

# The link between HIV/AIDS and violence among young adults: A study in Udupi, Karnataka

## Abstract

**Background:** Violence is a major public health problem which affects the community and threatens the life of people. **Objectives:** To estimate the prevalence and different forms of violence among HIV positive young adults taking antiretroviral therapy (ART) in Udupi district. **Materials and Methods:** A cross-sectional study was carried out among HIV positive young adults (18-35 years) who were aware of their status. The participants were selected from ART Centre of Udupi district adopting convenience sampling. Data were collected from 200 young HIV positive young adults using a predesigned, pre-tested self-administered questionnaire. **Results:** The overall prevalence of domestic violence was 14.5% and was found to be more among females (17.6%) as compared to males (6.9%). This difference was statistically significant among gender with a *P*-value <0.05. Among the various forms of violence the prevalence of physical violence was found to be 14.5% with significant difference among gender. Among females who experienced physical violence, husband was perpetrator in 76% cases and among males, parents/relatives as the perpetrator in 75% cases. Around 8.5% of females had experienced sexual violence and husband was perpetrator in 50% of the cases followed by relatives and friend/acquaintance. **Conclusion:** Physical and sexual violence was found to be more in female HIV positive patients as compared to males. The presence of violence among HIV positive young adults especially among the females demands for the concerted efforts at combating underlying factors leading to violence among this vulnerable group of HIV positive young adults.

**Key words:** ART, HIV positive, physical and sexual violence, young adults

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## INTRODUCTION

Violence is a major public health problem that affects the communities and threatens the life. More than 1.6 million people die worldwide as a result of violence.<sup>[1]</sup> Most of the times the risk of violence is higher in the domestic setting and ultimately concealed from public health aspect. Many who live with violence assume that it is an intrinsic part of their lives.

According to World Health Organization (WHO) violence is “the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community that either results in or has a high likelihood of resulting in injury, death, psychological harm, or deprivation.”<sup>[2]</sup> Whereas domestic violence is defined as a pattern of abusive behaviors by one or both partners in an intimate relationship such as marriage, dating, family, friends or cohabitation.<sup>[3]</sup> People experience various types of domestic violence like physical, sexual and psychological abuse.<sup>[2]</sup>

Globally, there were 34 million people including 3.4 million children below 15 years living with HIV in 2010.<sup>[6]</sup> There were 2 million adolescents (aged 10-19) and 5 million young adults (15-24 years) living with HIV in 2009<sup>[7]</sup> and the epidemic varies between countries.<sup>[8]</sup>

Among the HIV positive people, women are basically at a higher risk of violence from their partner. A study from South Africa reported that women with violent partners are more than 50% likely to be HIV positive as compared to other women.<sup>[9]</sup> Also, a study conducted in Tanzania showed that young HIV positive women reported intimate partner violence as compared to the other women.<sup>[10]</sup>

Research has identified that there is an association between domestic violence and HIV/AIDS and it has emerged as a major public health concern since victims are at high risk for adverse health outcomes, including HIV/AIDS, STDs, alcohol and drug abuse. There is a dearth of literature on violence among people living with HIV and most of the available studies were carried out in the American and African setting. Udupi district is one among the high prevalence area for the HIV/AIDS in India and since there are no studies done, the present study was conducted to explore the threat of violence and assess the different forms and magnitude of violence among people living with HIV/AIDS.

## Objectives

- To estimate the prevalence of violence among HIV positive young adults taking antiretroviral therapy (ART) in Udupi district, Karnataka.
- To assess the magnitude and different forms of violence among HIV positive young adults.

## MATERIALS AND METHODS

A cross-sectional study was done at the Antiretroviral Therapy Centre, Udupi district, Karnataka between February 2013 to July 2013 using semi-structured self-administered questionnaire among HIV positive young adults in age group of 18-35 years (National Youth Policy of India).<sup>[11]</sup> Questionnaire was modified based on relevant literature and modified to suit the cultural context before data collection.

The participants included in the study were aware about their positive status and were residents of Udupi district. Permission was taken from the District surgeon of the District hospital of Udupi district and also the ethical approval obtained from Manipal University Institutional ethical committee. The written informed consent was obtained from each participant before giving the questionnaire.

The required number of respondents to be included in the study were calculated using the sample size estimation formula for prevalence. Since the literature review could not identify an appropriate prevalence rate for domestic violence among HIV positive young adults, 50% was considered with 7% absolute precision for calculation of sample size.

$$\frac{Z_{\alpha}^2 p (1-p)}{d^2}$$

$$n = (1.96 * 1.96 * 0.5 * 0.5) / (0.07)^2$$

$$= 0.9604 / 0.0049$$

$$= 196$$

$$\approx 200$$

Thus the minimum sample size required for the study was 200. The participants were selected by using convenient sampling method. HIV positive young adults who visited ART Centre during data collection period and willing to give informed consent were included in the study.

The final questionnaire was translated to the local language so that participants will understand the questions better before they answer it. The translated questionnaire was pretested.

## Statistical analysis

The data were analyzed with the help of SPSS vs.15.0. The descriptive data were analyzed with frequency and percentages. The chi-square test was used to find the association between the various aspects of violence & self-esteem and gender.

## RESULTS

Among 200 participants, 71% were females while 29% males. Since convenience sampling technique was adopted, the study showed the visit of female HIV positive persons more in the ART Centre as compared to the male HIV positive persons [Table 1].

The age distribution as per the stages of young people according to National Youth Policy of India showed that 58.5% participants belonged to age group of 31-35 years, 32.5% from 26-30 years, 6% from 21-25 years and 3% from 18-20 years. The same age distribution was observed among both genders. Majority of male (69%) and female (54.2%) participants belonged to the age group of 31-35 years [Table 1].

**Table 1: Distribution of participants by their socio-demographic characteristics**

Characteristics	Male	Female	Total
	(N = 58)	(N = 142)	(N = 200)
	N (%)	N (%)	N (%)
<b>Age distribution (in years)</b>			
≤20	3 (5.2)	3 (2.1)	6 (3)
21-25	4 (6.9)	8 (5.6)	12 (6)
26-30	11 (19)	54 (38)	65 (32.5)
31-35	40 (69)	77 (54.2)	117 (58.5)
<b>Marital status</b>			
Single/Unmarried	36 (62.1)	9 (6.3)	45 (22.5)
Married	22 (37.9)	73 (51.4)	95 (47.5)
Widow	0	53 (37.3)	53 (26.5)
Divorced	0	1 (0.7)	1 (0.5)
Separated	0	5 (3.5)	5 (2.5)
Living together	0	1 (0.7)	1 (0.5)
<b>Education</b>			
Illiterate	2 (3.4)	14 (9.9)	16 (8)
Lower primary	11 (19)	34 (23.9)	45 (22.5)
Higher primary	12 (20.7)	46 (32.4)	58 (29)
Secondary	24 (41.4)	38 (26.8)	62 (31)
Higher secondary/PUC	6 (10.3)	7 (4.9)	13 (6.5)
Graduation	3 (5.2)	3 (2.1)	6 (3)
<b>Total Family income (in INR)</b>			
≤3000	8 (13.8)	49 (34.5)	57 (28.5)
3001-6000	21 (36.2)	45 (31.7)	66 (33)
6001-9000	12 (20.7)	9 (6.3)	21 (10.5)
>9000	12 (20.7)	10 (7.1)	22 (11)
No response	5 (8.6)	29 (20.4)	34 (17)

Majority (93.5%) of the participants belong to Hindu religion, while 4.5% were Muslims and 2% Christians. Of the total 200 participants 47.5% were from Udupi taluk, 40.5% from Kundapura taluk and 12% from Karkala taluk, Udupi District.

Among all participants, 47.5% were married while 26.5% were widows and 22.5% single/unmarried. Among male participants, 62.1% were unmarried whereas among female participants only 6.3% were unmarried [Table 1].

There was wide variation observed regarding the educational level among the participants. Around 8% participants were Illiterate compared to 92% who had formal education. Majority of participants (31%) had secondary level of education. Among the study population 61.5% had family income less than INR 6000 per month; while only 21.5% had more than INR 6000 per month and about 17% participants had not stated their family income [Table 1].

Around 14.5% of the participants experienced violence and this was found to be more among males was 6.9% and in females 17.6% which was statistically significant with *P*-value of <0.05.

The various forms of violence observed were physical and sexual violence. A total of 14.5% experienced physical violence among the participants this was found to be with statistically significant difference among male (6.9%) and female (17.6%) participants with *P*-value of < 0.05 [Table 2].

It was observed that among females who experienced physical violence, husband was perpetrator in 76% of cases, followed by friends/acquaintance in 12% of cases, parents/relatives in 8% of cases and steady boyfriend in 4% of cases. Among male participants who experienced physical violence, majority (75%) of them experienced from their parents/relative and 25% from their friend/acquaintance [Table 2].

Regarding the participants experience on sexual violence in their life, 8.5% females reported to have experienced sexual violence while none of the male participants reported the same. Of the female participants who experienced sexual violence, husband was the perpetrator in 50% of cases followed by relatives 25% and friend/acquaintance 25%. Of these females only about 25% had discussed this issue and preferred family members, close friend and service provider for discussion of this issue [Table 3].

The participants were asked about the worries of various aspects of life. The most common issues participants were worried about was their HIV positive status (69.5%), looks of other people toward them (66%), people finding out about their HIV positive status (63.5%), infecting someone else with HIV (53%), disclosing status to their friends (48.5%), unable to find partner (38.5%), having sexual relationship (34%), dumped by partner (33.5%), becoming or making someone pregnant (20.5%), and forceful sex (12.5%). All these aspects were found to be statistically significant among male and females with *P*-value < 0.05.

**Table 2: Distribution of participants on experience of physical violence**

Physical violence Indicators	Male	Female	Total
	(N = 58)	(N = 142)	(N = 200)
	N (%)	N (%)	N (%)
Ever been physically abused			
Yes	4 (6.9)	25 (17.6)	29 (14.5)
No	54 (93.1)	117 (82.4)	171 (85.5)
If yes, Perpetrator	(n=4)	(n=25)	(n=29)
Husband/Wife	0	19 (76)	19 (65.5)
Parent/Relative	3 (75)	2 (8)	5 (17.2)
Steady boyfriend/Girlfriend	0	1 (4)	1 (3.4)
Friend/Acquaintance	1 (25)	3 (12)	4 (13.8)
Discussed this problem with anyone	(n=4)	(n=25)	(n=29)
Yes	2 (50)	18 (72)	20 (69)
No	2 (50)	7 (28)	9 (31)
If yes, with whom	(n=2)	(n=18)	(n=20)
Family member	2 (100)	6 (33.3)	8 (40)
Close friend	0	11 (61.1)	11 (55)
Other	0	1 (5.6)	1 (5)

**Table 3: Distribution of participants on experience of sexual violence\***

Sexual violence indicators	Female
	(N = 142)
	N (%)
Ever been sexually abused	
Yes	12 (8.5)
No	130 (91.5)
If yes, Perpetrator	(n=12)
Husband/wife	6 (50)
Relative	3 (25)
Friend/Acquaintance	3 (25)
Discussed this problem with anyone	(n=12)
Yes	3 (25)
No	9 (75)
If yes, with whom	(n=3)
Family member	1 (33.33)
Close friend	1 (33.33)
Service provider/counselor	1 (33.33)

\*None of the male participants had experienced sexual violence

Also 62.5% were worried about being mistreated/rejected by friends and 54% about their development of body was not as fast as their friends. This was not found to be statistically significant among male and female as *P* value was greater than 0.05.

## DISCUSSION

The prevalence of physical violence observed among HIV positive young adults in Udupi was around 14.5%. The proportion of physical violence among females was 17.6% and among males was 6.9%. A study in India conducted by Chandrasekaran *et al.* showed that 42% of female participants reported that they experienced violence, of whom 29% reported physical violence and 69% reported psychological abuse while it was 31% in a study conducted

by Birungi *et al.*<sup>[12]</sup> in Kenya (31%). The reason for the lower prevalence of violence in present study could be due to under reporting of the issue by the participants.

The findings reported in the study conducted by Birungi *et al.*<sup>[12]</sup> in Kenya showed no difference in prevalence of physical violence among male and female HIV positive adolescents (15-19 years). The study conducted by Iliyaz *et al.*<sup>[13]</sup> in Kano on HIV positive women stated that the risk of domestic violence was more among the women as compared to men, where prevalence of violence among women was 22% which was similar to the present study.

In majority of the cases, the perpetrator of physical violence was found to husband (76%) in females and parents/relatives (75%) in males. A study conducted by Aryal *et al.*<sup>[14]</sup> in Nepal among HIV positive women found husband (45%) as perpetrator for physical violence in majority of the cases. Also a study conducted by the Ramachandra *et al.*<sup>[15]</sup> in 2010 in Nigeria found that almost three-fourth of the sample (73%) reported lifetime violence from their partner and 20% reported current abuse.

In present study those who had experienced physical violence when asked whether they discussed this issue with anyone, about 69% participants stated that they had discussed the issue with others. Among participants who discussed, more than half (55%) of them discussed with close friends followed by family members (40%). Similar findings were observed by Birungi, *et al.*<sup>[12]</sup> in Kenya in 2011 where around 31% participants had experienced physical violence in their life and about 65% of them had discussed this problem and most of them discussed with either family member, close friends or service providers.

In the present study, none of the male participants had experienced sexual violence whereas 8.5% of females had experienced it. The study conducted by Birungi *et al.*<sup>[13]</sup> in Kenya among HIV positive adolescents found the higher prevalence of sexual violence among males (13%) and females (16%) as compared to present study. Prevalence of sexual violence is found to be low in the present study could be due to under reporting as it is a sensitive issue.

The participants in the present study reported to be worried about various aspects of life. The most common issues they were worried about, their HIV positive status (69.5%), looks of other people towards them (66%), people finding out about their HIV positive status (63.5%), infecting someone else with HIV (53%), disclosing status to their friends (48.5%), unable to find partner (38.5%), having sexual relationship (34%), dumped by partner (33.5%), becoming or making someone pregnant (20.5%), and forceful sex (12.5%). All these aspects were found to be statistically significant among male and females with  $P$ -value < 0.05.

Similar findings were observed in the study conducted by Birungi H, *et al.*<sup>[11]</sup> in Kenya where 85% of participants were worried about infecting others with HIV, 66% getting someone pregnant, 64% disclosing HIV status, people coming to know their HIV status

(64%), being forced to do things they did not want (63%), and having sex (57%). On the other hand a greater proportion of women were worried about having sex, being coerced into doing things that they did not want, or being rejected by friends as compared to males.

## CONCLUSION

The life of HIV positive young adults is compromised due to the prevailing disease condition; the present study was conducted to explore the domestic violence among HIV positive young adults. The prevalence of physical violence among HIV positive young adults was found to be 14.5% with higher proportion in females. Similarly the sexual violence was found only among the females (8.5%). This showed the vulnerability of the women suffering from HIV which has to be managed properly. In most of the females who suffered from violence, husband was the perpetrator which proved that the Intimate partner violence is still increasing in our country. They had not discussed these issues very commonly with others and kept it hidden which makes them more vulnerable. The HIV positive people were worried about various aspects of life such as looks of other people being identified by other people and mistreated by friends, which supports the presence of fear and stigma among the HIV positive people that is still existing in our community.

The presence of violence among HIV positive people especially among the females demands concerted efforts at combating underlying factors leading to violence among this vulnerable group. The capacity of existing counselors needs to be enhanced to understand the issues of violence among HIV positive people so that young HIV positive adults can openly talk about these issues with counsellors. These strategies will be useful in addressing the issue of violence through counseling. Another major issue found in the study was "HIV positive young adults still living with fear and anxiety. Organizing training on positive living and regular reinforcing of positive messages can help HIV positive young adults to cope with fear and anxiety.

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