SEXUAL BEHAVIOUR AS A RISK FACTOR IN THE TRANSMISSION OF HIV INFECTION AMONG ADOLESCENTS AND YOUNG MALES IN INDIA

Lt Col RS VIRK^{*}, Lt Col RAJVIR BHALWAR⁺

ABSTRACT

In order to understand the beliefs and behaviour related to sexual perception and activity of young male adults a multi-centric study was conducted using a structured proforma for a face to face interview. A total of 9845 subjects in the age group 18-25 years were interviewed. 73.78% of the respondents believed that sex with a commercial sex worker (CSW) is an acceptable way of satisfying sex. Sex with an Amateur was considered acceptable by 57.21% of the subjects. Knowledge about condom use was inadequate among 23.67% of the subjects. An information education and communication (IEC) intervention programme with a school set up and peer network education is recommended for developing safe sex practices. Aggressive social marketing for condom usage will reduce the rate of infection and probability of transmission of HIV/AIDS.

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KEY WORDS : Adolescent sexual behaviour; Sexual behaviour and AIDS; Sexual risk behaviour.

Introduction

India has witnessed a considerable increase in the prevalence of HIV infection in both the high risk population and now the general population since 1986 when the first case of HIV was detected in India. Society is still making up its mind about how to cope with the sexual inclination of men and the economic needs of women that ensure prostitution [1]. This article, about the sexual risk behaviour factors in the transmission of HIV infection, formed a part of a larger study of seroprevalence and epidemiological pattern of HIV among adolescents and young adults in India. Some sexual risk factors responsible for the continued transmission have been studied so as to arrive at possible intervention strategies.

Material & Methods

A multicentric cross-sectional survey of recruits joining the Indian Armed Force was undertaken during the period 01 Jul 96 to 31 Aug 97. As these individuals are drawn from all over the country, the general population of the country in the age group 18-25 years constituted the reference population while the recruits were the actual study population. A final sample of 9845 was studied. A standardised survey questionnaire was completed by face to face interview after adequate briefing and informed consent. The questionnaire was pretested on a sample target population and was duly validated for field use. The behavioural factors included, perceived proper ways of satisfying sexual urge, views on sex with a commercial sex worker (CSW) and a woman or a girl not a CSW. Immuno-comb screening for detection of HIV infection was carried out with Elisa kits received from National Aids Control Organisation (NACO). Specimens that yielded positive results were confirmed by a repeat test and in case positive were subjected to Western Blot (WB) test that was confirmed by

NACO. The data, obtained was subjected to appropriate statistical analysis, which included calculation of proportion estimates and their 95% Confidence Intervals (95% CI).

Results

The overall seroprevalence was found to be 0.46 per 1000.

Ideal method of satisfying sexual urge

Sex with wife was considered as the ideal method by more than two thirds while almost one fifth of the study population (18.7%) had a positive attitude towards masturbation. It may be mentioned here that the findings of Table-1 refer to the most ideal method of satisfying sexual urge, as perceived by the study population, which essentially consisted of unmarried subjects being recruited.

It was observed that 7.7% thought that sex with a CSW was an acceptable method of satisfying sexual urge while another 2.5% were favourably inclined towards having sex with amateurs. Thus approximately 10% of the study population is likely to be a high risk group (Table -1).

TABLE 1

Perceived ways of satisfying sex among young males

Perceived methods of satisfying sexual urge	No.	(%)	95% CI
Sex with wife	6993	(67.9%)	67.0% - 68.8%
Sex with CSW	762	(7.7%)	7.69% - 7.71%
Sex with amateur	249	(2.5%)	2.2% - 2.8%
Masturbation	1841	(18.7%)	18.0% - 19.4%
Total	9845	(100.0%)	

Attitudes regarding sex with a CSW

As regards their attitude towards sex with a CSW, 73.87% saw no harm in having sex with a CSW (Table-2). These figures are different from those presented in Table-1 since the latter refer to

^{*} Reader, Dept of PSM, AFMC, Pune., ⁺ Reader and Epidemiologist, Dept of PSM, AFMC, Pune.

the "ideal" situation for sex as perceived by the respondents while Table-2 indicates the acceptance of having sex with CSWs if it at all required.

TABLE 2

Attitude regarding sex with CSW among young males

Attitude about sex with CSW	No.	(%)	95% CI
Can have sex with CSW	7273	(73.78%)	72.9% - 74.7%
Should not have sex	2572	(26.13%)	-
Total	9845	(100.00%)	

Attitude regarding sex with an Amateur

57.21% of the respondents thought that sex with a girl or woman not a wife (amateur) was in order and acceptable (Table-3).

TABLE 3

Attitude about sex with an amateur (Not CSW/Wife)

Sex with amateur	No	(%)	95% CI
Can have sex	5632	(57.21%)	57.20% - 57.23%
Should not have sex	4213	(42.79%)	-
Total	9845	(100.00%)	

History of sexual activity.

12.16% of the respondents had already had one or more exposures to sex, though they were just in their late teens (Table-4)

TABLE 4

History of sexual activity in young males

Exposure of sexual act	No	(%)	95% CI
Had sex	1197	(12.16%)	11.52% - 12.80%
Did not have sex	8648	(87.84%)	-
Total	9845	100%	

History of sex with a CSW

Out of the 9845 respondents, 266 (2.7%) had sex with CSWs while 931 (9.45%) had sex with amateurs (Table-5). Thus, as far as attitude is concerned, while a higher percentage (7.7%) was more permissive to having sex with CSWs as compared with amateurs (as seen in Table-1), the actual practice of having sex with CSWs was much lower.

TABLE 5

History of having sex with CSW among young males

History of having sex with CSW	No	(%)	95% CI
Had sex with CSW	266	(2.70%)	2.38% - 3.02%
Did not have sex with CSW but had sex with amateur	931	(9.45%)	9.40% - 9.51%
Never had any sexual exposure	8648	(87.84%)	87.20% - 88.48%
Total	9845	(100.00%)	

Knowledge about the use of condom

76.33% had correct knowledge about use of condom as a protective measure against HIV infection. However, 12.58% had no knowledge about condom while 9.56% had wrong knowledge.

The role of masturbation

It was observed that as many as 70.62% of the subjects did not consider masturbation as an acceptable alternative to promiscuous sex. In fact, even among those who practised masturbation, as many as one sixth (16.3%) had a feeling of guilt.

Discussion

The risk of contracting HIV infection is greatly influenced by individual sexual behaviour, beliefs and lifestyle; especially where it is a taboo to talk about issues related to sex or sexuality [2]. Thus, almost three quarters of the study population did accept sex with CSWs as an acceptable mode of gratifying sexual urge under certain situations. This needs to be viewed with concern. Due to changing social norms and values, premarital and extramarital sexual relations are prevalent which are of relevance to the spread of HIV/AIDS. Basic behavioural research, therefore, would help develop appropriate HIV/AIDS preventive care interventions [3].

The present study had a HIV seroprevalence of 0.46 per 1000 among adolescents and young male adults aged 18-25 years compared with an overall prevalence of 3.14 per 1000 for India [4]. The presence of infection among adolescents and an increase in heterosexual transmission calls for more effective strategies [5] as younger age is a principal factor associated with high risk [6]. Therefore the incidence of HIV infection can be expected to rise as these young males grow older and develop risky behaviour and beliefs conducive for perpetuation of HIV infection. As HIV infection is a disease linked to sexual behaviour, a change in sexual practices would be an appropriate outcome in HIV prevention [5]. In Thailand, a change in sexual behaviour saw a decrease in extramarital sex and sex with CSWs from 22% in 1990, when the first behavioural study was carried out at a National level, to 10% in 1997 [7].

In our study 73.78% subjects believed that they could have sex with a CSW. (Table-2). An almost similar attitude was observed towards sex with an amateur (Table-3). These beliefs and attitude need immediate attention for a change in behaviour and control of HIV/AIDS. Risk infection taking is age and sex related, young adult men are more "adventurous" and more willing to take risks than women or older persons [8]. Health education of these young adolescents about sex and sexuality will reduce the incidence and will not lead to promiscuous or "immoral" behaviour,

for which a school setting would provide an ideal environment for self care and self help [8]. The role of peers by providing leadership for this group would further augment this approach [8,9].

Only 12.16% of the subjects gave a history of having had sex, showing thereby that promiscuous behaviour is still not widely prevalent in this age group in India. (Table-4). Only 2.7% of the subjects gave history of sex with a CSW (Table5). This is a favourable indication and calls for intensive educational efforts to be directed towards this population which is still in the formative years in so far as sexual life style is concerned. Being younger, a very small number of 32 (0.33%) had sex with multiple CSWs. Intensive information, education and communication (IEC) campaigns with social marketing of condoms [10] aimed at this young impressionable group would provide adequate knowledge to effect a change in behaviour and beliefs for safe sex [8].

An intensive preventive intervention among Thai Army conscripts saw a decrease in rate of sex with CSWs from 57.1% in 1991 to 23.8% in 1995 [7].

23.67% of the subjects had incorrect, partially correct or no knowledge about condom usage. As sexual behaviour is recalcitrant to change, a general population approach for large condom based protection should be achieved [11]. In the Thai conscripts who continued to have sex with CSW the condom use increased from 61% in 1991 to 92.6% in 1995 after implementation of the education and prevention programme envisaging 100% condom use, and education in schools to change the underlying undesirable social and cultural factors; further, sex with CSWs decreased to 10% in 1997 and this may have decreased the number of individuals being infected by 50% [7]. Factors that impinge on the decision to use condoms, and which will have to be aimed at, include the younger age when the condoms are least used. Besides, in the lower socio-economic class, a condom is more likely to be used with the first than the last client and all these of course depend on the availability of condoms [1]. In Switzerland, a campaign for condom use saw its use increase from 40% in 1988 to 64% in 1994 among 17 to 30 years [11]. In India, only 14.3% of CSWs used condoms [12] compared with 24% of individuals attending STD clinics [13].

The role of masturbation as a means of satisfying sex was felt as correct by only 29.38% of the subjects. This finding needs to be perused while developing IEC strategy since society is not far from accepting that masturbation is less risky than promiscuous or

unprotected sexual intercourse [8].

In conclusion, it is seen that 73.78% and 57.21 % of subjects felt that they could have sex with a CSW and amateur respectively, giving large scope for education aimed at increased knowledge and altered attitude and behaviour [14,15]. 23.67% had incomplete knowledge about condom use, an intervention that will reduce the probability of transmission in both partners [14]. A campaign of sexual health education, targeted at those in their late adolescent years is specifically recommended [16].

At the National level the important role of parliamentarians in advocacy, reform, policy and legislation needs no emphasis. There is also a clear need for the medical functionaries to shed our inhibitions and clearly discuss various aspects of sexual behaviour. Recent suggestions put forward by Ramage, in this regard, may be given due consideration [17].

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