# Study of sexual behavior in male soldiers for STD/HIV prevention opportunities

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#### ABSTRACT

**Background:** A survey was undertaken in patients of sexually transmitted infections with the aim of exploring STD and HIV prevention opportunities. **Methods:** A behavioral survey was conducted on 56 soldiers while being treated or followed up for a sexually transmitted disease. They were studied for their attitude and sexual activity patterns relevant to the transmission of STDs. In addition, the individual's outlook to sexual life and motivation factors was assessed. **Results:** The study revealed that the source of infection of STD was equally divided between commercial sex worker (CSW) and casual sexual relationships. The majority did not use barrier contraceptives and knowledge about their protective role was insufficient. Access to health education was satisfactory; however, awareness levels for preventive action were still inadequate. Homosexuality was rare and most soldiers could stay without frequent sex. Alcohol was not found to be a significant co-factor. **Conclusions:** Heterosexual contact remains the main route of sexual contact. A wide variation in casual relationships and motivating factors was noted. Long abstinence and transit periods, traditionally considered major reasons for a soldier's indulgence in sex did not seem to play a major role. The role of sex parlors in the army was negated.

KEY WORDS: Sexual behavior, HIV, AIDS, soldiers.

#### INTRODUCTION

Sexual behavior, the most intimate of human interactions, is the key to the prevention of sexually transmitted diseases.<sup>1</sup> The issue has always been poorly studied and even less understood as it has always been confined to our bedrooms in the darkness of the night.<sup>2</sup> Modern medicine with its stress on scientific, logical studies brought STD prevention into the limelight. However, with the advent of the antibiotics era and the relative ease of treatment, the preventive aspect was buried under the pills and the shots.<sup>3</sup> It was only in the last decade due to the HIV/AIDS epidemic with its high morbidity and mortality that the study of sexual behavior and behavioral patterns relevant to the transmission of sexually transmitted diseases regained importance.<sup>4,5</sup> It appears essential that HIV/STD prevention approaches be designed to fit into the local system of medical services.<sup>6,7</sup> It is well known that armed forces personnel are at high risk for STD / HIV infection. In our own effort of prevention and control of HIV/STDs, we studied the sexual practices, attitudes, behavioral patterns and beliefs of HIV/STD patients amongst soldiers of the

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# METHODS

The study group consisted of soldiers who had sought treatment for a sexually transmitted disease at our hospital. Fifty-six patients over a one-and-a-half year study period were issued a standard proforma that they were asked to fill up while being treated or followed up for a STD. The individual's confidentiality was maintained. The involved patients were all males of different ethnicity, age group 20-46 years and represented a cross-section of the community. The data was not accessed during the patients' stay in the hospital or during the treatment period to avoid bias.

# RESULTS

The findings ar	e summariz	ed in the tables	given below:	
1. Source of in	fection			
Amateur	Marital C	Commercial sex	Unknown	
	sex	worker		
16	18	14	8	
2. Place of exp	osure			
Unit Area (9 Months)		Leave Period	(3 months)	
30		26	26	
3. Use of Cond	oms (Barrie	er Contraceptive	·)	
		Yes	No	
Use condoms		19	37	
Know the protective		28	28	
use of co	ondoms			
Easy availability of		08	48	
condom	s in unit are	еа		
4. Health Educ	ation			
		Yes	No	
Lecture/ Tal	k onHIV/ST	D 42	14	
prevention	imparted			
5. Aware of ou	tcome of A	IDS		
		Yes	NO	
		31	25	

<sup>6.</sup> Homo/ Heterosexual contact

Peno-vaginal	51
Oral	04
Anal	01

7. Regular visitor to a com	egular visitor to a commercial sex worker (>3/year)	
	Yes	No
	08	48

8. Urge for sex	
Can stay without frequent sex	44
Cannot stay without frequent sex	12
9. Sexual habits (for married men only)	
Like to have sex with spouse only	23
Willing to have sex with any lady	33
Feels guilty after sex with casual contact/	12
CSW	
10. Motivation for sex	
After Alcohol	06
After casual friendship	25
Relative	12

During transit
ntroduced by friends
ong abstinence

#### DISCUSSION

The traditional approach to the prevention of STDs has been the prompt treatment of the infected individual (the index case) and the identification and treatment of the sexual contacts.<sup>8</sup> This strategy was effective in controlling the epidemic of syphilis and gonorrhea in the 1960s and 1970s.<sup>9,10</sup> In the Armed forces too, we have an elaborate contact tracing and follow-up card system for the purpose of partner identification, counseling and surveillance for the window period of syphilis.

This methodology has failed in the last two decades due to the epidemic of viral STDs including HIV.<sup>11,12</sup> These infections are not easily diagnosed, have an uncertain infectivity period and worse of all have no effective treatment. A change in the attitude to sexual relationships is therefore essential in the control of sexually transmitted diseases.<sup>13</sup> Understanding sexual

08 19 10 Our study revealed that heterosexual contact and the peno-vaginal route remains the main route of sexual contact, the others being only exceptional. This is consistent with earlier studies on the subject.<sup>15</sup> However, times are changing. Homosexuality in both sexes is increasingly coming out more into the open, especially in metros like Mumbai and Kolkata.

Surprisingly, half the individuals surveyed did not have any inhibitions about having sex with a partner other than the wife. About 15% gave a history of regular visits (i.e. >3 visits/ year) to a commercial sex worker. Exposure to a CSW was more at the place of duty rather than during the leave period at the native place. Visits to a CSW were uncommon despite the individual's willingness for extramarital sex. Does this reflect an impact of our health awareness program or a societal norm—we're unsure. A wide variation in casual relationships appeared most important. This was especially true during the leave period of the individual at home.

Motivation for sex leading to his present STD was invariably an earlier relationship -either a friend or a relation within the family. Friends played a facultative role in the individual's sexual behavior. Long abstinence and transit periods, traditionally considered major reasons for a soldier's indulgence in sex, did not seem to play a major role.<sup>16</sup> Most individuals could stay without sex. Sexual abstinence on being separated from their spouses due to service conditions did not lead to sexual anxiety. Thus, behavior towards the sex partner was noted to be quite inconsistent in this study. Further, alcohol was not found to be a significant cofactor for STDs, contrary to previous studies.<sup>17</sup> Perhaps, the easy availability and regulated consumption of alcoholic drinks amongst soldiers failed to provide the same effect of loss of social inhibitions.

Two-thirds of the individuals did not use condoms despite half of them knowing their protective action. Therefore, stress on their role in the prevention of STD and regular usage is important. More important though is the easy access to condoms. This was found to be dismal. This was so despite the regulations to place condoms freely in the doctors' clinics, recreation rooms etc. Better quality condoms, better packaged and strategically located would perhaps be a better option.<sup>18</sup> Even better would be to hand over a condom to the individual before he steps out of the unit lines. Too radical a recommendation some would say-

promoting promiscuity or preventing STD -it is for us

to weigh the options and act accordingly.<sup>19</sup>

Our study further revealed that though health education lectures on HIV/STD prevention have been imparted to soldiers their awareness levels for action are still inadequate.<sup>20</sup> High-risk behavior is not always uncontrollable or inevitable.<sup>21</sup> Many more factors individual, social, cultural and environmental contribute to an individual's propensity to indulge in unsafe sex. The sexual behavior would also differ in varying situations and locations, factors not included in our study. Also, the inherent feeling of social ostracism on disclosing sexual urges and practices to colleagues or medical personnel could not be fully negated.

Thus, the subject needs a greater in-depth understanding. Understanding and designing interventions according to these prevailing behavioral patterns only will have a major impact on the effectiveness of any STD/HIV prevention program.<sup>22</sup>

#### REFERENCES

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- O'Reilly KR, Islam M, Sittirai W. Sexual behavior and behavioral interventions in the developing world. *In*: Holmes KK, Mardh PA, Sparling FB et al, eds. Sexually Transmitted Diseases. 3<sup>rd</sup> Ed. McGraw Hill,1999;p.1421-9.
- 2. Anderson RM, May RM. Epidemiological parameters of HIV transmission. Nature 1998;333:514-9.
- 3. Holmes KK. Human ecology and behavior and sexually transmitted bacterial infections. Proc Natl Acad Sci USA 1994;91:2448-5.
- 4. Ericksen KP, Trocki KF. Behavioral risk factors for sexually transmitted diseases in American households. Soc Sci Med 1992;34:843-53.
- Andersson JE, Dahlberg LL. High-risk sexual behavior in the general population. Results from a national survey 1998-1990. Sex Trans Dis 1992;19:320-5.
- 6. Bajos N, Wadsworth J, Ducot B, Johnson AM, Lepont F, Saul J,

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et al. Sexual behavior and HIV epidemiology: comparative analysis in France and Britain. AIDS 1995;9:735-43.

- 7. Lagarde E, Pison G, Enel G. Knowledge, attitude and perceptions of AIDS in rural Senegal: relationship to sexual behavior and behavioral change. AIDS 1996;10:327-34.
- 8. Over M. Infection and STD: disease control practices. Washington DC, World Bank Publication 1991.
- Cates W Jr, Hinman AR. Sexually transmitted diseases in 1990's. N Eng J Med 1991;325:1368-70.
- 10. WHO: An overview of selected curable sexually transmitted diseases.1997.
- 11. Berkman A. Confronting global AIDS: Prevention and management. Am J Public Health 2001;91:1348-9.
- 12. Wasserheit JN. Epidemiological synergy. Interrelationships between human immunodeficiency virus infection and other sexually transmitted diseases. Sex Trans Dis 1992;19:61-77.
- 13. MacDonald NE, Wells GA, Fisher WA, Warren WK, King MA, Doherty JA, et al. High risk STD/ HIV behavior among college students. JAMA 1990:263:3155-9.
- 14. Giesecke J, Scalia-Tomba G, Gothberg M, Tull P. Sexual behavior related to the spread of sexually transmitted diseases-population based survey. Int J STD AIDS 1992;3:255-60.
- 15. Tyden T, Bjorkelund C, Olsson SE. Sexual behavior and sexually transmitted diseases among Swedish university students. Acta

Obstet Gynecol Scand 1991;70:219-24.

- Nannis ED, Schneider S, Jenkins PR, Sharp-Breslau E, Daniell FD, McKee KT. Human immunodeficiency virus (HIV) education and HIV risk behavior: A survey of rapid deployment troops. Mil Med 1998;163:672-7.
- 17. NACO. A summary of findings of high-risk behavior-Study from 18 cities. New Delhi. Govt. of India. Ministry of Health and Family Welfare. NACO 1997.
- Roth J, Krishnan SP, Bunch E. Barriers to condom use: Results from a study in Mumbai, India. AIDS Edu Prev 2001;13:65-77.
- Crosby R, Di Clemente RJ, Holtgrave DR, Wingood GM. Design, Measurement and analytical considerations for testing hypothesis relative to condom effectiveness against non-viral STD's. Sex Trans Infect 2002;78:228-31.
- 20. Coates TJ. Reducing high-risk HIV behaviors: An overview of effective approaches. NIH Consensus Development Conference on Interventions to prevent HIV Risk Behaviors 1997;11-3.
- NIDA: Principles of HIV prevention in drug using population

   A research based guide. Washington DC, NIDA, US Dept of Health and Human Services. 2002.
- 22. Chandra PS, Bengal V, Ramkrishna J, Krishna VA. Development and evaluation of a module for HIV/AIDS related risk reduction among patients with alcohol dependence. (Project report).Bangalore. NIMS 1999.

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