

FEMALE SEX WORKERS AND HIV/AIDS AWARENESS IN BAHAWALPUR, PAKISTAN

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OBJECTIVE: To assess the sexual behaviour and HIV/AIDS related knowledge among female sex workers (FSWs) in Bahawalpur division (BD).

STUDY DESIGN: A cross sectional study. Setting: Three districts (Bahawalpur, Bahawalnagar and Rahim Yar Khan).

DATA: Fifty FSWs from various brothels were interviewed by using convenient sampling.

METHODS: Descriptive and inferential analysis carried out.

RESULTS: Every 7 out of 10 FSWs were illiterate. Higher proportion (58%) of FSWs heard about HIV/AIDS but profound lack (66%) of comprehensive knowledge regarding HIV/AIDS transmission. The practice of consistent use of condom during sex remain quite low (32%) among FSWs and more than half (54%) of the respondents never asked to client for condom use before sex. Two models are executed separately to explore the association of FSWs knowledge about HIV/AIDS and comprehensive knowledge of HIV/AIDS. Age, education, marital status, duration as a sex worker, number of per month clients, consistent use of condom, sex service charge, asks client for condom use, multiple partner increases the chance of getting HIV, aware of sexually transmitted diseases (STDs) and mass media are found to be associated regarding comprehensive knowledge of HIV/AIDS transmission.

CONCLUSIONS: FSWs were at high risk of contracting STDs and of transmitting it to their clients due to inconsistent condom use. Interventions are suggested to promote the comprehensive knowledge of HIV/AIDS and use of condom before sex, ultimately to improve health outcomes

INTRODUCTION:

HIV/AIDS is social disease and a major health concern which remains incurable. Globally 35 million people were living with HIV in 2013 whereas around 78 million people have been infected since the start of the epidemic and 39 million people have died of AIDS- related illness.¹ Higher proportion of people living with HIV lived in Sub-Saharan Africa (24.7 million) followed by Asia and the pacific (4.8 million), Western and Central Europe and North America (2.3 million), Latin America (1.6 million), Eastern Europe and Central Asia (1.1 million) and Middle East and North Africa (230000).¹ Ignorance and unsafe reproductive health behaviour are the important causes of HIV transmission and social scientists believed

that the HIV/AIDS can only be prevented by social vaccine which involves spreading education on how to protect oneself, hundred percent condom use, and changing sexual behaviour.²

FSWs remain one of the key forces in the spread of HIV/AIDS and other sexually transmitted diseases (STDs) in South Asia and Central Asia³⁻⁵ In India prevalence rate was 47% among sex workers in brothels in Bombay.³ FSWs in China were at high risk of

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HIV/STDs and HIV prevalence among them ranged from 1% to 11%.⁶ In Thailand, rates found were 20% among male sex workers⁷ and 22% among female sex workers.⁸ Lack of comprehensive knowledge regarding HIV/AIDS and inconsistent use of condom is common in Asia, a study conducted in Afghanistan and found that only 17.4% and 11.5% FSWs had comprehensive knowledge about HIV/AIDS and use condom consistently with clients respectively.⁹ Indonesia the most populous Muslim counties, low rate of condom use among FSWs were reported.¹⁰ High rates of STD infections and low rates of condom use have been documented, for instance, among commercial sex workers in Madras, India¹¹, and in Surabaya, Indonesia.¹² In terms of infection with STDs other than HIV, unprotected oral sex seems to be a risk factor. A study conducted in Singapore, found that 30% of sex workers who did not use condoms consistently when performing oral sex were 17 times more likely than others to contract pharyngeal gonorrhoea.¹³ Pakistan is classified as low prevalence (less than 1%) but high risk country for HIV spread. Commercial sex workers, inject drug users, individual who received blood transfusions and Pakistani workers deported from abroad¹⁴ identified as a major groups for HIV spread. According to National AIDS Control Programme (NACP) of 2012 and USAIDS estimates of 2013, Pakistan has more than 130,000 HIV positive people, although less than 6000 are registered with treatment facilities.^{15, 16} The surveillance round among twenty cities conducted in 2011 and the results suggested that an overall HIV prevalence were 7.2% and 3.1% among hijra sex workers and male sex workers (MSWs) respectively.¹⁷ NACP documented the risk groups along with prevalence rate for instance, people who inject drug (27.2%), transgender (5.2%), male (1.6%) and FSWs (0.6%).¹⁸ A study conducted in Lahore and Karachi major cities of Pakistan and found that in Karachi, 23% of inject drug users (IDUs) and 4% of MSWs were HIV positive, and HIV positive individuals were identified in all risk groups in at least one city. Two-thirds of all IDUs used a shared needle in the previous week, and unprotected commercial

sex activity with men and women was high.⁵ BD contains the districts of Bahawalnagar, Bahawalpur, and Rahim Yar Khan. Its area 45588 km² and population is 7635591. BD is a less developed and agricultural area with large proportion of dwellers are Sariki speaking.

METHODS AND MATERIAL:

The present study consists of interview of 50 FSWs from Bahawalnagar, Bahawalpur, and Rahim Yar Khan by using convenient sampling. Various brothels were visited. The two trained outreach workers from department of statistics sub campus RYH conducted interviews. Quantitative analysis and Pearson chi-square test for independence were performed to examine the HIV/AIDS related knowledge, conception and sexual behaviour among FSWs. The continuous variables, such as age, client's services charges, sex work duration and client's age were dichotomized at the median. The binary dependent variables (i) ever heard about HIV/AIDS (No=0 and Yes=1)? (ii) Comprehensive HIV knowledge or identification of transmission modes of HIV/AIDS (Not comprehensive knowledge=0 and having comprehensive knowledge [sexual contacts + Blood transfusion] =1). The independent variables were age, education, marital status, duration as a sex worker, number of monthly clients, charges per clients, use of condom during sex, sold sex outside city of residence, asked client to use condom during sex, multiple sexual partner increase the chance of getting HIV/AIDS, heard about STDs, ever test for HIV/AIDS, clients age, media access and use of drugs. SPSS version 21 was used for data analysis.

RESULTS:

The analysis of the data brings out that 56% of the respondents belong to 25 years and over age group. About 72% of FSWs had no education and nearly two third of the respondents were ever married. Higher proportions of FSWs had media access. More than half (56%) of the respondents reported

that they worked as a sex worker by more than five year. Nearly two third (66%) FSWs reported that the monthly number of clients did not exceed by more than eleven whereas the higher proportion of clients having age greater than thirty years. About 58% of FSWs travelled from BD to other cities for sex service. Majority (60%) of the respondents charged more than 500 PRPs for sex service. The use of drugs was higher (80%) among FSWs. The detail descriptions of the characteristics of FSWs were reported in Table 1.

SEXUAL BEHAVIOUR AND HIV/AIDS RELATED KNOWLEDGE:

Majority (58% and 80%) of the respondents had heard about HIV/AIDS and STDs respectively but the comprehensive knowledge about HIV/AIDS transmission was low (34%). Consistent (with every sex act) use of condom during sex was lower, only 32% respondents used condom consistently and majority of FSWs never asked client to use condom during sex. Large proportion of FSWs believed that the multiple sexual partners did not increase the chance of getting HIV/AIDS. Poor knowledge of medically diagnoses of HIV/AIDS among respondents, 80% never test for HIV/AIDS.

Table 1: Distribution of socio demographics characteristics and HIV/AIDS related knowledge Findings (n=50)

Features	n [%]
Age (years)	
< 25	22 [44]
> 25	28 [56]
Education level	
No education	36 [72]
Any education	14 [28]
Marital status	
Ever married	33 [66]
Never married	17 [34]
Duration as a sex worker	
< 5 year	20 [44]
> 5year	30 [56]
Number of per month clients	
< 11	33 [66]
> 11	17 [34]

Use of condom during sex	
Consistent use	16 [32]
Inconsistent use	34 [68]
Charge per client (PKRs)	
< 500	20 [40]
> 500	30 [60]
Sold sex outside city of residence	
No	21 [42]
Yes	29 [58]
Asked client for condom use	
No	27 [54]
Yes	23 [46]
Multiple sexual partner increase the chance of getting HIV/AIDS	
No	27 [54]
Yes	23 [46]
Ever heard about HIV/AIDS	
No	21 [42]
Yes	29 [58]
Comprehensive knowledge about HIV/AIDS	
Comprehensive knowledge	17 [34]
Not comprehensive knowledge	33 [66]
Ever test for HIV/AIDS	
No	40 [80]
Yes	10 [20]
Ever heard about STDs	
No	20 [40]
Yes	30 [60]
Media access	
No	13 [26]
Yes	37 [74]
Clients age (years)	
< 30	22 [44]
> 30	28 [56]
Use of drugs	
No	10 [20]
Yes	40 [80]

BIVARIATE ANALYSIS:

Two models are executed separately to explore the association of FSWs knowledge about HIV/AIDS (Model 1) and comprehensive knowledge of HIV/AIDS (Model 2) with a set of various explanatory variables reported in

Table 2. Pearson chi square analysis exhibits that with the exception of sold sex outside the city of residence and ever test for HIV/AIDS all other characteristics are found to be statistically significant (P-Value <0.005) with respect to knowledge about HIV/AIDS (Table 2). Respondents having age less than 25 year, illiterate, unmarried, duration as a sex worker less than 5 years, consistent use of condom during sex, having monthly clients more than 11, sex service charge more than 500, asked client for condom use, those agreed that multiple sexual partner increase the chance of getting HIV/AIDS, those aware

of STDs, having access to mass media, those with clients age under 30 years and those using drugs have more knowledge of HIV/AIDS. Similarly the analysis of Model 2 brings out that comprehensive knowledge regarding HIV/AIDS transmission and explanatory variables such as age, education, marital status, duration as a sex worker, monthly number of clients, condom use during sex, asked clients for condom use, multiple sexual partners increase the chance of getting HIV/AIDS, ever heard about STDs and media access are found to be associated.

Table 2: Cross tabulation of outcome variable versus explanatory variables

Features	Model 1			Model 2		
	HIV awareness ^a			Comprehensive HIV knowledge ^b		
	n [%]	Chi-square [df]	p-value	n [%]	Chi-square [df]	p-value
Age (years)						
< 25	21	22.624	<0.0	13[76	11.022	0.00
> 25	[72.4]	[1]	01	.5]	[1]	1
	8.0[27.6]			4 [23.5]		
Education level						
No education	17	6.1310	0.01	3	37.745	<0.0
Any education	[58.6]	[1]	3	[17.6]	[1]	01
	12			14[82		
	[41.4]			.4]		
Marital status						
Ever married	13	13.793	<0.0	7	7.073	0.00
Never married	[44.8]	[1]	01	[41.2]	[1]	8
	16			10[58		
	[55.2]			.8]		
Duration as a sex worker						
< 5 year	19	15.676	<0.0	11[64	5.451	0.02
> 5year	[65.5]	[1]	01	.7]	[1]	1
	10			6		
	[34.5]			[35.3]		
Number of per month clients						
< 11	13	13.793	<0.0	7	7.073	0.01
> 11	[44.8]	[1]	01	[41.2]	[1]	0
	16			10[58		
	[55.2]			.8]		
Use of condom during sex						
Consistent use	15	12.345	<0.0	10	8.517	0.00
Inconsistent use	[51.7]	[1]	01	[58.8]	[1]	5
	14			7		
	[48.3]			[41.2]		

Charge per client (PKRs)						
< 500	5	14.901	<0.0	2	8.556	0.00
> 500	[17.2]	[1]	01	[11.8]	[1]	3
	24			15		
	[82.8]			[88.2]		
Sold sex outside city of residence						
No	9	3.408	0.06	5	1.676	0.16
Yes	[31.0]	[1]	0	[29.4]	[1]	1
	20			12		
	[69.0]			[70.6]		
Asks client for condom use						
No	7	24.78	<0.0	6	3.628	0.05
Yes	[24.1]	[1]	01	[35.3]	[1]	0
	22			11		
	[75.9]			[64.7]		
Can multiple sexual partners increase the chance of getting HIV/AIDS?						
No	7	24.78	<0.0	7	6.132	0.00
Yes	[24.1]	[1]	01	[41.2]	[1]	4
	22			10		
	[75.9]			[58.8]		
Ever test for HIV/AIDS						
No	24	0.328	0.41	13	0.201	0.46
Yes	[82.8]	[1]	1	[76.5]	[1]	1
	5			4		
	[17.2]			[23.5]		
Ever heard about STDs						
No	4	19.759	<0.0	3	5.362	0.02
Yes	[13.8]	[1]	01	[17.6]	[1]	0
	25			14		
	[86.2]			[82.4]		
Media access						
No	2	13.079	<0.0	2	8.556	0.00
Yes	[6.90]	[1]	01	[11.8]	[1]	3
	27			15		
	[93.1]			[88.2]		
Clients age (years)						
< 30	21	22.62	<0.0	10	2.297	0.11
> 30	[72.4]	[1]	01	[58.8]	[1]	2
	8			7		
	[27.6]			[41.2]		
Use of drugs						
No	9	5.25	0.02	4	0.201	0.46
Yes	[31]	[1]	2	[23.5]	[1]	1
	20			13		
	[69]			[76.5]		

^aInclusive only of participants aware of HIV/AIDS (n=29)

^bInclusive only of participants have comprehensive knowledge of HIV/AIDS (n=17)

DISCUSSION AND CONCLUSION:

This study demonstrates that the knowledge of HIV/AIDS among FSWs was high but profound lack of its routes of transmission. However the practice of 100% condom use remain quite low, about 32% of FSWs in this study reported having consistent use of condom during sex. About 34% FSWs reported having number of monthly clients exceed 11 and higher proportion of FSWs travelled across BD for sex service. Misconceptions regarding HIV/AIDS infection transformation exists about 54% of FSWs believed that multiple sexual partner did not increase the chance of getting HIV/AIDS.

There is an association between duration of time as a sex worker and HIV/AIDS awareness and comprehensive knowledge about its routes of transmission. FSWs having duration of sex work less than five year are more conscious about HIV/AIDS as well as having comprehensive knowledge. Respondents having charge more than 500 PRPs are more prone to aware about comprehensive HIV/AIDS knowledge. Similarly FSWs having greater number of monthly clients are more prone to aware about HIV/AIDS and its comprehensive knowledge of transmission. A similar finding had been reported in border sharing country Afghanistan.⁹

The consistent use of condom is yet another important way to prevent HIV/AIDS. The analysis of the data exhibited that consistent use of condom before sex was statistically significant with respect to HIV/AIDS awareness and comprehensive knowledge of it various transmission routes respectively. However in our study the HIV/AIDS and STDs related knowledge is high but consistent use of condom and comprehensive knowledge remain low similar finding are reported in our border sharing country Afghanistan⁹, India¹⁹ and Yunnan province, of China.²⁰

Sexual intercourse with multiple partners was marked as major reason of HIV spread. Association were observed HIV related knowledge and heterogeneous sexual partners in our finding. Poor diagnostic practice were observed in our findings and found insignificant with respect to HIV knowledge. The reason might be society is still not accepted the HIV/AIDS and other STDs due to old age stigma and taboos related to these diseases, particularly in remote areas where these diseases considered as a very shameful and people hide their diseases and not seeking any sort of treatment due to low literacy, poverty and social norms.²¹

There is a need of an hour to emphasis condom use among FSWs. In Pakistan the general perception that condom is used as a family planning method, FSWs and their clients have limited knowledge that they can be used to prevent HIV/AIDS. A comprehensive programme about the benefits of consistent condom use and openness in discussion of sexual matters are needed and this should play a vital role in the control of HIV/AIDS in Pakistan. Studies that explore how communication about sexual matters can be initiated in the Pakistan social context should be conducted. Such studies could test the acceptability of messages concerning sexual behaviour and determine the most appropriate means of promoting behaviour change.

CONCLUSION:

Finally it is concluded that FSWs are at high risk of contracting STDs and of transmitting it to their clients due to inconsistent condom use. Interventions are suggested to promote the comprehensive knowledge of HIV/AIDS and use of condom before sex, ultimately to improve health outcomes.

STUDY LIMITATION:

Since this is one of the first studies among FSWs in BD and based on a small sample size. Research is needed to understand the HIV/AIDS knowledge, sexual belief and attitude among FSWs; data should be collected by including the client's sexual belief and behaviour and increasing the sample size.

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