

LETTER-TO-THE-EDITOR

Awareness of HIV/AIDS and Risky Sexual Behaviour among Male Drug Users of Higher Socioeconomic Status in Dhaka, Bangladesh

Sir,

Drug use is an alarming problem in Bangladesh. An estimated 1.7 million people are drug users in the country (1). Injecting drug users present a tremendous potential for an HIV epidemic due to their needle-sharing habits, while non-injecting drug users are also prone to spread/receive HIV infection through their unsafe sexual behaviour. Several studies have reported needle/syringe-sharing habits and unsafe sexual behaviour among drug users of average socioeconomic status in Bangladesh (2,3). To our knowledge, a similar study on drug users of higher socioeconomic status in the country has not yet been conducted.

We investigated 185 consecutive male drug users who attended a drug addict treatment centre in Dhaka city to seek treatment during October 1998–February 1999. This centre usually attracts patients from the better-off areas of the city. After taking informed verbal consent, information, such as sociodemographics, knowledge about HIV/AIDS, drug history and related behaviour, sexual behaviour, history of sexually transmitted diseases (history of penile ulcer/urethral discharge), and previous visit to countries with a high HIV prevalence, was obtained in a face-to-face interview (MSUZ) using a structured questionnaire. The questionnaire contained six questions regarding HIV/AIDS. A summary score was developed from the questions, assigning 1 point for each correct response and 0 for each incorrect or uncertain response. Multiple logistic regression analysis, using the

Stata statistical software (4), was performed, with history of unsafe sexual behaviour as a dependent variable and demographics, knowledge about HIV/AIDS, and drug-use pattern as predictor variables.

Demographics have been published recently (5). The mean age of the drug users was 25.5 years, and their mean annual family income was US\$ 11,800. Ninety-seven percent of them had some awareness of AIDS, while the mean knowledge score was 2.8, with 6 being the maximum score. Their sexual behaviour is shown in Table 1. One hundred and forty-eight (80.0%) respondents had non-marital sex, 125 (67.6%) had unprotected non-marital sex, and 109 (58.9%) had commercial sex in their lifetime. The number of injecting drug users was 24, and 13 (54.4%) of them had needle/syringe-sharing habits and 21 unprotected sex (87.5%). The logistic regression model showed that drug users with a higher AIDS knowledge score (odds ratio [OR] 0.75; 95% confidence interval [CI] 0.57-0.99, $p=0.041$) were less likely to practise unsafe sex, while the reverse was true for IDUs (OR 5.22, 95% CI 1.11-24.49, $p=0.036$), drug users who took drugs in groups (OR 3.10, 95% CI 1.12-8.58, $p=0.029$), and those who were older individuals (OR 1.13, 95% CI 1.04-1.23, $p=0.005$) (Table 2).

Awareness of AIDS was very high among the drug users compared to other population groups in Bangladesh (6-8), which could be due to their higher number of years of schooling (11.3 years) (5) and higher socioeconomic status (annual family income: US\$ 11,880 vs US\$ 3,600) (3). Despite being in the higher socioeconomic class, their mean years of schooling was not that much high due to the fact that 32.1% of them were students at the time of interview and that a large number might have dropped out from schools due to the drug-abuse problems. The prevalence of unsafe sexual practice was higher (67.6%) among them than that among drug users of average socioeconomic status (50-53.7%) (2,3) or the general population (47-52%) (9). Unsafe sexual practice,

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Table 1. Sexual behaviour and condom use among male drug users

Category	No. of drug users	No. of respondents	Percentage
Sexual behaviour			
Non-marital sex	185	148	80.0
Extra-marital sex	61*	55	90.2
Pre-marital sex	124†	93	75.0
Commercial sex	185	109	58.9
Ever had sex with male	185‡	5	2.7
Had sex in India	52¶	15	28.8
Had sex without condom in India	15	6	40.0
Unprotected non-marital sex	185	125	67.6
Unprotected non-marital sex among IDUs	24§	21	87.5
History of brothel visits	185	75	40.5
In the last month	75	18	24.0
In the last year	75	47	62.7
Before the last year	75	10	13.3
Condom use			
As a whole in non-marital sex			
Never used	148	56	37.8
Irregularly used	148	66	44.6
Always used	148	26	17.6
In brothel sex			
Never used	75	20	26.7
Irregularly used	75	21	28.0
Always used	75	34	45.3
Never condom users	185	74	40.2
Consistent condom users	185	32	17.3
History of STD	185**	87	47.0

*Married; †Unmarried; ‡Nobody used condom; ¶Visited India; §IDUs; **Respondents were asked about penile ulcer/urethral discharge, and positive response from one or both was considered to be an incidence of STD
IDUs=Injecting drug users; STD=Sexually transmitted disease

despite having AIDS awareness, revealed that perception of risk was not up to the mark among them. Since a higher AIDS knowledge score was associated with lower unsafe sexual practice, there is still room to reduce risky behaviour through an appropriate AIDS-awareness programme. The IDUs were more likely to practise unsafe sex, which implies that an appropriate awareness programme for them is also needed.

Although the number (465 in March 2005) of persons with HIV in Bangladesh (10) and its prevalence based on five rounds of surveillance conducted during 1998-2004 (2,11-14) were not of much concern, the prevalence of HIV among injecting drug users from a needle/syringe exchange programme (NEP) in Dhaka city has increased considerably over the last few years (1.4% in 2000 to 4.0% in 2002). A recent study from the same setting reported an even higher HIV prevalence (5.9%) among this group (15). However, no HIV infection was

found in injecting drug users from two other NEP sites in northwest Bangladesh (16). On the other hand, unsafe sexual behaviour was very common among drug users (2,3), as was the case in our study.

Our study had several limitations. First, most historical data had no timeframe. Second, the sample of drug users was taken from a drug addiction treatment centre rather than from the general population. Finally, AIDS awareness among drug users might have been over-estimated because they had had some counselling regarding HIV/AIDS during treatment for addiction.

In conclusion, drug use and unsafe sexual behaviour appear to be intertwined among male drug users of higher socioeconomic status in Bangladesh. All future HIV-prevention programmes for them should include safer sex education along with safer injection practices for injecting drug users.

Table 2. Predictors of unsafe sexual behaviour		
Predictor	Odds ratio (95% CI)	p value
Age	1.13 (1.04-1.23)	0.005
Marital status	1.01 (0.43-2.35)	0.989
IDU	5.22 (1.11-24.49)	0.036
Group practice	3.10 (1.12-8.58)	0.029
Knowledge about STD	0.90 (0.58-1.39)	0.643
AIDS knowledge score	0.75 (0.57-0.99)	0.041

*Mean schooling year was excluded from the model as it was found to be a collinear predictor (with AIDS knowledge score)
Pseudo R²=0.121
Dependent variable: History of unsafe sex
Independent variables: Age (years), marital status (married or not), IDU (yes/no), group practice (yes/no), knowledge about STD (continuous), and AIDS knowledge score (continuous)
Variable inclusion criteria: p<0.20 in bivariate logistic regression analysis
AIDS=Acquired immunodeficiency syndrome; CI=Confidence interval; IDU=Injecting drug user; STD=Sexually transmitted disease

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