

**A sequential analysis of critical events: Methodological innovation to study alcohol, risky sex and interfacing HIV vulnerabilities among urban youth**

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**Introduction**

Alcoholism influences sexual behavior for a variety of psychological, social and physical reasons. However, attention has primarily been focused at the dis-inhibiting effects of alcohol and the popular believes that drinking may be used to facilitate or excuse otherwise unacceptable behavior (Plant, et. al.1990). Alcohol-related impairment reduces the drinker's perception of personal risk and positive outcome expectancies motivate drinkers to engage in risky sexual practices. (Fromme, 1999). The relationship between alcohol and risky sexual behavior is best characterized by a common characteristic of excitement seeking (Justus & Finn. 2000). In a simultaneous test of both inhibition conflict theory and expectancy theory, amount of alcohol consumed was found to be negatively associated with condom use at first intercourse among individuals high in both conflict and expectancy, at first time sexual intercourse with their most recent partner among high-expectancy individuals, and at last intercourse among high-conflict individuals (Dermen & M. L.2000).

It is needless to mention that the context and environments in which an individual lives play an important role in shaping his behavioural traits. As a result, people exposures to their soundings often guide their perceptions, attitude and behaviours irrespective of the degree of desirability. India is witnessing increasingly widespread use of alcohol despite proscriptions against use. Alcohol is marketed via sexuality coinciding with the cultural belief in alcohol as a sexual stimulant and expectancy that alcohol enhances sexual experiences and fuels HIV epidemic.

In the low-income slum areas of Mumbai and other major cities of India the social dynamics favorable to spread of HIV infections involve a combination of recent migrants plus longer-term resident migrants and those born in Mumbai, who suffer from economic and social hardships. It is also especially true for migrants who once arrive join with networks created by migrants from their home communities. These extended networks serve as a kind of shelter to these new-comers providing security and support in the unfamiliar urban cities. These men also see a sudden cut off from

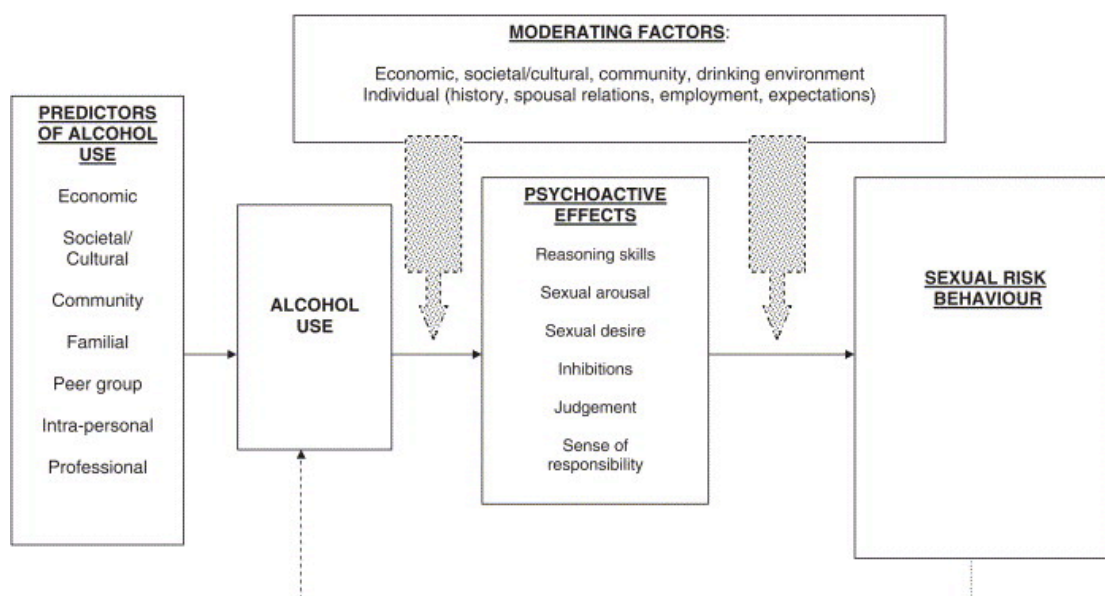
kinship support and control. With increasing years of staying at the city they gain access over various work as well as leisure outlets. These include alcohol and different sex selling avenues.

Very little literature exists on the co-occurrence of alcohol and sex and their interactions including their likely contribution to HIV infection. Also one can not deny the fact that there is enormous difficulty in studying sensitive issues like alcohol use and sexual behavior especially with youth in a context like Indian where sex and sexuality is taboo and alcohol is generally prohibited for youth and hence youth although consumes it keeps its use a secret from family. Owing to all these operational issues, there is a strong need to research these pertinent issues of youth health and behavior using innovative approaches beyond contemporary KAP methodologies that may fetch us some more reliable and unbiased results. The social dynamics that surround alcohol use, sexual risk behavior and HIV infection and interactions between these issues warrant a search for alternative ways of dealing with the problem in diverse sociocultural settings, if intervention is to be effective. Only by unraveling the social dynamics of alcohol use-related sexual risk behavior within particular cultural settings can this be achieved.

With this backdrop, we aimed to examine the socio-economic, contextual and behavioral determinants of type of sexual partners in the last critical event among young men in low income slums of Mumbai and to understand the interface of alcohol consumption and risky sexual behavior with different types of partners.

### **Framework**

Alcohol use and sexual behavior patterns operated “separately” or independently of one another, a number of patterns of interaction between alcohol use and sexual risk taking were identified, with some of these patterns manifesting a specific individual behavioral scheme, some a cultural scheme and some a cross-cultural scheme (Singh et al, 2010).



### Study Area, Methods and Sampling

Basic data used in this paper has been collected from three low-income urban communities in Greater Mumbai using a combination of quantitative and qualitative research methods. The data was collected as part of NIAAA sponsored project entitled "*Alcohol, Sexual Health Risk and AIDS prevention in Mumbai*" (ASHRA) conducted under the auspices of *IIPS, Mumbai* in collaboration with *ICR, Connecticut, USA* during 2006-08. Study was conducted in a randomized cluster sample of 1239 unmarried and married young men between the ages of 18 and 30 years, selected after canvassing a screener so that the study sample should primarily focus at those who reported to consume alcohol at least once in the last 30 days prior to the survey. To have an effective control group, the study sample also includes every seventh non-drinkers in the study design. KRISH table was used to recruit one eligible respondent for canvassing of screener in case more than one in one household. Study has designed a number of covariates to study linkages with type of partners and safe sexual practices. A brief description of the variables used as predictors in Binary and/or Multinomial logistic regression is presented below.

### A brief description of variables used in the Logistic/Multinomial regression

Variables	Computation of Index/Scale	Cut off points to convert in to categorical variables
Exposure to mass media	Computed by recoding a variable v3r, which was created initially by adding six different forms of media	<i>medexp</i> up to 6= Low,

<b>(medexp)</b>	exposure measured on 5 point scale and hence <i>v3r</i> ranges from <b>a minimum of 6</b> for those who have never exposed to any form of mass media in the <b>last 30 days</b> prior to the survey <b>to the maximum of 30 points</b> for those exposed every day.	7-12=Moderate, 13 & above=High
Exposure to pornographic materials <b>(exporn)</b>	Computed by recoding a continuous Guttman's scale <b>ipornxo</b> by merging a series of statements concerning exposure to different forms of pornographic materials canvassed on 5 point scale after testing of reliability and normalizing	<b>exporn</b> up to 2=Low, 3-4=Medium, 5 & above= High
Exposure to sexual stimuli <b>(sexstim)</b>	Computed by recoding a continuous Guttman's scale <b>SsexstiO</b> , created <b>by</b> merging a series of statements concerning exposure to different forms of sexual stimuli canvassed on 5 point scale after testing of reliability and normalizing	<b>sexstim</b> 1.00-1.99=Low, 2.00-2.99=Moderate, 3.00-4.00=High
Current exposure to alcohol <b>(curexp)</b>	Computed by recoding an index <b>IcurrexO</b> , created <b>by</b> merging a series of statements concerning exposure to alcohol consumption at different levels i.e. home, neighborhood, community, work place etc. canvassed on 4 point scale, ranging from a minimum of point 1 to the maximum of 4 and normalizing.	<b>curexp</b> 4 - 8=Low, 9 - 12=Moderate, 13 -16=High
Hyper masculinity <b>(hymas)</b>	It is recoded from <b>Shypmsc3</b> , computed by recoding a continuous Guttman's scale developed as <b>ShypmscO</b> by merging a series of statements concerning different dimensions of masculinity canvassed on 3 point scale, after testing of reliability and normalizing.	<b>hymas</b> 1=Low, 2=Moderate, 3=High
<b>Leisure time activities (leiact3)</b>	Computed by recoding a continuous Guttman's scale <b>Stagut</b> by merging a series of statements concerning involvement of an individual in a number of activities with friends/peers after testing of reliability and normalizing	<b>leiact3</b> 1 =none activity 2 = one or two activity 3 = three or more activities
Pattern of drinking <b>(pattern3)</b>	Recoded from a variable <b>pattern</b> , computed by merging two variables frequency and quantity of alcohol use collected as a part of information on alcohol audit among those who reported to consume alcohol at least once in the last 30 days prior to the survey.	<b>pattern3</b> 1=Low amount and low frequency 2=High amount and low frequency or low amount and high frequency 3=High amount and high frequency
Alcohol use in any critical event <b>(alcCR)</b>	Computed by recoding <b>alc_cr</b> , which was generated on the basis of information regarding alcohol use at any stage of the critical event i.e. interface of alcohol and sex	<b>alcCR</b> 0=No 1=Yes
Alcohol and condom use in the last sex <b>(alccncls)</b>	Generated on the basis of 2x2 classification of condom use by use of alcohol in the last sexual act	<b>alccncls</b> 1= No alcohol and no condom 2= No alcohol but condom

		3= Alcohol but no condom 4= Both alcohol and condom
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### **Critical events methodology**

In order to develop a measure of the combined risk, the phenomenon of critical event is developed. Critical event refers to encounters in the past six months that involve alcohol and unprotected sex. Further, the risk is analyzed in context of type of sexual partner in last critical and partner mixing.

*"If a married respondent reported to have sex only with his wife in the last six months the last time he had sex with wife has been considered as the critical event. However, if a married respondent reported to have sex with only one of any other type of woman, most recent event in the past six months with the other woman has been treated as the critical event. On the other hand, if the respondent is married and has had sex with more than one other type of women in the past six months, the criterion for inclusion in the critical event prioritize sex with any girlfriend or lover over bargirl/non- brothel based sex worker and bargirl over brothel-based FSW. In case of unmarried respondents, only the last two categories have been included for determination of any sexual act as critical event as there is no question of sex with wife in the last six months. Thus, the analysis of critical events has been based on the information collected from 757 respondents who reported to have sex in the last six months prior to the survey."*

Critical event as an innovative methodology provides a connotation to study interfacing alcohol and sex in the last six months prior to the survey. Methodology form the perceived notion on the potential risk and notions of dangers of STI/HIV associated with various types of partners as an explanation to selecting them in the critical event. Considering this the girl friend as a sexual partner was emphasized more risky partner over casual partner because they are perceived faithful and often results in non-use of condom during the sex. Similar is the case with when comparing the bargirls with female sex workers.

### **Results**

#### ***Determinants of Partner type in Critical Event***

Results from bivariate analysis showing the effects of the demographic and socio-economic variables on the type of sexual partners in the last critical event shows that the younger men are more likely to have sex with girl friend or any other women inclusive of female sex workers than their relatively older counterparts. In fact, there is a possibility of larger proportion of currently married respondents among those age 25 years and above and hence a larger proportion reporting wife as sexual partner in the last critical event is quite expected. But almost every seventh young men reporting girl friend or other women in the last critical event is the prime concern, especially when over three-fifths on young men in India do not perceive themselves at the risk of contracting STI/HIV. A chi-square test of significance reveals a significant variation in the type of partner in the last critical event by their current age at the time of survey. It is evident that a relatively larger proportion of young men from high SLI households are more likely to have sex with their girl friend and also with other women including female sex workers than those coming from low SLI households. Overall, the survey data reveals that standard of living influences indulgence in sex with other sexual partners than wife in the study communities.

Literature underlines that people's exposures to their surroundings often guide their perceptions, attitude and behaviors irrespective of the degree of desirability. The bivariate results of the effects of the contextual and behavioral variables on the type of sexual partners in the last critical event reveal that contextual variables such as *exposure to mass media*, *exposure to pornography*, *exposure to sexual stimuli* and *current exposure of alcohol* are significantly ( $p < 0.001$ ) associated with the type of sexual partners in last critical event, while, the variation in the type of sexual partner in the last critical event by *hyper masculinity* - a proxy of maleness affecting risk indulgence has been significant at 10% level of significance ( $p = 0.10$ ). Also, behavioral variables such as leisure time activities with friends and alcohol use before sex were significant ( $p < 0.001$ ) highly associated with the type of sexual partners in last critical event while pattern of drinking was also significantly ( $p < 0.05$ ) associated with type of sexual partners in last critical event. Among the contextual determinants, *exposure to pornography*, *exposure to sexual stimuli*, *pattern of drinking* and *consuming alcohol prior to sex in the last critical event* are significantly associated with non spousal *sexual partner* in last critical event. It is evident that 35 percent of the people with higher exposure of sexual stimuli have sex with girl friend and nine percent have sex with other women as compared to six and one percent among those in

the low exposure to sexual stimuli. If we see the effect of hyper masculinity on type of sexual partners in last critical event then we found that there are two dimensions of hyper masculinity exist in the study population. The low hyper masculine peoples have considerable proportion to have sex with girl friend (14 percent) and other women (4 percent), which are by and large the same among the peoples who perceived higher masculinity. The results also show that the behavioral determinants of type of sexual partners in last critical event are influencing the peoples to have sex with girl friend and other women as these determinants are increasing from lower category to higher category. The leisure time activities with friends have relatively larger association with the type of sexual partners in last critical event. The leisure time activities were comprised with eight activities with friends which are; *to play cards with your friends, to roam with your friends, to gamble with your friends, to drink alcohol with friends, to visit beer bars/drinking place with friends, to watch blue films with your friends, to visit CSW with your friends and to meet girls and women with your friends*. It is evident that among those who are engaged with their peers and friends in three or more activities, almost one-third have sex with their girl friend and 9 percent have sex with 'other women' in their last critical event. However, the corresponding proportions among those who are not engaged in any activity with their peers/friends are 3 and 1 percent for girl friend and other women respectively. Similarly, pattern of drinking also followed the same trend; as compared to peoples having low frequency and low amount alcohol drinking the peoples who have high frequency and high amount of alcohol drinking habits are high proportion to have sex with girl friend (15.9 percent) and other women (1.3 percent). Alcohol use before sex has significantly strong association with type of sexual partner in the last critical event. Young men who have sex with other women (including FSWs) in their last critical event are 8 and 4 times more likely to consume alcohol before sex than those who reported to have sex with wife and girl friend in their last critical event.

**Table 1** presents the result of multinomial logistic regression in terms of relative risk ratios to have sex with 'girl friend' and 'other women' as against sex with wife among young men in their last critical event in low income community in Mumbai. Findings reveals that age, religion, standard of living, leisure time activities with friends and exposure to sexual stimuli are significantly associated with type of sexual partners in last critical event. It is evident that the relative risk ratios to have sex with girl friend in last critical event as against wife are significantly lower among

those in the age group 21 to 24 years and 25 & above as compared to younger age group i.e. 20 and below years of age. On the other hand, the relative risk ratios for sex with other women in the last critical event as compared to wife are not significant. These findings clearly indicate that younger peoples have more relative risk of indulgence in sex with girl friend in last critical event than relatively older peoples. The standard of living have found significant relative risk ratios in relation to have sex with girl friend as against to wife in both medium and high standard of living peoples with reference of low level of standard of living. The relative risk to have sex with girl friend in reference with wife is 2.1 and 2.8 times higher more among those in the medium and high standard of living households as compared to those from low standard of living households. The leisure time activities with friends play a significant role to indulgence into the sexual relation with girl friend as well as other women as compared to wife. The result of the multinomial logistic regression shows that relative risk of having sex with girl friend as compared to wife in the last critical event is 11.6 times more among peoples who have three or more activities with friends against those who have no activity with friends. It means peer network played important role to have sex with girl friend as compared to wife. Similarly, result also shows that relative risk is 16.2 times more in peoples who have three or more activities with friends against those who no activity with friend to have last critical event with other women (including FSWs and Bar girls) as compared to wife. Exposure to sexual stimuli has also resulted as an important predictor influencing the indulgence into the sexual relation with girl friend as well as other women as compared to wife in the last critical event. The result of the multinomial logistic regression shows that relative risk of having the last critical event with girl friend as compared to wife is 2.2 and 6.9 times higher among those among those from medium and high sexual stimuli categories. Similarly, the relative risk ratio to have last critical event with other women as compared to wife are 2.9 and 7.4 times higher among those exposed to medium and high levels of sexual stimuli as compared with those having lower exposure to sexual stimuli. These findings clearly provide an evidence base that addressing young men's exposure to sexual stimuli is an important issue for any program targeting behavior change in the context of type of partners.



**Table 1.** Multinomial logistic relative risk ratios to have sex with girl friends and other women as against wife by some selected socio-economic and contextual characteristics

Variables	Girl friends vs. Wife			Other partners vs. wife		
	RRR	S. E.	95% CI	RRR	S. E.	95% CI
<b>Age</b>						
20 and Below®						
21 to 24	0.13*	0.05	[0.06 0.29]	0.56	0.50	[0.10 3.22]
25 and above	0.03*	0.01	[0.01 0.06]	0.30	0.26	[0.06 1.60]
<b>Education</b>						
Illiterate or primary®						
Middle school	0.73	0.25	[0.37 1.43]	1.09	0.58	[0.38 3.11]
High school & above	1.77	0.71	[0.81 3.88]	1.98	1.29	[0.55 7.09]
<b>Religion</b>						
Hindu®						
Muslim	1.03	0.46	[0.43 2.48]	1.25	0.86	[0.33 4.83]
Buddhist & Others	0.80	0.43	[0.28 2.29]	3.04***	1.85	[0.92 10.05]
<b>Standard of living</b>						
Low®						
Medium	2.06**	0.68	[1.08 3.93]	0.56	0.29	[0.20 1.56]
High	2.75**	1.16	[1.21 6.29]	0.80	0.57	[0.18 3.21]
<b>Leisure time activity with Friends</b>						
No activity®						
One or two activity	2.00	1.10	[0.69 5.87]	1.86	2.07	[0.21 16.43]
Three or more activities	11.59*	6.24	[4.03 33.31]	16.19**	17.21	[2.01 130.11]
<b>Exposure to sexual stimuli</b>						
Low®						
Medium	2.21**	0.70	[1.18 4.12]	2.88**	1.53	[1.02 8.14]
High	6.87*	3.28	[2.70 17.49]	7.43**	5.43	[1.77 31.12]

Note: \* P<0.01, \*\* P<0.05 and \*\*\* P<0.10

### ***Alcohol Use and Risky Sex: Interface in the Context of last Critical Event***

Condom use is the corner stone of all HIV prevention programmes in India. It is the most effective self reported indicator of safe sexual practices but, as clear from the discussion above, may be amply influenced by alcohol use before the sex. Of course, any association between these two events may be a function of type of sexual partners. The overall data for critical events reveals that 15.3 percent respondents used condom in their last critical event, which varies significantly by use of alcohol ( $p<0.05$ ). However, the direction of association has not been uniform as the reported use of condom has been higher among those who consumed alcohol in the last critical event. Therefore, the relationship between alcohol use and safe sexual practices can be better understood once analyzed by type of sexual partner in the last critical event.

**Table 2 (a).** Total number of critical events and percent distribution of alcohol and condom use in last critical event by type of partner

Types of Partner	Total number of Critical Event	Alcohol Use	Condom Use
Wife only	646	5.6	6.5
Girl friend only	88	(13.6)	35.2
All others	23	(43.5)	(78.3)
Total	757	7.7 (58)	12.0 (91)

**Table 2 (b).** Percent distribution of condom use last critical event by Alcohol use in last critical event

Variables	Condom use in last sex		Chi-square test of significance	p-value
	Yes	No		
Alcohol use in critical event				
Yes	25.9	74.1	5.03	0.025
No	14.5	85.5		
Total	<b>15.3</b>	<b>84.7</b>		

**Table 2 (c).** Percent distribution of condom use in last critical event by alcohol use and type of sexual partners in the last critical event

Variables		Condom use in last sex		Chi-square test of significance	p-value
Type of sexual partner	Alcohol use in critical event	Yes	No		
Wife only	Yes	5.9	94.1	0.103	0.543
	No	7.4	92.6		
	Marginal total	<b>7.3</b>	<b>92.7</b>		
GF only	Yes	60.0	40.0	0.047	0.553
	No	56.4	43.6		
	Marginal total	<b>56.8</b>	<b>43.2</b>		
Others	Yes	60.0	40.0	6.293	0.024
	No	100	0		
	Marginal total	<b>82.6</b>	<b>17.4</b>		

The analysis of the critical event by the type of partners to see the causation between alcohol use and non use of condom in last sex is presented in table 2(c). The result shows that 94.1 percent of peoples were not used condom with wife during the sex while they have consumed alcohol before sex. This could be because of perceived

notion by the community that wife is a faithful sexual partners. In case of girl friend and other women, there were 40.0 percent of the peoples under the effect of alcohol have not used condom in last critical event. On the other hand, 100 percent of the peoples who have not consumed alcohol they used condom in last sex with other women (including FSWs and Bar girls). This implied that there was great awareness among the community peoples about HIV/AIDS so they used condom during sex with irregular/unfaithful partners.

**Table 3.** Interface of alcohol and condom use in critical event by type of sexual partners

Variables	Alcohol and condom use in critical event					
	No alcohol and no condom	No alcohol but condom	Alcohol but no condom	Both alcohol and condom	Chi-square test of significance	p-value
wife only	87.7	7.0	5.0	0.3		
GF only	38.6	50.0	4.6	6.8	281.148	0.000
Others	0	56.5	17.4	26.1		
Total	<b>79.4</b>	<b>13.5</b>	<b>5.3</b>	<b>1.8</b>		

The interface of alcohol and condom use in the last sex has been analyzed by developing a new variable alcohol and condom use in the last critical event, which is classified in to four groups ranging from *neither alcohol nor condom use* to *both alcohol and condom use* and is presented in table 3. It is evident from the table that young men in the community are three times more likely to indulge in risky sexual behavior under the effect of alcohol than those adopting safe sexual practices under the effect of alcohol. It is evident from the table that alcohol use has been reported only in case of 7 percent of the critical events. However, a safe sexual practice under the effect of alcohol is much higher if the sexual partner has been any women other than wife and girl friend. These findings clearly reveal a comprehensive knowledge among young men in the low income urban communities as majority of those reporting sex with 'other women' were practicing safe sexual behavior in their last critical event. However, relatively lower condom use with girl friends, which may be possibly due to the concept of image and stigmatization of condom use as a symbol of disease prevention, may increase the vulnerability of STI/HIV infections among young men as well as young women in low income urban slums in Mumbai.

***Determinants of condom use in critical events***

To analyze the major determinants of condom use in last sex reported by young men in low income communities, a binary logistic regression has been carried out by including a number of socio-economic, contextual and behavioral variables in the model. After controlling for the effects of other predictors included in the model, the odds of the condom use in last critical event is significantly lower among young men age 25 and above than among those age 20 or lower. This implies that people in higher age group are less likely to use condom in last critical event than those who were in younger age groups. This may be primarily due to significantly larger proportion of young men age 25 and above reporting sex with wife only in their last critical event. Findings reveal that religion, standard of living, hyper masculinity, current exposure of alcohol and type of sexual partners in last sex are significantly associated with condom use in last critical event. The standard of living was also significantly associated with the condom use in last sex. The odds of using the condom in last sex is 2.3 and 3.5 times more among those coming from medium and high standard of living household than among those from low standard of living households. Hyper masculinity comes out one of the significant determinant of condom use in the last critical event. It has found that odds of using condom in last sex among young men having higher masculinity are significantly lower than those who have low hyper masculinity. The odds of using condom in last sex was significantly found 2.7 times more among the peoples who have higher current exposure of alcohol than the lower exposed peoples. The pattern of drinking could not come as significant predictor for the condom use in last sex. Alcohol use before sex was also not significantly associated with condom use in last sex. This may be probably due to a smaller proportion of respondents consuming alcohol before sex. While, an odd of using condom in the last sex is lower among those who consumed alcohol before sex than who have not consumed alcohol. This shows that under the influence of alcohol peoples were less likely to use condom in last sex than who did not consume alcohol. However, the types of sexual partners in last sex have been the most important determinant of the condom use in last critical event. The odds of using condom in last sex is significantly higher among those having sex in last critical event either with girl friend or with other women (including FSWs and Bar girls) than among those reporting wife. This could due to the perceived danger of infection from

partners and the fear of HIV/AIDS transmission leads peoples to have safe sexual practices in term of condom use while having sex with such partners.

### **Conclusions and Recommendations**

Findings provide evidence base that addressing alcohol-sex interface with reinforcing condom-use especially girlfriend is crucial. A mix of traditional and modern values, norms and practices regarding sexuality and sexual behaviour among youth in low income communities in metropolitan cities have resulted in higher risks, increased risky behaviour and elevated vulnerability among youth. There are evidences that exposure to media and surroundings with plethora of opportunities have resulted in practices of multi partner, premarital and extra marital sexual activities which are mostly unprotected, have resulted in putting a higher proportion of men and women at the pedestal of contracting STDs including HIV.

In addressing STI/HIV risk among young men in low income urban communities types of sexual partner plays a crucial role. The urban slums conditions act as catalyst to HIV related risk environments and behaviors. It has emerged from the study that the current age of respondents has been one of the most important determinants of the type of partner in last critical event where, a significant proportion of younger peoples were involved in sex with girl friends as well as other women. Standard of living of the households has emerged as an equally important factor predicting non spousal partner in the last critical event as those men belonging to higher standard of living households are more involved in sex with girl friends and/or other women as compared to wife in the last critical event. Besides these, as evident from multinomial model, leisure time activities with friends and exposure to sexual stimuli have emerged as predictors of partner types 'girlfriends' and 'other women' than wife in the last critical event.

The interfacing effects of alcohol and condom use are clear and loud in the results of this study. The overall low prevalence of condom among the study group further declines among respondents who reported to have consumed alcohol before sex in their last critical events. Hyper masculinity forms another significant determinants of condom use in the last critical event. Overall, men are ambivalent about condoms and believe that women transmit disease. Hence, the perception that a woman is "safe" provides an excuse to avoid using a condom. It may be said that most men use alcohol before sex to improve sexual experience, which include sexual experimentation with

unknown partners for hiding their identity, to overcome their sexual inhibitions and also improving their sexual performance in terms of duration.

Study underlines the inevitability of using innovative methodology to expose convoluted susceptible sexuality issues. Dealing with only “prohibitory” regulations focusing on sex as a norm. The context in which sex and psychoactive substance use coincide and varieties in these behaviors should be thoroughly analyzed. The preventive efforts must be informed in the following three

- Exhaustive knowledge on the behavior patterns of sexual partners, who drinks with whom and why e.g. regarding first intercourse, the selection of a partner for marriage, casual sex, multiple partners, commercial partners
- Full-scale mapping of the content of sex and substance use e.g. vaginal, oral, anal, heterosexual, MSM, commercial sex, loving relationship involved or not, drinking what, where, when.
- Knowledge on the subjective meaning of sex (e.g. for pleasure, for procreation, for power/status, for pleasing the partner), and reasons for drinking (e.g. for pleasure, out of sorrow, habit, addiction).

Dealing with such stigmatized issues, needs multi-level targeted interventions. Intervention may be designed to operate at two levels, structural interventions at community level and peer based interventions at individual level. At community level, structural intervention should focus on laws and regulations to address the ramification of sexual risk behaviour, especially the interface of alcohol use and risky sexual behavior where major community stakeholders could facilitate in developing sound support system to young men and creating enabling environment for behavior change. At individual level, there are two prominent approaches emerging from findings ensuring condom use in intimate relationship irrespective of type of partner and addressing sexual violence and coercive sex. Interventions to ensure safe sexual practices should primarily focus at promoting condom use as a mean of dual protection and positioning it as a sexual stimuli rather than means for disease protection. On the other hand, issue of sexual violence and coercive sex can be addressed by sensitising young men about the sexual rights of women in terms of equality in sexual relations and control over own sexuality. Use of social networks,

networking locations and leisure time can be effectively used for planning informative sessions on these topics which will be accessible, appropriate and acceptable to youth.

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