# Perception of HIV/AIDS and Attitude towards People Living with HIV/AIDS –A Mixed Method Study among General Population in a Village of West Bengal

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Abstract: A community –based cross-sectional mixed method study, involving FGDs and cross sectional survey, was conducted in a village of West Bengal among 495 subjects of 15-49 years age group to assess the awareness about HIV/AIDS and attitude towards PLWHA. The study revealed that awareness about HIV/AIDS was not complete as inspite of higher level of knowledge about transmission and prevention of the disease, poor knowledge about STDs, PPTCT, nearest treatment facilities for the disease and appreciable level of misconceptions persisted across the population. Stigma, discrimination and negative attitude towards PLWHA were also observed. Younger age, male sex, higher literacy status, interpersonal communication in last one year and media exposure were positively correlated with awareness and attitude towards people living with HIV/AIDS (PLHA). The study concludes that strengthening of existing national programme for HIV/AIDS in this rural community is needed by intensifying IEC campaigning to dispel myths and misconception among general population and generate positive attitude towards HIV patients.

Key words: FGD, HIV/AIDS, PLHA, Qualitative analysis, STDs

# I. Introduction

HIV/AIDS is a global pandemic. [1] The epidemic is characterised by heterogeneity and mainly depends upon the culture, customs, and behavioural pattern of a specific population. Promising development have been seen in recent years in global effort to address the AIDS epidemic including increased access to effective treatment and prevention programmes.[1]The interventions to control the HIV epidemic in India are being exerted via National AIDS control programme and currently NACP IV is going on throughout the country. Goal of NACP IV is comprehensive care, support and treatment to all persons living with HIV/AIDS. India has successfully achieved the 6th Millennium Development Goal of halting and reversing the HIV epidemic. National adult (15–49 years) HIV prevalence is estimated at 0.26% (0.22%–0.32%) in 2015 and it is 0.30% among males and at 0.22% among females. The total number of people living with HIV (PLHIV) in India is estimated at 21.17 lakhs in 2015 compared with 22.26 lakhs in 2007. [2]India is estimated to have around 86 (56–129) thousand new HIV infections in 2015 showing 66% decline in new infections from 2000 and 32% decline from 2007.In 2015 an estimated 67.6 (46.4–106.0) thousand people died of AIDS-related causes nationally. The estimates show that, while significant progress has been made in halting and reversing the epidemic, challenges still remain to be addressed through joint efforts and with renewed impetus.

Tough epidemic in the country shows declining trends, the current figure is appreciable as stigma and discrimination against people living with HIV/AIDS and those considered to be at high risk remains deeprooted. Behavioural Surveillance Survey (BSS) is a parts and parcel of National AIDS Control programme which periodically assess the level of behavioural risk factors along with knowledge and attitude of people in a community that predispose to the emergence of an epidemic. Baseline BSS was conducted for both for high risk and general population during 1999-2001 followed by midterm BSS in 2006. Though much improvement has occurred in BSS 2006 compared to BSS 2001, still West Bengal along with some other states showed poor results in respect to most of the Indicators of knowledge and attitude in BSS 2006. [3] Stigma alleviation and prevention of entry of infection from High risk population to general population needs higher level of awareness about the disease and positive attitude of general population towards PLWHAs. Many studies conducted in India have shown variable level of knowledge and overall negative attitude to HIV affected people. Till date no ART is curative for AIDS and no vaccine is available. It is only health education and behavioural change will act as vaccine for the diseases. Higher level of awareness is prerequisite for behavioural change and positive attitude towards PLWHA. Stigma and denial undermine efforts being made to increase the reach of interventions, care support and treatment services to PLWHA. [4]

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The present study was conducted in a rural area of West Bengal where the national programme has been implemented and working in full phase from the beginning to assess the perception of general population regarding HIV/AIDS transmission and prevention, and their attitude to PLWHA.

# **II. Materials and Methods**

**Study Setting and Design:** This community based, descriptive, cross-sectional study was conducted in a purposively selected village in the rural field service area of AIIH&PH at Singur block, Hooghly district among the permanent residents of the village, aged 15-49 years during January- September, 2013. A mixed method approach including both qualitative and quantative methodology was adopted for data collection.

For quantitative assessment, sample size was calculated using the formula-  $Z\alpha^2$  pg/L<sup>2</sup>.

[Za= at 95% confidence interval is 1.96 .p= Proportion .of. respondents knowing that of HIV/AIDS can be prevented by having single uninfected faithful sexual partner and consisted condom use and was 30.2% in west Bengal rural setup in BSS, 2006, q= (1-p), L= Allowable Error(20% of p)] [3]

The population of the village was 1600 in 2011 and about 50% of this population was of 15-49 years age group(records available in RHU&TC, Singur) .So, the sample size for the finite population of the village was found to be 444.Taking 10% extra for non response, the final sample size calculated was 488.

A list of households was obtained from Nosibpur Sub centre and there were 180 house holds. So on average in every household people of 15-49 yrs age would be (800/180) ~ 4 .So to get 488 subjects,(488/4)122 households would have be visited. Among all the households in the list, 122 were selected randomly and visited .Next household was selected if a pre selected household did not have any member of reproductive age group. Those who were absent during home visits, appointments were made for next date. If that person could not turn up in two such appointments he/ she was excluded from the study. Thus 588 persons of 15-49 age-groups approached during house to house visits, of which 496 subjects (230 male, 266-female) found eligible for the study. For qualitative assessment snowball sampling technique was used as a recruitment technique to gather a relatively age, sex matched homogeneous groups of male and female participants for the focus-group discussions (FGDs) from two villages. Despite snowballing having its limitations as a recruitment technique, it was chosen because the topic of the discussions was sensitive, and this approach required making use of personal networks and encouraging the participant to overcome their apprehensions and attend the group discussions. Eligibility was decided by the following inclusion criteria.

# **Inclusion criteria**

- 1. Permanent resident (for at least last 5 years) of the village
- 2. Those who gave informed written/verbal consent to the interview.
- 3. Not suffering from HIV/AIDS.

**Collection of data -** A mixed-method approach, including focus-group discussions (FGD), and a cross-sectional survey, was adopted as the study aims to explore the knowledge and attitude of the study population to a sensitive issue named HIV/AIDS. The qualitative data was used to improve the survey instrument and, later, to assess and interpret the survey results. In addition, the survey enabled the findings that emerged from the focus groups to be corroborated and assessed. Qualitative interviews help investigators to collect narrative data that provide rich descriptions of interviewee's beliefs, attitudes and health care practices.

**Focussed Group Discussion**- Qualitative data was collected with the help of 5 FGDs. FGDs were done at the beginning 2 months of the data collection period, which helped in bringing rapport with the community. One person in each age and sex group of the village identified with the help of the local ANM and community leader and briefed about the purpose of the group discussion, and he/she initiated the recruitment process. 45 persons were contacted and 39 of them gave informed consent to participate in the discussion.

There were 7-9 members in each FDG and discussion moderated by the researchers and were recorded with a tape recorder. The FGDs were conducted in some community centres such as primary school and clubs ensuring no disturbances during recording. Discussions were conducted in the local language, Bengali and lasted approximately 60 to 90 minutes. Issues discussed during the FGDs were perceptions about HIV/AIDS, its transmission, prevention, misconception, relationship of STDS and HIV/AIDS social taboos, sign and symptoms, treatment, cure, attitude toward PLWH, causes for negative attitude if any. FGD guide was pilot tested among general population of nearby village and modified accordingly.

#### **Cross Sectional Survey**

For survey, data was collected by interviewing each of the study subjects by house to house visit with the help of a pre-designed, pre-tested questionnaire which was prepared with the help of the standard schedule for evaluation of National AIDS Control programme, constructed by WHO and adopted by NACO for BSS surveys.[3,5,6]

Pilot study was done in Nosibpur village and the schedule was modified accordingly. Information was collected on socio-demographic profiles, knowledge of routes of transmission and modes of prevention of HIV/AIDS, different misconceptions, source of knowledge and attitude towards PLHA. The age group (15-49 years) of the study population and the recall period of 12 months was determined according to NACO and BSS reference. [3, 5]

# Uniform scoring system for knowledge and attitude

A uniform scoring system was adopted with consultation with two public health experts and one statistician to find out overall knowledge about transmission and prevention of HIV /AIDS of the study subjects and their attitude towards PLHA.

Each question related to transmission and prevention of HIV /AIDS asked, was closed and one of the pre fixed responses (yes/no/do not know) will be the answer. For every correct answer score=1 was allotted and for incorrect answer/ do not know response, score=0 was allotted. [6] .Thus total score of each individual on knowledge was obtained by adding scores of all question asked. There were 20 such questions on appropriate and inappropriate knowledge (misbelieves) of HIV/AIDS transmission and prevention, hence, highest attainable score was-20, lowest-0.

Similarly for attitude, each question asked, had three fixed answer-agree/do not agree/can not say. Every correct response was allotted score=1 and rest score=0. [7] Then total score of each respondent on attitude was obtained by summing score of each question asked. There were 4 such questions on attitude, so highest attainable score was four.

#### **Data Analysis**

All the FGDs were recorded, transcribed verbatim in Bengali, and then translated into English. To validate the tapes, we checked them against the translated text for any inaccuracies and analyzed by the first author with assistance from 2 public health experts. According to the objectives of the study, a thematic coding system was developed. Themes were identified, and quotes from the group interactions were listed for each theme. Themes that represent the most salient ideas are reported; outliers that did not emerge as common group ideas, yet seemed important, are also detailed. Observations about the nonverbal interactions, comfort levels, and enthusiasm of the group members and their satisfaction with the focus group process as a whole were also analyzed.

The quantative data was analysed using MS Excel software and expressed in proportion. Z test and simple linear correlation were applied as significance test taking  $\alpha$  level at 5%.

#### III. Results

# **Socio-Demographic Profiles**

In this study 266(54%) of the participants were female and 230 (46%) male. The mean age of males and females were  $30.8(\pm\ 10.)$  and  $27.1\ (\pm\ 8.3)$  years respectively. Literacy rate was seen high as 99.6% of the male and 97% of the female participants was literate. Median years of school education were 9 years for total and male population but 8 year for female. Most of the study population (51% - male and 75% - female) was married at the time of interview and of low economic condition (63% had PCI <Rs 500).100% of the study population was Hindu by religion. Highest proportion (29%) of the male study population worked as agriculture labourers, followed by students (22%). Twelve (5%) males were gold smith either working in Mumbai or history of working there in the recent past at the time of interview. 9 males (3.9%) of total male worked as driver and 6 (2.6%) as mason, most of them had to stay outside the village for days or month for their occupation. Highest proportions of females (60%) were homemaker, followed by student (13%). Nine (3.4%) were not engaged any gainful job and depended on family members or Neighbours.

# Qualitative analysis

#### **Profile of FGD Participants**

All participants were Hindu, permanent resident of the village and most had at least 5 years of schooling. All participant in younger group (FGD-3 &4) had at least 9 years of school education.

Serial no FGDs	Age group	category	No of participants
1	25-35 yrs	Married female	8
2	25-40 yrs	Married male	7
3	15-25 yrs	Unmarried female	9
4	18-22 yrs	Unmarried male	7
5	35-44 yrs	Married female	8

Themes obtained from the transcribed data from the five focus groups were in the following order (1) Awareness regarding HIV/AIDS and STIs-transmission and prevention along with misconception (2) Attitude towards PLWHA & associated stigma and discrimination (3) causes of negative attitude (4) Knowledge about any known case of HIV/AIDS (5)signs, symptom, treatment and treatment facility for AIDS case. Initially much reservation and resistance to involve in the discussion was experienced specially among male groups (FGD-2&3), gradually that was overcome with time. The young female participants were more

# Awareness regarding HIV/AIDS and STIs: Transmission and Prevention

comfortable and enthusiastic than others.

Overall knowledge about HIV/AIDS, its transmission and prevention was found to be good except a few areas like mother to child transmission and symptoms of STI/RTI, link of HIV and other STDs. In spite of higher knowledge about correct routes of transmission, considerable misconception about other modes of transmission (e.g. mosquito bite, sharing common toilet, sharing food, taking bath in common pond etc) was present especially among older women. One woman told that 'the disease can occur through anything that is used by a patient'

The knowledge level in the younger groups (FGD-3 & 4) was found to be better as they reported exposure to occasional campaigning in school in the recent past. TV and newspaper were the most common source of knowledge in older male and female groups and campaigning in school, health education given by Health worker and doctor in health centre were some of the prominent source in younger participants. 'Bulladi'-(a hypothetical icon for IEC previously used by NACO in West Bengal) was known to almost all except 2 older women. Only 7 young participants knew that AIDs is not curable and most were unaware about the sign symptoms of the disease. Knowledge about treatment facility available for the disease was very poor. None except 3 married male were aware of the fact that treatment and care is available for the disease and none could tell about nearest VCTC centre.

# Attitude towards PLWHA & associated stigma and discrimination

Considerable stigma and discrimination for PLWHA were observed among all groups, but more in the older male and female groups. Most of the participant in the FGDs 2 and 5 feels that only patient should be blamed for the disease and should not be allowed to live in the community to prevent disease transmission to others. They described the disease as punishment of past 'sin 'of the individual. The causes of negative attitudes were mostly due to misconception about the disease, poor knowledge about treatment and ART facilities and the sexual route of transmission. It was understood that sexual relationship other than spouse was still social taboo in that village especially among older group and it was perceived as 'sin' by the participants. All the participants confirmed an incidence of death of a young man due to AIDS in nearby village and he was goldsmith in Mumbai and much fear and apprehension was generated among them. Younger participants had more awareness and somewhat favourable attitude (FGD-1,3 & 4). The reasons behind the favourable knowledge and attitude was understood as they were more educated and are more informed due to higher exposure to media, awareness campaign in school and college. The young married female group used to seek reproductive health service from nearby health centre and thus got opportunity to interpersonal communication (IPC) with doctors and Health Workers about the disease.

# Some important outliers

The majority of the participants confirm that, the premarital sexual activity was on increase among young generation and this is due to exposure to media and degradation of social values.

# **Quantitative Analysis**

# Media exposure and source of information

Majority of (91% of female , 84% male) study subjects were exposed to TV at least once per week during last 4 weeks and the male –female difference was statistically (Z=2.39,p<0.05) significant . Exposure to radio (68.8% of total subjects) and newspaper (40.9% of the total) were lower than that to TV. Exposure to newspaper was much lower among female group compared to male group (21% VS 64%). TV is the most common source of knowledge about HIV/AIDS (62%), followed by Neighbours/ friends (19%) and awareness programme in school (9%). Awareness program in school was the most common source among adolescent boys (41%) and girls (9%), and young married women, who have completed higher secondary standard

.

#### Awareness about HIV/AIDS transmission and prevention

As depicted in table -1,appreciable proportion( approximately 80-88%) of participants were knowledgeable about 3 major routes of transmission of HIV/AIDS, namely sexual, blood borne and needle sharing. However, knowledge about mother to child transmission was somewhat lower (76% in male and 75% in female) Very little male-female disparity was seen except for transmission trough sexual route, in which the male had statistically significant higher knowledge than women (Z=2.01, p<0.05).

Awareness about consisted condom use for prevention was found to be lower (61%) than the other preventive modes and .Males had higher knowledge than female on two methods of prevention, consistent condom use and sterile needle and syringe use ( Z= 13.36,3.47: p<0.05).(table-1)

It was observed that 59% of male and 44% of female study subjects were aware about both the method of prevention of HIV/AIDS i.e., by having single uninfected faithful partner and consistent condom use (not shown in table) Only 45% of the study subjects were aware of all four modes of prevention of HIV/AIDS with proportion of males being significantly higher than females (53% vs. 39%, Z= 3.15,p<0.05). Nearly 11% of male and 5% of female did not know any modes of prevention of HIV/AIDS. (not shown in table) Contrast to the knowledge about HIV transmission and prevention, awareness of STDs, STD symptoms and linkage between STDs and HIV was found to be much lower across the study population and males had significantly higher knowledge than female participants in all the 4 categories (p <0.01) .(table-1) It was observed that large proportion of the study subjects (90.1%) had at least one misconception, most common being 'transmission by mosquito bite'. 13% of total (13% of male and 12% of female) had all the misconceptions and 16 % of male and 9.3%(Z= 2.23, p <0.01) female population had no misconceptions about HIV/AIDS transmission and prevention. Gender disparity was less except for 'sharing food with HIV infected patients causes HIV transmission' in which proportions of females with misconception were significantly higher than that of males (Z=2.6,p<0.05). Knowledge about nearest diagnosis and treatment facility was very poor, much poorer among female group (Z=2.05, p< 0.05). Higher proportion of female than male did not think that HIV/AIDS patient always look sick but sometimes look perfectly healthy, but the difference was not significant. Significantly higher proportion of male knew that HIV has got no cure till now, Z=4.54, p<0.01).

# Attitude towards people living with HIV/AIDS

Significantly higher proportion of female respondents replied that they will take care if one of the close persons gets HIV (Z=2.79. p<0.05) but in other cases like right of a HIV patient to live in community (Z=10.61, p<0.01,) to continue work in the work place,(Z=3.31 p<0.05), to get equal or more care in the hospital male participants had shown better attitude. [TABLE-2] Majority of study population attained average knowledge score (54% male and 36% female). More than half of the study subjects (51%) got highest attainable attitude score. Male subpopulation got overall higher knowledge regarding HIV/AIDS transmission and prevention and attitude towards PLHA than female counterpart. [TABLE-3 & 4]

# Correlates of knowledge and attitude and relationship between knowledge and attitude

It was observed that literacy status, Younger age, male sex, media (TV) exposure and interpersonal communication made in last 12 months were important correlates of knowledge and attitude towards PLHA. Mean knowledge score and attitude score were found to be significantly higher in male than female ,in younger group than older group, those exposed to IPC in last one year than those not and those exposed to TV at least once/ week than those exposed less frequently. [TABLE- 5] Applying simple linear correlation, statistically significant relationship was found between years of institutional education and knowledge score and attitude score in total, male and female subpopulation. No such significant relationship was found between years of institutional education and attitude score for male and total population, but seen for female at  $\alpha$  = 0.05. [TABLE-6]

#### IV. Discussion

The present study results (quantative) can be compared with that of BSS, 2006, National Family Health Survey, Round-III (NFHS III) in the rural West Bengal groups as similar study instrument was used and at the same time it will judge how the existing national programme was going on in this community.[3,4] All the indicators assessing knowledge of HIV/AIDS transmission and prevention was found to be better in the present study if compared to above surveys. For example, 100% of current study population was ever heard of HIV/AIDS / both compared to only 74% in BSS and 78% in NFHS III. Though in the present study knowledge level was more in male than female, but male-female disparity in different indicators found to be lesser in the present study than that in above mentioned surveys. In present study 70% male and 52.6 % female reported consisted condom use can prevent HIV/AIDS which was 59.6% and 38.4% in male and female respectively in BSS and 46.1% and 20% in married male and female in NFHS III. This higher knowledge level and lesser

male-female difference may be explained by the higher literacy status of the village, especially, female literacy, higher media exposure compared to a typical village of West Bengal. [3, 4] In NFHS-IV, knowledge about consisted condom use among male was higher (80.7%) but lower among females (20.2%) compared to the current study.[8] Knowledge about mother to child transmission was poorer in current study similar to NFHS III and BSS. In our study, people displayed less awareness of prevention methods in comparison to awareness of transmission modes of the disease. These knowledge gaps were consistent with other HIV studies carried on in other parts of the world [9, 10, 11,12] and India. [13, 14, 15, 16, 17]

On the contrary prevalence of inappropriate knowledge or misconception was seen to be higher in the study than other community based survey among 15-49 years age group. About 16 % of male and 9.3% female had no misconceptions about HIV/AIDS transmission and prevention compared to 25.4% in both male and female in BSS and 45% and 31% in NFHS. Females had more inappropriate knowledge than male which corroborates the NFHS III Finding but not BSS. Similar to these surveys, majority of the respondent replied that mosquito bite can transmits the disease. [3, 4, 16] Compared to different Indian studies prevalence of misconceptions was found to be higher in the present study; however most of those studies were conducted either in students or youth. In present study also, the younger people showed better knowledge and lesser misconception both in the qualitative and quantative analysis. The reason behind this was understood in FGDs. [13, 14, 15, 16]

In the present study literacy status, media exposures were significantly associated with knowledge level which was in concordance with the findings in above surveys. Contrary to NFHS -III, economic condition found to have no role on awareness in present study. Similar to findings in BSS, 2006 TV was the most common source of knowledge about HIV/AIDS followed by radio and newspaper, but exposure rate to media in the present study was higher than BSS, 2006. [3, 4]

#### Attitude towards PLWHA

Considerable stigma, discrimination and negative attitude was observed towards PLWHA in the current study. Compared to BSS(50.2%-male and 40.2% -female) higher proportion of respondents replied that PLWH should be allowed to live in the community/ village in the current study( 84.3%-male and50.4%)6. The blaming attitudes in the present study corroborates finding in the China study among general population. [18] . Stigma and discrimination against HIV patients was reported in different studies, among general population [3,4,18,19] in healthcare setting [20,21,22,23] (24,25,26,27) and from the perspective of PLHA [24] across the globe. In the Namibia study, Derogatory names for HIV/AIDS reflected the stigma associated with the disease. Slang labels also highlighted the fear-mongering and subtle warnings towards HIV infection and death. [25]

#### Limitations

The results from the present study should be interpreted with caution as the village was chosen purposively and result lacks external validity outside the village. It is recommended that further research with more rigorous design must be undertaken to explore the issues.

#### V. Conclusion and recommendation

The current study revealed that in spite of higher level of knowledge about HIV/AIDS transmission and prevention in the community studied, appreciable level of misbelieves regarding transmission of HIV/AIDS was still prevailing among both male and female population which may be the routes of stigma associated with the disease and the huge gap between awareness and attitude towards PLHA. The gloomiest part, revealed by the study was very poor awareness of the study population about STDS, mother to child transmission, facility available for confidential testing and ART treatment centres. On the other hand it was encouraging to know that younger section of the respondents had shown more awareness and favourable attitude. The results of the study suggest that existing health programme in the community should be reoriented to target the less educated or illiterate and older section of population giving emphasis on dispelling myths and misconceptions associated with the disease. At the same time, the increased awareness and favourable attitude among younger people must be sustained and strengthened further.

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Table 1: Perception of the Study Population Regarding HIV/AIDS

	Correct response				
Knowledge	Male	Female	Total		
	No (%)	No (%)	No (%)		
	n=230	n=266	n=496		
Routes of transmission					
Sexual Contact*	201(87.4)	215(80.8)	416(83.9)		
Blood Transfusion	193(83.9)	224(84.2)	417(84.1)		
Needle Sharing	198(86.1)	232(87.2)	403(86.7)		
Infected Mother To Child	175(76.1)	199(74.8)	374(75.4)		
Vertical	87(37.8)	82(30.82)	146(29.4)		
During delivery	53(23)	76(28.6)	129(26.0)		
Breast Feeding	40(17.4))	63(23.6)	103(20.8)		
Mode of prevention					
<ul> <li>Having single uninfected</li> </ul>	155(67.4)	176(66.2)	331(66.7)		
faithful partner	161(70)	140(52.6)	301(60.7)		
Consistent condom use**	193(83.9)#	189(71.1)#	382(77.0)		
Sterile needle and syringe	182(79.1)	205(77.0)	387(78.0)		
use*					

Safe blood transfusion			
Awareness about STDs			
Ever heard of STD	108(47)##	80(30.1)##	188(37.9)
<ul> <li>Linkage between STD and</li> </ul>	101(43.9)†	84(31.6) †	185(37.3)
aids	75(32.6) ††	42(15.8) ††	117(23.6)
At least one Symptoms of	69(30) †††	64(24.1) †††	133(26.8)
STD in male			
At least one Symptoms of			
STD in female			
Misconception			
HIV/AIDS can be transmitted			
By touching	171(74.3)	200(75.2)	371(74.8)
<ul> <li>By sharing food*</li> </ul>	150(65.2)	143(53.8)	293(59.1)
By mosquito bite	45(19.6)	52(19.5)	97(19.6)
Public toilet use	79(34.3)	92 (34.6)	17(34.5)
HIV/AIDS can be	112(48.7)	46(49.3)	228(46.0)
<ul> <li>Prevented by having Good</li> </ul>			
diet			
Awareness about diagnosis and	119(51.7)	133(57.8)	252(50.8)
treatment of HIV/AIDS	133(57.8)	60(22.6)	193(38.9)
<ul> <li>HIV/AIDS patient always</li> </ul>	54(23.5)	23(8.6)	77(15.5)
look sick			
<ul> <li>HIV has got a cure*</li> </ul>			
<ul> <li>Nearest diagnosis and</li> </ul>			
treatment facility**			

Multiple responses

Table 2: Attitude of the Study Population towards PLWHA

Attitudes towards PLWHA	Positive attitude			
	Male Female Total		Total	
	No (%)	No (%)	No (%)	
	n=230	n=266	n=496	
Taking care if one of the close person gets HIV*	199(86.5)	250(94)	449(90.5)	
HIV patient should get equal/more care in hospital as other non HIV patients	204(88.7)	226(85)	430(86.7)	
A HIV patient should be allowed to work in his/her work place*	142(61.7)	125(47)	267(53.8)	
A HIV patient should be allowed live in your community and social mixing should be normal*	194(84.3)	134(50.4)	328(66.1))	

Table 3: Distribution of Respondents According To the Total Knowledge Score Obtained

	_	0	0
Total knowledge score obtained (% of highest Attainable score)	Male (n=230) Number (%)	Female (n=266) Number (%)	Total (n=496) Number (%)
Very poor (Upto 25%)	36(14.8)	38(14.2)	72(14.5)
Poor (25-50%)	16(7)	87(34.2)	107(21.6)
Average (50-75%)	12(53.9)	92(33.8)	214(43.1)
Good (75-100%)	52(24.3)	47(17.7)	103 (20.8)

Table 4: Distribution of the Respondents According To Attitude Score

Attitude	Male[n-230]Number[%]	Female[n=266]	Total [n=496]
Score		Number[%]	Number[%]
0	4(1.7)	0(0)	8(1.6)
1	8(3.4)	8(3)	16(3.2)
2	16(6.8)	33(12.4)	49(9.9)
3	70(30.4)	106(39.8)	176(35.5])
4	132(57.4)	119(44.7)	251(0.6)

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Table 5: Correlates of Knowledge and Attitude

Correlates	Mean knowledge	Value	P value	Mean attitude	Value of	P value
	score + SD	of Z		score+ SD	Z	
Age*						
Young age(15-24 yrs)	15.51 <u>+</u> 2.96			3.14 <u>+</u> .91		
(n= 178)		23.41	< 0.001			< 0.01
Older age(25-49	8.72 <u>+</u> 3.45			2.61 <u>+</u> .87	5.10	
yrs)(n=318)						
Sex*						
Male (n=230)	11.94 <u>+</u> 3.02	5.13	< 0.01	3.45 <u>+</u> .86	5.7	< 0.01
Female(n=266)	10.52 <u>+</u> 3.13			3.04 <u>+</u> .7		
PCI						
>500(n=169)	10.42 <u>+</u> 2.65	1.80	>0.05	2.81 <u>+</u> .91	0.56	>0.05
< 500(n=327)	9.95 <u>+</u> 2.77			2.76 <u>+</u> .98		
Marital status						
Married(n=315)	9.87 <u>+</u> 2.55			3.11 <u>+</u> .87	1.86	>0.05
Unmarried(n=181)	10.11 <u>+</u> 2.32	1.07	>0.05	3.24 <u>+</u> .69		
IPC made in last one						
year*	13.62 <u>+</u> 1.86	14.07	< 0.001	3.89 <u>+</u> .27	18.76	< 0.001
Yes (n=95)	9.75 <u>+</u> 3.96			2.52 <u>+</u> 1.36		
No(n=401)						
Media exposure(TV)*						
At least once /week	11.22 <u>+</u> 2.33	3.81	< 0.01	2.98 <u>+</u> 1.02	7.2	< 0.01
(n=427)						
Less than once /week	9.43 <u>+</u> 3.76			2.33 <u>+</u> .65		
(n=69)						

Table 6: Relationship between Literacy Status and Knowledge and Attitude of Study Population and Between Knowledge and Attitude Scores

Category of population	Value of r'	At 'P' value	Degree of freedom	comment			
	Relationship between years of education and knowledge score						
Total	0.372	0.001	n-2	significant			
Male	0.530	0.001	n-2	significant			
Female	0.473	0.001	n-2	Significant			
	Relationship between years of education and attitude score						
Total	0.155	0.05	n-2	not-significant			
Male	0.067	0.05	n-2	not-significant			
Female	0.244	0.05	n-2	Significant			
	Relationship between knowledge score and attitude score						
Total	0.48	0.001	n-2	significant			
Male	0.524	0.001	n-2	significant			
Female	0.421	0.001	n-2	significant			

\*Dr amrita samanta. "Perception of Hiv/Aids And Attitude Towards People Living with Hiv/Aids –A Mixed Method Study Among General Population In A Village of West Bengal." IOSR Journal of Dental and Medical Sciences (IOSR-JDMS) 16.8 (2017): 53-61.

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