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Challenges and Coping Strategies among Couples of Mixed HIV Status Presenting at a Large Comprehensive Care Centre in Eldoret, Kenya

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Abstract
This study was to determine challenges and coping strategies of HIV discordant couples seen at AMPATH Centre, Moi Teaching and Referral Hospital, Kenya. A cross sectional study design with consecutive sampling was used.384 participated. Challenges included; negotiation for sex (100%), need for children (94%) and blame for HIV infection. Females reported more abuse (65.4% against 34.6% for males). Highest incidence of abuse was reported among the unemployed HIV positive females. Coping strategies expressed included; abstinence (9%), condom use (74%), sleeping facing opposite sides in bed or separation of beds (11%) and living apart. A bivariate analysis of those participants who reported use of condom all the time and those who reported otherwise showed Age group, order of HIV testing and HIV status were significant while level of formal education of the participants and occupation were not. Negotiation for sex formed the greatest challenge while a combination of coping strategies was used.
Keywords: HIV**,** Discordant couple, challenges, coping strategies

1. Introduction

The HIV/AIDS epidemic is probably the greatest challenge facing Africa. According to UNAIDS Global report (2010), in 2009, 22.5 million adults and children were living with HIV in sub-Saharan Africa (this represents around 67.6 percent of the worldwide total and implies that 5.0 % of adults living in the region are HIV positive), between 1.1–1.5 million died from the virus and an estimated 1.8 million people became infected in 2009.

According to the 2008–09 Kenya Demographic and Health Survey (KDHS), HIV prevalence is 6.3% for women and men age 15–49, compared with 6.7% in the 2003 KDHS and 7.4% in the 2007 Kenya AIDS Indicator Survey. In Kenya, 8.0% of women and 4.3% of men are HIV-positive. By comparison, in 2003, 8.7% of women and 4.6% of men had HIV. In the 2007 KAIS, 8.8% of women and 5.5% of men 15-49 were HIV positive.

The prevalence of serodiscordant couples in populations varies. In sub-Saharan Africa, studies have found rates of 3–20% in the general population, and higher rates of 20–35% in studies of those presenting to voluntary counseling and testing (VCT) services (Bunnell *et.al*.2005). In a longitudinal study of couples in Tanzania, risk of HIV for a seronegative partner in a serodiscordant couple was several times higher than that of partners in seroconcordant HIV negative couples (Hugonnet *et.al*. 2002).

Couples may have poor understanding of what it means to be serodiscordant. A number of misconceptions have been noted in a descriptive study from Uganda. (Bunnell *et. al*. 2005). There was belief that both people in the couple were infected but tests had failed to detect this, belief that the HIV seronegative partner was somehow immune to HIV, belief that God was protecting the HIV seronegative partner, and that "gentler" sex offered protection to the HIV seronegative partner.

As Beckerman (2000) point out, serodiscordant couples have faced a number of challenges over the decades of HIV/AIDS. Combination therapies added hope to the survival of the HIV positive partner, but it also has created new challenges to intimacy. They identified three emotional challenges in discordant relationships as (1) the impact of side effects from medications, (2) safer sex conflicts, and (3) the decision making process regarding reproductive issues and family planning (Beckerman *et.al*.2002). When asked how they coped, the primary source of psychological support was found in their friendships with other couples of mixed HIV status, couple counseling and individual counseling.

HIV prevention messages have focused on risk in the context of casual relationships outside of marriage (Barden-O'Fallon *et al*., 2004; Merson *et al*., 2000). This has led to the view that marriage is a safe haven, usually without emphasizing the importance of HIV testing before marriage or within already long time married couples who have not been previously tested.

2. Methods

2.1 Study Design and Setting

A cross sectional study design was used.

The research was conducted at AMPATH (Academic Model Providing Access to Health Care) Centre located within Moi Teaching and Referral Hospital (MTRH) in Eldoret. AMPATH currently treats over 100,000 HIV-positive patients at 23 sites in both urban and rural Kenya.

2.2 Population and Sampling

Participants were selected by use of consecutive sampling. All eligible discordant couple members presenting to the clinics (modules) were then enrolled until the sample size (N=384) was attained.

2.3 Data Collection and Analysis

The open-ended questions responses on challenges and coping strategies formed the basis for qualitative data. NVIVO (Version 7.0) software for qualitative research was used to code and analyze content of the data, enabling identification, exploration and consolidation of the major emerging key themes and views that were in agreement or opposition to the themes, and also comparisons of responses from the various participants. STATA 9 was used to analyze quantitative data.

2.4 Ethical Considerations

Before execution of the study, the research protocol was submitted to the Moi Teaching and Referral Hospital/Moi University's Institutional Research and Ethics Committee (IREC) for ethical approval. Permission was sought from the AMPATH Research Committee from whose endorsement it was possible to carry out the study at AMPATH centre adult clinics.

3. Results

3.1 Demographics

A total of 384 participants were interviewed. They had a median age of 35 years with a range of 39 years, between 20 years and 59 years old. The mean age was 36.3 years. 55.2% of the participants were females. The median period of living together for the couples was 11 years with a range of 30 years, between one year and 31 years.

Table 1: Participants demographics (N=384)

3.2 Order of testing for HIV

Most of the participants (63.3%) reported having been the ones who tested first, after which they requested their partners to get tested, thus discovering their HIV discordance status. Only 25.8% of the participants had tested as a couple.

3.3 Discordant Couples' Challenges

3.3.1 Challenges in regards to issues pertaining sex

Issues pertaining to sex posed the most difficult challenge for participants. Immediately after receiving discordant HIV test results, participants reported having had disagreements over sex and blame about bringing HIV into the family. Lack of interest in sex initially after testing was reported by the participants; seven (7) discordant couple members said they had lost interest in sex completely due to their discordant status.

One HIV-positive man explicitly reported sex –related verbal and psychological abuse from his partner:

"For the last three years my wife has refused to have sex with me, she constantly reiterates that I got what I deserved for my promiscuous past, further she insists that should I feel like having sex, then I should go 'have it' with my previous 'partners'. She has moved from our matrimonial bed and now sleeps on the sofa in the sitting room."

Condom use posed another challenge as regards sex. Ninety one participants (23.7%) felt the use of condoms during any sexual act with their spouses' as overburdening and alien.

As one HIV negative man stated:

"I have been condemned to a life of using condoms all the time for fear of infection, I can never enjoy natural sex, its very saddening, am tempted to take the risk"

A HIV positive woman stated:

"since we use condoms, my spouse usually feels unsatisfied."

Yet another one stated:

"my husband does not want to keep going for tests after every three months and neither does he want to use protection during intercourse."

Though after living with discordance over a considerable period the participants reported having come to a compromise in regards to sexual matters, nearly all of them still felt that something was amiss. While the majority 73.9 %% (258) reported consistent condom use, 25 %(96) had had a child since learning of their discordant status.

3.3.2 Blame for HIV infection

Three hundred and sixty one (94 %) of the participants reported that their initial reaction to their discordant

results was to equate discordance with infidelity on the part of the HIV-positive partner. Most of the participants who had lived longer with discordance [greater than a year, 72.4% (278)) reported less instances of blame for HIV infection as opposed to their newly diagnosed discordant couples (less than a year, 27.6%, 106)

3.3.3 Ignorance on HIV discordance

Nearly all participants (91.4%, 351) reported limited knowledge on HIV discordance. They further were of the belief that HIV-discordance was rare, and, as a result, felt isolated. They did not realize, until participating in the study, that many other couples faced similar challenges. Despite 68.8% (264) of participants reporting having had some information on HIV discordance from health personnel, they still expressed ignorance about discordance. Lack of information may have influenced the coping mechanisms they adopted.

3.3.4 Loss of psycho-socio-economic support

Psychological stress due to discordant status was frequently reported. Inadequate social support to help in coping with discordance was also reported. The HIV positive parties felt that society looked down at them as being promiscuous and a risk to their families especially their spouses.

Eighty one (21.1%) of the participants reported aspects of verbal or physical abuse, with consequences of the abuse ranging from loss of economic support, psychological trauma, partner staying away from home to relationship breaking up. The highest incidence of abuse was reported among the unemployed females who were HIV positive as illustrated in the bivariate analysis table 2.

A bivariate analysis of those participants who reported verbal or physical abuse and those who reported no abuse showed Age group, gender, occupation, order of HIV testing and HIV status were significant at 0.05 significance level. Females were more likely to report abuse (65.4% against 34.6% for males, n=81). The level of education of the participants was not significant.

Table 2: A table of Bivariate analysis comparing those who were verbally or physically abused by partner and those who were not abused.

3.3.5 Need for children

Issues regarding procreation posed a big challenge especially for young couples who had no children at the time of discovering their HIV discordant status or for those who wanted more children.

Ninety six (25%) of the participants had had a child since knowing their HIV discordance status. Of these none utilized relatively safe forms of conception technologies, mostly due to ignorance and the costly nature of these technologies to the average Kenyan.

The challenge is further compounded by traditional African culture putting a lot of weight to children in any marriage.

A bivariate analysis of those participants who reported having had a child since knowing their HIV discordance status and those who had had no child showed Age group, gender, occupation, religion, order of HIV testing and HIV status were significant at 0.05 significance level. Age group and gender were strongly significant. The level of education of the participants was not significant.

Table 3: A table of Bivariate analysis comparing those who have had a child since knowing their HIV discordance status and those who had had no child.

3.4 HIV Discordant Couples' Coping Strategies

3.4.1 Condom use

With regard to the challenge on intimacy (sex), condom use was the most common and preferred strategy used by the participants. Thirty five (9.1 %) of the participants reported adopting abstinence as a strategy, but with frequent failure, hence switching to condom use. However there were differences among couples: men were more likely to report that there had been no problems, while women reported that condom use was inconsistent.

Seventy four percent (n=258) of participants reported consistent use of condoms, however when participants were asked if it were possible for couples to consistently and correctly use condoms 63.3% (n=243) responded in the affirmative.

One HIV-positive woman commented:

"*Though my husband does not like to use condoms during intercourse, I insist since I do not want him to get infected, as he's the only hope for the family now."*

A bivariate analysis of those participants who reported use of condom all the time and those who reported otherwise showed Age group, order of HIV testing and HIV status were significant at 0.05 significance level. The level of formal education of the participants and occupation were not significant.

Table 4: A table of Bivariate analysis comparing those who reported use of condom all the time and those who did not.

3.4.2 Living apart

This was another strategy used by participants, especially for those newly diagnosed discordant couples. The spouses would live separately though maintaining their relationship, this reduced instances of sexual encounters between the couples. This was more common where a member of the couple was working in town whereas the spouse lived rural.

Some HIV negative women (11.1%, 6) insisted on their spouses sleeping in separate beds or sleeping on same bed but facing opposite directions.

3.4.3 Abstinence

Very few participants had chosen abstinence as their coping strategy (9.1%, 35).HIV negative females said they would prefer abstinence if their HIV positive partners were in agreement.

One HIV negative woman insisted they had to abstain, though the spouse did not like the idea, she insisted that they had to sleep facing opposite sides of the bed. This was vehemently opposed by the husband, but she had her way.

Men felt that abstinence was not easy. However abstinence appeared to be easier if an HIV positive man endorsed it. The fear of both members of the couple getting infected was the driving force behind some cases of abstinence. Some who could not abstain resulted to seeking for other sexual partners.

Age group, gender, occupation and order of HIV testing were significant at 0.05 significance level. The level of formal education of the participants and religion were not significant.

Table 5: A table of Bivariate analysis comparing those who have other sexual partner and those who do not have.

4. Discussion

Most of the participants interviewed did not test as a couple; they tested first and their spouse followed. This is contrary to findings by Robertson G. *et al, 2005* whose experience indicates that deciding to test together was a mutual decision for the majority of couples. The most common reasons cited for HIV testing was that the doctor recommended, this may be in-line with the policy of diagnostic testing and counseling now evolved to Provider Initiated Testing and Counseling(PITC) which has enabled scaling up and greater uptake of HIV testing in Kenya.

Most participants reported incorrect explanations for discordance including the view that HIV transmission was based on luck and that their luck could end at any time, that it was an act of God, that the HIV-negative couple member had peculiar protective characteristics, rather than on the infectiousness of the HIV-positive partner. Bunnell *et al* 2005 also found out such incorrect beliefs regarding discordance including the concept of a hidden infection not detectable by HIV tests, that the negative partner may be in the 'window period', the thought that transmission is a consequence of 'rough sex' and that 'gentle sex' will protect HIV-negative partners, belief in protection by God, or simply denial that discordance as a phenomenon exists in a qualitative study in Uganda.

Participants in this study who had lived for over one year with discordance reported having developed adequate coping strategies and were seen to report less instances of challenges due to their HIV discordance status. Duration of living together is one of the partnership dynamics that may determine risk behavior within partnerships. (Gorbach P.M. *et al* 2003)

The challenges faced by HIV discordant couples in this study appear similar to those identified in discordant couples elsewhere (Bunnell *et.al*.2005). Fear of HIV transmission, coping with uncertainty of potential illness, shifts in emotional intimacy, and dilemmas regarding how HIV has impacted reproductive alternatives were identified as the most commonly experienced emotional issues for the serodiscordant couple noted in a study by Beckerman *et al*, 2002, these closely tally with challenges reported in our findings.

Studies on heterosexual and homosexual HIV discordant couples in the US have highlighted their unique challenges regarding sexual intimacy, disclosure to family and friends, feelings of isolation, uncertainty about the future, caregiver distress, trust, commitment, and reproductive decisions (Foley *et al*., 1994; Remien *et al*., 2003; Van Der *et al*., 1998; VanDevanter *et al*., 1999). These findings have implications for the design of interventions to enhance adaptation to HIV for discordant couples. HIV discordant couples also have increased levels of psychological distress, although open communication within the couple is associated with lower levels of distress (Remien *et al*., 2003). This current study showed sexual intimacy as a key challenge while a range of psychosocial issues were mentioned.

Many couples cope well with this stressful and challenging situation and arrive at a solution that best suits their circumstances. Perhaps the most common strategy is condom use. (Allen S, *et al,*2003., Roth DL, *et al*.2001). In agreement with this, the common strategies identified included staying away from each other, abstinence and condom use. Other strategies reported include separation, which seems to be an option adopted in particular by couples with relationships of shorter duration and particularly affects discordant relationships where the HIV-infected partner is a woman. These findings are in line with those by Porter *et al*.(2004). Few couples appear to choose abstinence. These findings have implications for the design of interventions for discordant couples.

5. Conclusion

Challenges revolving around management of sexual relations form the most prevalent and difficult issue among

these discordant couples, while a combination of coping strategies including staying away from each other, abstinence, and condom use rather than a single strategy ensured sustained living together of HIV discordant couples seeking care at AMPATH centre.

An in-depth understanding on the challenges, misconceptions about HIV discordance, and coping strategies from the perspective of the clients could be paramount in preventing HIV transmission and ensuring a more harmonious way of living among couples of mixed HIV status.

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Table 1: Participants demographics (N=384):

		Frequency	Percent
Age	20 – 30	120	31.3
	31 – 40	149	38.8
	41 – 50	88	22.9
	>50	27	7.0
	Total	384	100.00
Sex Distribution	Male	172	44.8
	Female	212	55.2
	Total	384	100.0
Highest level of education attained	Primary education	143	37.2
	Secondary education	124	32.3
	Tertiary education	117	30.5
	Total	384	100.0
HIV Status	Negative	54	14.0
	Positive	330	86.0
	Total	384	100.0
Religion	Christians	370	96.3
	Muslims	14	3.7
	Total	384	100.0
Occupation	Unskilled labour	49	12.8
	Skilled labour (Technicians)	116	30.2
	Non-health professionals	74	19.3
	Health professionals	14	3.7
	Others/unemployed	131	34.0
	Total Responses	384	100.0

Table 2: A table of Bivariate analysis comparing those who were verbally or physically abused by partner and those who were not abused.

		Abused	Not abused	P value
Age group	20 - 30	34	86	
	31 - 40	32	117	
	41 - 50	15	73	0.002
	>50	0	27	
	Total	81	303	
Sex Distribution	Male	28	144	0.037
	Female	53	159	
	Total	81	303	
Highest level of formal education attained	Primary level	28	115	0.848
	Secondary level	32	92	
	Tertiary level	21	96	
	Total	81	303	
Occupation	Unskilled labour	7	42	
	Skilled labour (Technicians)	14	102	
	Non-health professionals	21	53	0.001
	Health professionals	0	14	
	Other/unemployed	39	92	
	Total	81	303	
Religion	Christians	81	289	0.049
	Muslims	0	14	
	Total	81	303	
Who tested first for HIV	Self	67	176	
	Spouse	14	28	0.000
	Tested as a couple	0	99	
	Total	81	303	
HIV status	Positive	63	267	0.017
	Negative	18	36	
	Total	81	303	

Table 3: A table of Bivariate analysis comparing those who have had a child since knowing their HIV discordance status and those who had had no child.

		Have had child	Have not had child	P value
Age group	20 - 30	42	78	
	31 - 40	53	96	
	41 - 50	1	87	0.000
	>50	0	27	
	Total	96	288	
Sex Distribution	Male	22	150	0.000
	Female	74	138	
	Total	96	288	
Highest level of formal education attained	Primary level	29	114	0.876
	Secondary level	37	87	
	Tertiary level	30	87	
	Total	96	288	
Occupation	Unskilled labour	7	42	0.028
	Skilled labour (Technicians)	30	86	
	Non-health professionals	15	59	
	Health professionals	0	14	
	Other/unemployed	44	87	
	Total	96	288	
Religion	Christians	89	281	0.028
	Muslims	7	7	
	Total	96	288	
Who tested first for HIV	Self	44	199	0.004
	Spouse	28	14	
	Tested as a couple	24	75	
	Total	96	288	
HIV status	Positive	91	239	0.004
	Negative	5	49	
	Total	96	288	

Table 4: A table of Bivariate analysis comparing those who reported use of condom all the time and those who did not.

		Uses condom all time	Does not use condom all time	P value
Age group	20 - 30	70	36	
	31 - 40	94	48	
	41 - 50	73	7	0.0000
	>50	21	0	
	Total	258	91	
Sex Distribution	Male	116	35	0.282
	Female	142	56	
	Total	258	91	
Highest level of formal education attained	Primary level	101	35	0.415
	Secondary level	82	21	
	Tertiary level	75	35	
	Total	258	91	
Occupation	Unskilled labour	28	7	
	Skilled labour (Technicians)	74	35	
	Non-health professionals	53	14	0.905
	Health professionals	14	0	
	Other/unemployed	89	35	
	Total	258	91	
Religion	Christians	251	91	0.197
	Muslims	7	0	
	Total	258	91	
Who tested first for HIV	Self	187	35	
	Spouse	7	21	0.000
	Tested as a couple	64	35	
	Total	258	91	
HIV status	Positive	204	91	0.000
	Negative	54	0	
	Total	258	91	

Table 5: A table of Bivariate analysis comparing those who have other sexual partner and those who do not have.

		Has other sexual partner	**Does not have other sexual partner**	**P value**
Age group	20 - 30	0	120	
	31- 40	8	141	
	41 - 50	13	75	0.001
	>50	0	27	
	Total	21	363	
Sex Distribution	Male	21	151	0.000
	Female	0	212	
	Total	21	363	
Highest level of formal education attained	Primary level	7	136	0.711
	Secondary level	7	117	
	Tertiary level	7	110	
	Total	21	363	
Occupation	Unskilled labour	0	49	0.018
	Skilled labour (Technicians)	14	102	
	Non-health professionals	7	67	
	Health professionals	0	14	
	Other/unemployed	0	131	
	Total	21	363	
Religion	Christians	21	349	0.359
	Muslims	0	14	
	Total	21	363	
Who tested first for HIV	Self	21	222	
	Spouse	0	42	0.001
	Tested as a couple	0	99	
	Total	21	363	
HIV status	Positive	21	309	0.057
	Negative	0	54	
	Total	21	363	