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Factors affecting HIV disclosure among partners in Morongo, Tanzania

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ABSTRACT

Background: Human immunodeficiency virus (HIV) remains a major concern globally and locally. Married couples and those in stable relationships account for the highest percentage of new HIV and acquired immune deficiency syndrome (AIDS) infections. The rate of HIV disclosure among couples is low and affected by both known and unknown factors. The aim of this study was to describe the reasons for HIV status (non)disclosure among partners in Morongo.

Methods: A sampling containing two stages was used in this quantitative, exploratory, and descriptive study to select the 100 participants. The location was a Care and Treatment Clinic in the Morogoro municipality.

Results: The participants had a moderate level of knowledge about the importance of HIV serostatus disclosure. Female genital mutilation was the most mentioned (44%) custom affecting disclosure. The participants' level of knowledge about their partner's HIV status was also moderate (28%). Nitty-six percent had not disclosed due to fear of divorce and 98% due to fear of loss of financial support. Cultural factors such as traditional practices (95%) were also a major reason that hindered disclosure.

Conclusions: Interventions to address the negative attitudes are necessary to promote HIV disclosure and, in turn, better adherence to psychological adjustment therapy and reduction in the risk of HIV transmission among couples.

1. Introduction and background

HIV/AIDS remains one of the major global challenges. HIV education and prevention efforts are needed to prevent new HIV infections. An estimated 36 million people were living with HIV globally in 2015, of which more than 65% were in sub-Saharan Africa (Kharsany & Karim, 2016; World Health Organization, 2017) and more than 1.2 million were living in Tanzania (UNAIDS, 2017). According to Alema, Yalew, Beyene, and Woldu (2015), the number of newly infected people continues to fall globally. The total number of people living with HIV, however, has increased from previous years as more people are receiving lifesaving antiretroviral therapy. The predominant mode of HIV transmission is heterosexual contact between HIV-infected and uninfected individuals, with sexual transmission accounting for approximately 80% of infections (Tanzania Commission for AIDS [TACAIDS], Zanzibar AIDS Commission [ZAC], National Bureau of Statistics [NBS], Office of the Chief Government Statistician [OCGS], & ICF International, 2013).

1.1. Disclosure of HIV serostatus

Disclosing one's HIV status to a sexual partner means talking honestly about one's sexual orientation, possible drug use, and results of HIV testing (Alema et al., 2015). Disclosure has been shown to result in better adherence to therapy, good clinical outcomes, and reduction in the risk of HIV transmission among couples (Kenu et al., 2014; Muhindo, Nakalega, & Nankumbi, 2015). Worldwide, HIV status disclosure rates vary from 7% to 79%. (Atwiine, Kiwanuka, Musinguzi, Atwine, & Haberer, 2015; McHugh et al., 2018; Ubesie et al., 2016; Whembolua, Conserve, Thomas, Tshiswaka, & Handler, 2018) Disclosure of HIV serostatus is critical to controlling the spread of HIV, and understanding the reasons for disclosure will enhance the development of prevention interventions and ultimately lead to better control of the spread of the disease (Clarke et al., 2010). The disclosure rate is notably lower in developing countries than in the developed world (17% vs 86%, respectively) (Alema et al., 2015). In sub-Saharan Africa, disclosure rates among partners vary between 33% and 93%, depending on the country. The lowest rate was reported in Malawi. Reasons for disclosure include preventing HIV transmission, the need for care, and upholding the integrity of the relationship (Hardon et al., 2013). In

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Tanzania, disclosure rates range from 17% to 55% (Mwanga, 2012). In Morogoro, the disclosure rate is 41%; this is mostly from married/cohabiting HIV-positive pregnant women attending antenatal care in the Morogoro municipality who had disclosed their HIV serostatus to their partners (Kiula, Damian, & Msuya, 2013; Yonah, Fredrick, & Leyna, 2014).

A study carried out among students in Bangladesh shows that the participants lack proper knowledge about HIV/AIDS (Jahan, Shaikh, Begum, Chowdhury, & Hasan, 2012) in Uganda aimed to determine prevalence and factors associated with disclosure of HIV test results by women to their sexual partners. It found that nearly 84% of women disclosed their HIV results to their partners. The results showed that having a sexual partner who had also been tested for HIV made it easier for the woman to disclose her HIV status (Batte et al., 2015). These findings suggest the need to promote HIV testing among partners, improve the literacy levels of women, and encourage men to attend antenatal care—all key factors in promoting the disclosure of HIV results (Beyeza-Kashesya et al., 2010).

HIV serostatus disclosure offers benefits to the infected individual and to the public. It may motivate an individual to seek treatment and change their behaviour. It may also lead to the decreased transmission of HIV. It provides opportunities for social support, access to medical care, a chance to discuss and implement risk reduction factors with partners, and increased opportunities to plan for a future pregnancy or childbirth (Kenu et al., 2014; Smith, Rossetto, & Peterson, 2008). Risk behaviours change most dramatically among couples when both partners are aware of their HIV serostatus. HIV serostatus disclosure also enables couples to make informed reproductive health choices, which may ultimately lower the number of unintended pregnancies among HIV/AIDS-positive women (Taraphdar, Dasgupta, & Saha, 2007).

1.2. Attitudes towards disclosure

Married couples and those in stable relationships generally account for a higher percentage of new HIV/AIDS infections (Biraro et al., 2013; Godbole & Mehendale, 2005), although limitations in terms of sampling have been admitted in a recent study (Irungu et al., 2016). Despite the importance of HIV status disclosure, partner disclosure is low in developing countries (Akinyemi, 2013). South Africa follows this trend, with a similarly low rate of disclosure (36% of rural women) five months after diagnosis was reported (Makin et al., 2008). A study carried out in Iringa, Tanzania, reported that 55% of married men showed their results to their wives, whereas 34% of the married women disclosed the information to their husbands (Lugalla, Yoder, Sigalla, & Madihi, 2012). Another study in Dar es Salaam among HIV-positive pregnant women reported that only 17% of seropositive women disclosed their status to their sexual partners (Mwanga, 2012). Low disclosure rates have been attributed to negative outcomes such as rejection, separation, divorce, stigma, and discrimination (Odimegwu, Alabi, De Wet, & Akinyemi, 2018; Yonah et al., 2014). HIV-positive status disclosure is a sensitive event. HIV-infected persons need to weigh the benefits against the harm before disclosing their status.

Tom (2013) examined the knowledge and attitudes regarding disclosure of 263 HIV-positive patients at a clinic in Namibia. Overall, their knowledge and attitudes regarding disclosure were positive. The most common reason for disclosure was to seek help. Sixty per cent disclosed their HIV status within one week of learning their HIV test results. Ninety-six per cent did not regret disclosing their HIV status. Other studies (Hunter-Adams et al., 2017; Makin et al., 2008) have shown that most women selectively disclose their HIV status to at least one person albeit not always completely (Loutfy et al., 2016). Both Tom and Makin et al. supported the link between education and disclosure, regardless of whether it is the woman or her partner who has a sufficient level of education. Studies have suggested that men are more likely to disclose their status than women (Alemayehu, Aregay, Kalayu, & Yebyo, 2014; Mwanga, 2012), and people in urban environs are more likely to disclose their status than their rural counterparts are (Mwanga, 2012).

1.3. Cultural beliefs about HIV disclosure

Some studies have indicated a significant association between beliefs and attitudes about HIV (Seid, Wasie, & Admassu, 2012; Taraphdar et al., 2007; Tom, 2013). A study carried out in India to assess disclosure among people living with HIV/AIDS showed that the overall disclosure rate was almost 70% because of patients' positive outcomes following a disclosure—that is, they experienced kindness, understanding, and acceptance. More importantly, disclosure was not associated with the breakup of marriages (Taraphdar et al., 2007). Another study conducted in Tanzania that aimed to assess the influence of religious beliefs on HIV stigma, disclosure, and attitudes towards treatment showed that shame-related HIV stigma was strongly associated with religious beliefs such as that HIV is a punishment from God or that people living with HIV/AIDS have not followed the Word of God (Zou et al., 2009). The findings of another study (Mwanga, 2012) showed that societies associate specific signs with HIV/AIDS. For instance, if an HIV-infected person does not manifest any signs generally associated with HIV/AIDS, such as weight loss, the community will not believe that they have been infected even when the infected person discloses their status. Moreover, a considerable high number of individuals and groups of people associate HIV/AIDS with religious beliefs or witchcraft and other supernatural means, a tendency that affects HIV disclosure (Faimau, Maunganidze, Tapera, Mosomane, & Apau, 2016; Roura et al., 2010).

Fear has been suggested as the most common cross-cultural factor interfering with disclosure (Montalvo-Liendo, 2009) Serostatus may not be disclosed if the individual believes that doing so will result in physical abuse, lack of psychosocial support, or a negative reaction from their partner (Mucheto et al., 2009; Seid et al., 2012).

A study carried out at the Muhimbili Health Information Centre in Dar es Salaam showed that 49% of the patients who did not disclose their status experienced physical violence, about 38% had a low level of anxiety symptoms, and 25% reported experiencing a high level of depressive symptoms (Mushi, 2012). In the same study, it was found that despite high encouragement of HIV serostatus disclosure during Voluntary counselling and testing (VCT) services, two out of ten women did not share their HIV serostatus result due to fear of their partner's reaction. The majority mentioned that they feared physical abuse and abandonment (Mushi, 2012).

2. Aim

The present study contributes to the scientific literature on reasons for HIV serostatus disclosure or nondisclosure among partners. This will help health care providers develop interventions that can increase the disclosure rate among partners and, in turn, reduce the rate of HIV transmission among partners and families. This study aimed to understand the factors affecting HIV disclosure among partners attending the Care and Treatment Clinic (CTC) at the Mzinga Military Hospital in Morogoro.

3. Methods and materials

This quantitative, exploratory, and descriptive study collected data to assess the reasons for HIV (non)disclosure among partners attending the CTC at the Mzinga Military Hospital.

3.1. Study setting

The study was conducted at the CTC of the Mzinga Military Hospital in Morogoro. The Morogoro municipality is one of the six districts of the Morogoro region situated in South eastern Tanzania, about 190 km west

of Dar es Salaam. As of the 2012 census, the district had a population of at least 315,000. Its main economic activities are small-scale farming, livestock raising, small-scale trade, and textile work. The Morogoro Urban District is administratively divided into 19 wards including Mzinga. The Mzinga Military Hospital was established in 1974. It is located 10 km from Morogoro town. It serves all military personnel working in Morogoro and Dodoma and other civil personnel from those regions. CTCs are clinics offering services exclusively to HIV-infected patients. The CTC at the Mzinga Military Hospital operates from Monday to Friday. The average number of patients who attend the CTC each month is 450–500.

3.2. Sampling

The sampling contained two stages. Health centres providing CTC services in the Morogoro municipality were chosen using simple random sampling. All health facilities in the Morogoro municipality were listed and assigned numbers. The researchers used small pieces of paper to represent the health facilities according to their assigned numbers. The papers were mixed, and one of them was randomly selected: the Mzinga Military Hospital. Then a sample of 100 participants was composed of married male and female adults living with HIV/AIDS who attended the CTC at the Mzinga Military Hospital in Morogoro. All who voluntarily agreed to participate in the study were included regardless of their social or economic status, education, religion, age, or other differences. The dependent variable was HIV disclosure among partners, and the independent variables were attitudes towards HIV status disclosure, cultural beliefs about HIV status disclosure, education level, marital status, stigma, discrimination, and knowledge on the importance of HIV status disclosure. The study was carried between March and April in 2016.

3.3. Data collection and processing

The data were collected using structured questionnaires in Swahili that contained both closed- and open-ended questions. The questionnaire was pretested on 10 married men and women living with HIV/AIDS who were waiting for services at the Mawenzi CTC. The necessary changes were made for questions that were misinterpreted (Cohen, Manion, & Morrison, 2013). The collected data were processed and analysed using SPSS v. 16.0. This was done by the researchers after the completeness and consistency of the information were checked.

3.4. Ethical considerations

Permission to conduct the study was requested from Kilimanjaro Christian Medical University College (KCMUCo) Research and Ethical Committee. A letter through the dean of the Faculty of Nursing was sent to the medical doctor in charge at the Mzinga Military Hospital. Interviews were conducted with individuals who voluntarily participated in the study. No names were used in the process of collecting data or in any paper. Every participant was assured that the information they gave would be confidential and used only for scientific purposes. Confidentiality was considered throughout the study.

The participants who were found to have any problem were advised accordingly; they were attended to and allowed to go back home as early as possible if their condition was fair. Critically ill patients were admitted to the hospital to be attended to by the appropriate physician for further management. The research findings were submitted to the management of the Mzinga Military Hospital, KCMUCo. They were also disseminated at the Morogoro Regional Hospital during clinical meetings.

Table 1
Sociodemographic characteristics of the respondents (N = 100).

Variable	Frequency (n)	Percentage (%)
Age		
18–25	4	4
26–30	11	11
31–35	24	2
Above 36	60	60
Missing	1	
Marital Status		
Married	42	42
Single	9	9
Divorced	16	16
Separated	17	17
Widowed	15	15
Missing	1	
Education Level		
None	1	1
Primary	65	65
Secondary	26	26
College	7	7
Missing	1	1
Religion		
Islamic	38	38
Christian	62	62
Employment Status		
None	26	26
Employed	26	26
Self-employed	46	46
Student	2	2
Number of Years in Marriage		
< 1	11	11
> 1	87	87
Don't know	2	2
Number of Children		
None	2	2
1–2	55	55
3–4	31	31
5–6	9	9
7–9	3	3

4. Results

4.1. Sociodemographic characteristics

A hundred respondents participated in the study, of which 60% were above 36 years old and 42% were married. Table 1 shows that 65% had a primary education. A majority of the participants had completed primary education (65%) and almost everyone got children (98%).

4.2. Knowledge and reasons for HIV status disclosure among the participants

Questions on knowledge were coded as follows in terms of correct answers: ≥5 = high; 4–3 = moderate; < 3 = low. Most of the respondents knew the importance of HIV disclosure among partners; only 11% had low knowledge (Fig. 1). As for the respondents' perception of the cultural beliefs affecting HIV disclosure, 9% agreed that there are customs that act as barriers to HIV disclosure. Among them, four (44%) identified female genital mutilation as a barrier. Of the participants, 28% had disclosed their sero-status to their spouse. Regarding attitudes towards HIV status disclosure among partners, 96% and 98% had not disclosed their status due to fear of divorce and loss of financial support, respectively (Table 2).

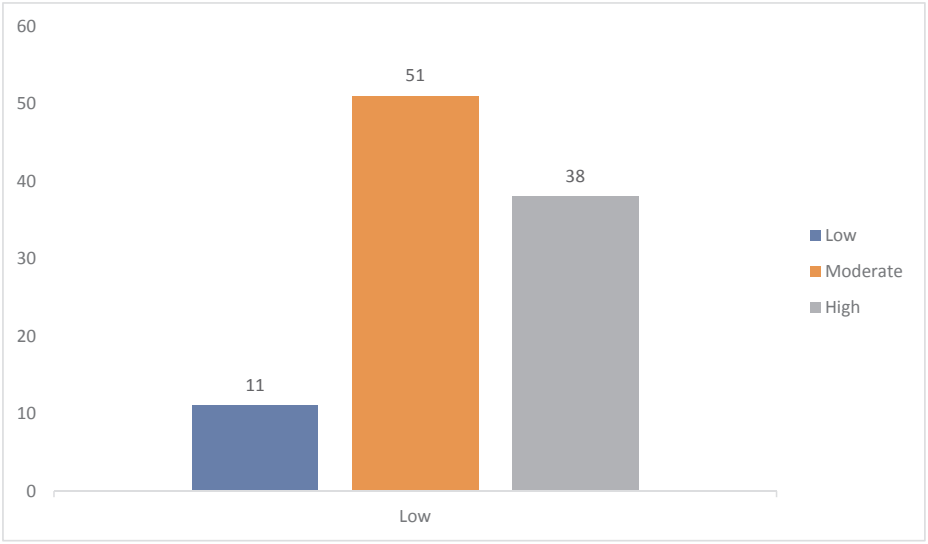

Fig. 1. Knowledge on importance of disclosure among participants.

Table 2
Attitudes towards HIV disclosure among partners at Mzinga (n = 100).

Variable	Frequency (n)	Percentage (%)
Fear of being blamed		
Yes	82	82
No	18	18
Against traditional practice		
Yes	95	95
No	5	5
Fear of divorce		
Yes	96	96
No	4	4
Fear of loss of financial support		
Yes	98	98
No	2	2
Fear of being abused		
Yes	92	92
No	8	8
Normal in relationship with partner		
Yes	90	90
No	10	10
Others		
Fear of loss of friends	30	30
FGM act as a barrier	44	44
Stigma	50	50
Don't know	20	20

5. Discussion

This study focused on HIV disclosure among patients attending the CTC at the Mzinga Military Hospital. This study contributes to the limited data on HIV serostatus disclosure among partners, which will increase community members' awareness of the importance of disclosing their HIV serostatus to their partners. Compared with other studies on HIV disclosure among partners, the main variables in the present study were the participants' sociodemographic information, knowledge of the importance of disclosure, attitudes towards HIV disclosure, and cultural beliefs.

5.1. Knowledge on the importance of disclosure

The level of knowledge on the importance of HIV disclosure was moderate; most respondents knew that disclosing their status was important. This finding contrasts with that of Alema et al. (2015), who reported a good level of knowledge on the importance of disclosure. Most of the respondents in their studies agreed that it was important to disclose their HIV status. The most common reasons for disclosure in those studies were the need for help, wanting the partner to go for testing, and wanting to let their relatives know their status. This variation could be influenced by the participants' exposure to the source of knowledge, which was not specifically assessed in this study. It could also be due to the difference in sample size, as the sample size used in the current study was small compared to that of the two studies.

Related literature (e.g. Beyeza-Kashesya et al., 2010) to a critical degree links the level of education with the degree of disclosure. Such a link implies that educational efforts are needed to increase the rate of disclosure and so decrease the spread of HIV/AIDS. Specifically, an understanding of the dynamics of how a disease may transmit, including the social contacts or network involved, may enhance the understanding of why a disclosure is deemed as important (Datta, Mercer, & Keeling, 2018). Another reason is to avoid that ideas of HIV/AIDS is not aligned or inconsistent (Sigelman, 2018). Children participated in Sigelman's study, hwoever, Mahat, Scoloveno, and Scoloveno (2016) suggest that education programme on HIV/AIDS should be implemented in schools and community centres with the whole family in mind. Although an education – or the lack thereof – plays a role in the spread of HIV/AIDS, we must not forget to ensure that these efforts are accessible to a better part and not only a few (Hughes & Admiraal, 2012), and implemented and followed-up on with the context in mind (Adelekan (2017). Datta et al. (2018) and Mahat et al. (2016) menation the social network and the sapece, resepctively as factors for mitigating the spread of HIV/AIDS. Nyawasha and Chipunza (2015) bring the two together in catching light on the use of Radio broadcasting as a strategy to educate university students on issues regarding HIV/AIDS. Despite this, educational efforts or interventions cannot only target the level of group. We also need to target the level of family and individual.

5.2. Attitudes towards HIV disclosure

This study found that the majority of participants had not disclosed their HIV status. This nondisclosure was mostly influenced by issues such as the fear of being blamed, the belief that HIV status disclosure is against traditional practice, fear of divorce, fear of loss of traditional support, and fear of being abused. The most common reason was the fear of stigma and loss of friends. Similar findings have been reported elsewhere (Lugalla et al., 2012; Seid et al., 2012; Sethosa & Peltzer,

2005; Yonah et al., 2014). The social environment, traditions, and culture may influence these attitudes, and education could also contribute to these similarities in attitudes towards nondisclosure (Makin et al., 2008; Tom, 2013).

Contradictory findings were reported as well. For instance, Tom (2013) reported that participants had a positive attitude towards disclosure, while Alema et al. (2015) found that most participants perceived disclosure as important. Although the attitudes towards disclosure and the actual disclosure practices reported by the participants in the study conducted in Namibia were encouraging, the participants only disclosed their status to trusted individuals. The fear of stigma was a concern in that study and in ours, although the actual stigma in that study was low.

Other reasons for nondisclosure, such as fear of gossip, have also been reported, and a range of reactions to the disclosure (e.g., support, understanding, acceptance, and anger) have been documented (Tom, 2013). The differences in attitudes found in our study could be influenced by the participants' level of knowledge. The differences in culture, traditions, and beliefs between Namibia and our setting could also explain the differences in attitudes.

5.3. Cultural beliefs affecting HIV disclosure

This study found that cultural beliefs are not a barrier to HIV status disclosure among partners, as only a nine percent agreed that cultural beliefs hinder HIV status disclosure. Female genital mutilation was among the most commonly mentioned customs affecting disclosure. Small proportions of participants also mentioned other factors affecting HIV status disclosure, such as stigma, breastfeeding, mistrust of partners, prostitution, and multiple partners. Similar factors have been reported in other studies (Alema et al., 2015; Lugalla et al., 2012).

5.4. HIV disclosure rates among partners attending the CTC at Mzinga

This study revealed low HIV disclosure rates among partners, as only a quarter of the participants reported having disclosed their HIV status to their partners. This finding contradicts those of other studies conducted in Mwanza, Tanzania, with disclosure rates of more than 90% (Yonah et al., 2014). This inconsistency could be partly masked by intrinsic factors such as acceptance (Lugalla et al., 2012). However, the current study is similar to a study undertaken in Dar es Salaam, which reported that only 17% of seropositive women revealed their status to their sexual partners (Mwanga, 2012). Another study in Iringa also found low HIV disclosure rates among HIV-positive partners; 55% of the married men showed their results to their wives, while 34% of the married women disclosed the information to their husbands (Lugalla et al., 2012). The similarities could be due to the inadequate couple counselling services, which are not as strong in developing countries compared with developed countries.

6. Conclusion

This study found a moderate level of knowledge on the importance of HIV disclosure among partners. Although most participants acknowledged that disclosing their HIV status to their partner was important, a large number of participants had not disclosed their HIV status. The reasons behind their nondisclosure included the fear of being blamed, the belief that disclosure is against traditional practice, fear of divorce, fear of loss of traditional support, fear of being abused, and fear of stigma and loss of friends.

Nurses are involved closely in counselling and providing information about testing protocols. The findings of this study indicate that more has to be done to promote and increase HIV disclosure. Nurses can help improve disclosure through their practice; for instance, those who work in the voluntary counselling and testing section, in reproductive and child health, in CTCs, and in general wards can encourage partners to come together during testing to create room for disclosure.

The limitations of this study include the sampling method, which may have caused selection and recall bias. The sample size was not big enough due to the time limitation; therefore, the results cannot be generalised to the entire population of Tanzania. Furthermore, this study only described the factors affecting HIV disclosure. It did not investigate the association of disclosure with other factors such as education level and reasons for testing.

6.1. Recommendations

The issue of disclosure has not been fully addressed in the Mzinga community. Partner involvement must be encouraged, since partners do not seem to be fully involved in discussing matters concerning disclosure. The findings of this study have provided a basis for the evaluation of the status of disclosure, but more support is required. Researchers need to do more explorative qualitative studies to examine the experiences and challenges faced by partners upon disclosing their HIV status. More analytical studies can be done to assess the factors associated with disclosure, the attitudes towards disclosure, and the knowledge about disclosure.

Stakeholders in the HIV epidemic can conduct more educational forums, increase their advocacy for disclosure, and emphasise the involvement of couples instead of the male or female partner alone. More campaigns should be conducted by health workers with a focus on discouraging the stigma against persons with HIV in the communities in Mzinga, Morogoro.

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