### Results on Husband-wife concordance on variables

Comparison of quantitative data revealed varying levels of concordance between husband and wife data on the variables (Table 2 shows kappa values and adjusted kappa). There was poor concordance between couples for decision making power of the

Characteristics		Husbands (n = 23)		Wives (n = 25)	
		No.	%	No.	%
Age (in years)	Below 25	0	0	3	12.0
	25 - 45	16	69.6	19	76.0
	Over 45	17	30.4	3	12.0
	Mean age	42.3 ± 7.4		31.3 ± 5.6	
Educational level (highest)	Secondary	15	65.2	18	72.0
	Tertiary	8	34.8	7	28.0
Occupation	Civil servant	16	69.6	16	64.0
	Not employed	2	8.7	6	24.0
	Personal employment	5	21.7	3	12.0
Religion	Christianity	19	82.6	21	84.0
	Islam	2	8.7	4	16.0
	Others (including traditional)	2	8.7	0	0
Ethnic group	Efik/Ibibio/Annang	6	26.1	8	32.0
	Bekwarra/Ejagham/Yakurr	5	21.7	4	16.0
	Ibo	6	26.1	5	20.0
	Yoruba	5	21.7	5	20.0
	Others	1	4.3	3	12.0
Number of years of knowing diagnosis	Less than 1 year	5	21.7	5	20.0
	1 - 3 years	10	43.5	11	44.0
	4 - 6 years	6	26.1	9	36.0
	Over 6 years	2	8.7	0	0
HIV Sero-status	Positive	21	91.3	18	72.0
	Negative	2	8.7	7	28.0
Sero-discordant couples (n = 7)					
Sero-concordant couples (n = 18)					

**Table 1:** Characteristics of participants (n = 48).

Indicators	% Agreement	Adjusted Kappa Index (95% CI)	Level of agreement
Decision making power of the wife on sexual and reproductive issues	24	0.16 (0.11, 0.43)	None
Perception of each other's attitude towards sexual and reproductive issues	27	0.20* (0.14, 0.43)	None
Change in sexual relations with spouse because of HIV infection	28	0.22 (0.15, 0.30)	Fair
Husband-wife communication on HIV-related sexual and reproductive issues	28	0.24 (0.19, 0.30)	Fair
Desire to have more children (family planning/reproductive issues)	32	0.29 (0.22, 0.32)	Fair
Mutual support	35	0.40 (0.35, 0.49)	Weak
Starting ART/ ART adherence	72	0.60 (0.55, 0.63)	Moderate
Perception of each other's preference on sexual and reproductive issues	75	0.69* (0.53, 0.72)	Moderate
Accessing counselling services	88	0.80 (0.73, 0.83)	Strong
Health promotion	85	0.80 (0.75, 0.84)	Strong
Self-management	90	0.81 (0.75, 0.86)	Strong
Disclosure of HIV status to other family members	92	0.89 (0.83, 0.90)	Strong

**Table 2:** Husband-wife concordance on variables. \*Weighted kappa for ordinal data.

Spouses' responses		Decision making power of the wife on sexual and reproductive issues		Change in pattern of sexual relations		Communication on sexual and reproductive issues		Desire to have more children	
		No.	%	No.	%	No.	%	No.	%
Attitude	Concordant	5	20	10	40	9	36	7	28
	Discordant	20	80	15	60	16	64	18	72
	Kappa	0.13		0.42		0.31		0.22	
Preferences	Concordant	11		13	52	8	32	12	48
	Discordant	14		12	48	17	68	13	52
	Kappa	0.78		0.84		0.50		0.86	

**Table 3:** Spousal concordance on attitude and preferences.

wife on sexual and reproductive issues (24%, kappa 0.16). In 36% of couples the husbands reported that the wives have equal power and right to make decisions on sexual and reproductive issues, but the wives did not agree with this. In 40% couples the husband reported that the man has ultimate power to decide if, when and how to have sex; and whether or not to have more children. For change in sexual relations with spouse since diagnosis of HIV infection, there was also poor concordance (28%,  $k = 0.22$ ), with different answers from husband and wife. In 18 (72%) couples (including all sero-discordant couples), there was no agreement between spouses in terms of reported change in sexual relations; 48% wives reported a change contrary to their husbands' report, 24% of them reported no change contrary to their husbands' report.

There was minimal/fair concordance for communication between couples on HIV-related sexual and reproductive issues (28.0%,  $k = 0.24$ ); overall perception of each other's attitude towards sexual issues (27% agreement, kappa 0.20); mutual support (35%,  $k = 0.40$ ); and the desire to have more children (32%,  $k = 0.29$ ). In 68% couples (especially in sero-discordant couples), there was no concordance between husband and wife with respect to the desire to have more children. However this study revealed that a high number of HIV positive men and women desired children. In couples who had predominantly female children, there was reasonable agreement in the desire to have more children, but in sero-discordant couples the tendency was for the HIV positive partners to desire more children while the HIV negative partners reported no such desire.

Moderate concordance existed for starting ART/ ART adherence (72%,  $k = 0.60$ ); and perception of each other's preference on sexual and reproductive issues (75%,  $k = 0.69$ ), while strong/good concordance existed for accessing counselling services (88%,  $k = 0.80$ ); health promotion (85%,  $k = 0.80$ ); self-management (90%,  $k = 0.81$ ); and disclosure of HIV status to other family members (92%,  $k = 0.89$ ).

### **Husband-wife concordance on attitude and preferences on sexual and reproductive issues**

Results on the perception of husband and wife about each other's attitude and preferences towards sexual and reproductive matters are presented on table 3. Perception of each other's attitude showed 20% agreement ( $k = 0.13$ ) for decision making power of the wife on sexual and reproductive issues; 40% concordance ( $k = 0.42$ ) for change in pattern of sexual relations; 36% ( $k = 0.31$ ) for communication with spouse on sexual and reproductive issues; and 28% ( $k = 0.22$ ) for desire to have more children. Results show higher level of agreement on all areas between perception of each other's preferences and spouse's actual preference. Perception of the preferences of husbands modified the wives' decision making on sexual and reproductive issues in 9 (36%) couples, while perception of wives' preferences modified the husband's decision making in 5 (20%) couples. Perception of husband's attitude towards these issues modified decision making of wives in 6 (24%) couples while perception of wives' attitude towards sexual and reproductive issues influenced husbands' decision making in

2 (8%) couples.

### **Qualitative data on lived experiences**

Data on individual lived experiences of couples yielded 3 themes, desire for more children; overt and covert resentment by spouse; strained sexual relations; and one sub-theme, male dominance in sexual decision making. Couples reported initial strained sexual relations with spouse because of anger, blame and failed trust, but that with counselling their sex life has improved over time. They opined that living with HIV should not rule out love and romance. Several individuals, especially wives, reported perceived resentment by their spouses. A 32 year-old mother of three reported, "My husband resents me because of this situation we have found ourselves...he no longer sees me as a woman, yet he brought this thing home."

However the husbands did not report having such feelings towards their sero-positive wife, rather one husband reported that the wife is the one actually resenting him, "...I actually feel my wife resents me, and it has affected our sexual relationship. I used to love women a lot and my philandering ways got us into this mess. At first I thought that she infected me but she tested negative and has resented me since then"

Participants, especially husbands, reported not discussing sexual and reproductive issues with their spouses. When asked if he has discussed the issue of resentment with his wife one participant said,

"I don't discuss such issues with my wife, it is too private and sensitive. In our culture you don't talk about sex, you just do it"

On the theme of desire for more children, a 37 year-old wife with 3 female children said,

"The sensible thing is not to have any more children, but I know my husband is anxious to have a male child and would want to try once more. We have however not discussed it"

One husband stated,

"This disease has affected our sexual relationship so much. We want more children but we are too scared to try. It is very frustrating"

Another young husband stated,

"I am HIV-positive but my wife is negative. I think she should have at least one more baby but she has bluntly refused the idea. She says the nurse warned her about getting pregnant"

On the decision making power of the wife on sexual and reproductive issues, many husbands were of the opinion that the husband has full control over such matters, involving 'having sex with her, whether she wants to or not'. Such male control may sometimes involve unsafe sex with the spouse. To stress this, a 46 year-old husband said,

"The man is in charge of such (sexual) matters. I make decisions on issues of sex and childbearing and my wife has to agree with me"

On the issue of male control, a young sero-positive husband opined,

"I don't like using condom. Why should I use it when making love to my own wife?"

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His sero-negative wife tearfully said, "My husband has bluntly refused to use condom with me. He keeps reminding me that I am his wife, yet he sometimes refuses to take his ARTs and I have to cajole him to take the medications as if he is a baby"

### Discussion

Strong agreement was observed for self management, health promotion activities, accessing counselling services, and disclosure of status to others; while there was very low agreement on family planning/reproductive issues; decision making power of the wife on sexual/reproductive issues; and mutual communication about sexual issues. The areas of low agreements are related to sexual and reproductive matters which are culturally very sensitive matters to discuss even between couples. However sexual issues are very critical in HIV for both sero-discordant and sero-concordant couples. Although people living with HIV can have safe, healthy and satisfying sexual and reproductive health, there were reported sexual challenges, reduced intimacy, and sexual adaptations in this study. A general low level of agreement on sexual and reproductive issues between spouses was also identified. Despite reported strained marital sexual relations between couples, there was no reported desire for divorce from any participant, contrary to findings by Mulqueeny & Kasiram [10]. Reasons given for this, were the marriage vows of "in sickness and in health", and the desire to avoid scandals that would adversely affect their children.

There was poor concordance between couples for decision making power of the wife on sexual and reproductive issues. The desire by wives to have control over their sexuality and reproductive decisions in the presence of husband control, may create communication problems and unnecessary strains in the marital relationship. In a study in South Africa it has been reported that female power in sexual and reproductive matters is positively associated with women's reports of trust and mutually constructive communication [11]. This may have been responsible for the finding of minimal concordance for communication between couples on HIV-related sexual and reproductive issues in this study. Also power imbalances within sexual relationships have been found to have significant implications for HIV prevention in sub-Saharan Africa, while shared decision making power has been found to be strongly and consistently associated with higher quality of marital relationship in HIV in all aspects [11].

Many couples, especially sero-discordant ones were less likely to agree about the desire to have more babies, despite the wide access to ART and available strategies for reduction of mother-to-child transmission in the country. In many cases the sero-positive male partners wanted to have more children and declared that it is their reproductive right to do so and that they retain control of decisions on such issues. However, the sero-negative partners said they would prefer to adopt children. This is contrary to a study in Malawi where couples living with HIV preferred to maintain their reproductive decision of having children despite the fact that negative health workers' attitude and lack of information tend to influence such decisions [12]. Studies in Ethiopia [13] and South

Africa [14] however reported that HIV-positive women are less likely than their HIV-negative peers to desire pregnancy, while other studies in Uganda and Zimbabwe [15,16] indicate that the desire to bear children does not depend on HIV sero-status. This is because in most African countries cultural obligations greatly influence desire/intent to have biological children. This may have been responsible for the intent of some respondents in this study to have more babies despite their status and their spouse's disagreement. The Ethiopian study also reported that HIV-positive women who had discussed their RH issues with health workers were less likely to desire having children [13]. It also revealed that the desire to have children was significantly higher in women who have no children but whose husband/partner have the desire, being young, and being on ART for some time [13]. There is however insufficient attention to the pregnancy-related needs, rights, decisions and desires of couples living with HIV in relation to safety and best practices [17]. This may be the reason why interactions with health service providers tend to influence the pregnancy decisions of individuals and couples living with HIV in conflicting ways [17].

It is imperative to understand factors influencing both men's and women's desires to have children. Pregnancy decisions should be made in mutual agreement of both partners if they are properly guided and counselled by health care providers. However many studies have looked at the sexual and reproductive health rights of women living with HIV [18-19], but the rights of men are often not considered. In this study it was significantly found that men who are HIV-positive in discordant relationships desired to have more children, but their wives did not agree. This may contribute to a strain on marital relationship. Health care providers should develop strategies to counsel and guide couples in appropriate Reproductive Health decisions, especially in fertility and child bearing.

The degree of agreement between perception of spouse's attitude and actual attitude was poor on sexual and reproductive issues. This indicates that husband-wife pairs could not accurately report their partner's attitude towards sexual and reproductive matters. This may arise from the fact that spouses living with HIV also reported low level of communication with their partners on sexual and reproductive issues. However there was moderate concordance/agreement between perception of spouse's preference and actual preference, implying that they could to a moderate extent correctly report their spouse's preferences on such issues.

The findings of this study have implications for dyadic reproductive health interventions, and sexual health promotion for couples with HIV. Partner agreement on sexual issues is important, and contributes to a fuller understanding of decision making dynamics among spouses. Knowledge of this by health providers is critical for effective counselling and interventions for couples with HIV. Data on agreement between couples are also relevant for health planners and policy makers to enable them develop dyadic HIV prevention and health promotion interventions to address the reproductive health needs of couples living with HIV.

## Conclusion

Spousal agreement is poor for sex-related matters but good for health promotion and self-management. Couples with HIV tend to have difficulty communicating their desires about sexuality and reproduction with each other. Therefore spouses' responses do not generally reflect their partners' attitude and preferences on sexual and reproductive issues.

Sero-discordant couples are less likely to agree about the desire for more children and change in sexual relations than sero-concordant pairs. Wives do not exercise any significant power over sexual and reproductive decisions, husbands prefer to retain control of decisions on these issues. Findings have implications for health planning and counselling by health providers.

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