

Research Article

Factors Affecting Substances Abuse among Male Migrants Youth in Low-Income Slums in Mumbai, India

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Abstract

Substances abuse has been documented as a contributing factor to sexual risk-taking, whereby substance use impairs individual judgment and decision-making and increases a youth's risk of a sexually transmitted infection. The survey was conducted among 1239 men aged 18 to 29 years in low-income slum communities in Mumbai during 2007-08 adopting a randomized cluster approach. The survey collected information on men's activities, friend circle, health, alcohol use and risky sexual behavior. Almost 37 percent of them are married and migrated with their wives, while 29 percent of them are married and live away from their wife and 34 percent are never married. Of course, a very small proportion of young male migrants included in the study is borne and brought up in the city environment of Mumbai due to a migration of their parents to the city. The odds ratio for those engaged in one or two activities with peers and friends during their leisure times is 2.8 ($p < 0.01$) compare with no activity. The migration and HIV link seems to be complex in nature and may be governed by a number of implicit correlated of both in processes. Hyper-masculinity and leisure times activities are another two significant correlated of pattern of drinking among migrant youth in low-income slums of Mumbai. For policy implementation there is an urgent need to increase awareness about substance abuse among adolescent at school level and creating mass media exposure such as more TVs and Radios.

Keyboard: Abuse, Migrants, Youth.

Introduction

Substances abuse has been documented as a contributing factor to sexual risk-taking, whereby substance use impairs individual judgment and decision-making and increases a youth's risk of a sexually transmitted infection. Both casual and chronic substances users are more likely to engage in high-risk behaviors such as unprotected sex when they are under the influence the drugs or alcohol (Leigh BC, Stall R.). Substance abuse has also been shown to occur with a history of sex with multiple partners throughout the transition from adolescence to young adulthood (Tapert SF, Aarons GA et al.). Von Haeflen, ea al. found that people are more likely to

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use a condom with casual sex partners than with regular partners. As a result of risky sexual behavior, there are approximately 19 million new STD infections reported each year, and almost half of them are among youth aged 15-24 (Weinstock H. et al.). Increased susceptibility to substance abuse and HIV infection has become prevalent in rural communities (Brown EJ Wells S.). Rural adolescents in particular are experiencing increased problem related to substances abuse and HIV. Because rural adolescents exhibit higher rates of alcohol consumption than the adolescent's suburban and urban communities, (Botvin GJ. et al.) they may be more likely to engage in risky sexual behavior and therefore have increased susceptibility to STD/HIV infection

Need for the Study and objective

Despite widespread recognition that substance abuse is associated with HIV/STD risk behavior such as unprotected sex and having multiple sexual partners, few studies among adolescents have examined this association in a nationally representative sample, particularly in rural areas. But this type studies have not been conducted among male migrants and Non-Migrants youth. Importance of this study among male migrants is because maximum migrant's people belong to rural areas. In addition, most HIV and substance abuse prevention interventions have targeted adolescents in urban settings (Kirby D. Barth RP, et al.). When studies of differences between urban and rural settings have been conducted, variations in the trends and patterns among rural and urban adolescents relative to substances abuse and HIV exposure were found (Crosby RA, Yarber WL). This variation included increased sexual and drugs use behaviors among rural adolescents when compared to their urban counterparts. In view of the above, purpose of this study is to examine the relationship between substance abuse including alcohol, bidi/cigarettes, ganja/cannabis and drinking pattern among young male migrants age 18-29 living in low-income slums of Mumbai.

Data and Methodology

The basic data used in this paper has been collected as part of ASHRA study using a combination of quantitative and qualitative research methods. The survey was conducted among 1239 men aged 18 to 29 years in low-income slum communities in Mumbai during 2007-08 adopting a randomized cluster approach. The survey collected information on men's activities, friend circle, health, alcohol use and risky sexual behavior. Male Migrants (863) and Non-Migrants (376) youth were selected for the current analysis. The determinants of above outcome measures are examined through logistic regression models using selected variables, e.g. age group, education, marital status, occupation, mass media exposure, and standard of living index, childhood exposure to alcohol, hyper-masculinity leisure activity. Description of some indicators included in the analysis has been as follows: Alcohol use at first age has been classified into two categories less than 20 years and more than 20 years. The pattern of drinking also has been classified into low and high substantial.

To examine the factors influencing Substance abuse among male migrants, the logistic regression model with most likely variables was fitted and was estimated using the maximum likelihood method. The logistic model postulates that the probability of migration. P is a function of an index variable Z , summarizing a set of the explanatory variables (X_i). In fact, Z is equal to the logarithm of the odds ratio, i.e. ratio of the probability of migration to the probability of non-

migration and it can be estimated as a linear function of explanatory variables. The functional form of the logistic model may be given by equation:

$$Y = \frac{p}{1-p} = \frac{1+e^z}{1+e^{-z}} = e^z \text{ Or } \ln\left(\frac{p}{1-p}\right) = z = F(X_1 + X_2 + X_3 + \dots + X_k)$$

where,

Y represents dependent variable like substance use, age at first alcohol use and pattern of drinking Z is Vectors of explanatory variables and K is a total number of explanatory variables.

Findings and Discussion

Table 1 Socio-demographics profile of young male migrants as follows less than half (40.7 per cent) of the young male migrants living in low-income slums of Mumbai are aged 25 and above, while only 26 percent are age 20. The majority of the young male migrants from the different region is not well educated, only 9 percent migrates are above high school educated and hence employed in blue collar jobs in Mumbai. More than half (57.4 percent) of the young male migrants involve in a factory and other work. Young male migrants living in the low-income slum of Mumbai maximum are related to the medium standard of living index. Near about three fourth young male migrants is Hindu. Almost 37 percent of them are married and migrated with their wives, while 29 percent of them are married and live away from their wife and 34 percent are never married. Of course, a very small proportion of young male migrants included in the study is borne and brought up in the city environment of Mumbai due to the migration of their parents to the city.

Table 2 Analysis of the type of substances used by young male migrants reveals that a large majority of them consume gutka/chewing/tobacco/mawa, while a very small proportion of them reported using consumption of ganja/cannabis among migrants as well as Non-Migrants. A larger proportion of Non-Migrants (64 percent) has taken moderate alcohol in their childhood compared to migrants (51 percent), which may be due to their urban living conditions where norms of socialization are different than among those borne and brought up in rural traditional settings. These issues are further getting reinforced when analyzed for the age at first alcohol use and the variation in the pattern of drinking.

Table 3 show the determinant the substance use among male migrant youth. The adjusted effect of education on substance use among migrants clearly show the effect of education with a significant decline in the odds ratios with increasing levels of education (OR=0.21,p<0.01 for high school and above and 0.45,p<0.01 for middle school). An independent analysis of the NFHS-II data also showed that prevalence of tobacco use decrease with increasing year of education levels (IIPS, 2000) Standard of living index are significantly correlated with substance use among migrant youth in low-income slum Mumbai. This study has analyzed substance use among male migrants in the milieu of their marital status and highlighted that those who are never married are less likely than married and living away from their wives. Mass media exposure on substance use among migrants are significantly rises in the odds ratios with increasing media exposure (OR= 2.5, p<0.01 for high exposure and 2.4.p<0.01 for moderate media exposure). Leisure time's activity is significantly associated with substances use among

migrant in Mumbai. Migrant youth who are engaged in three or more activities with their friends are 3.4 times more likely substance use at 1% level of significant than those who are not engaged in any type of activity. On the other hand odds ratio for those engaged in one or two activities with peers and friends during their leisure times is 2.8 ($p < 0.01$) compare with no activity.

Table 4 presents the determinants of age at first alcohol use among young male migrants. Age at first alcohol use among migrants are 1.45 times more likely compare to Non-Migrants at 5 percent level of significant. The adjusted effects of education on age at first alcohol use among migrants clearly show the effect of education with significantly raising in the odds ratios with increasing the level of education ($OR = 1.802$, $p < 0.01$ for high school and above). Age at first alcohol use among young male migrates in the context of their marital status and living arrangement decorated that those who are unmarried youth in low-income slum Mumbai are less likely to spoil age at first alcohol use compare to married and who are living with their wife. The male migrant's youths who are aware of high mass media exposure among them age at first alcohol use demonstrates high the odds ratios than their counterparts. Hyper-masculinity is significantly correlated to age at first alcohol use among migrant's youth in low-income slum of Mumbai. Leisure time's activities are also significantly associated with age at first alcohol use. Migrant youth who are engaged in three or more activities with their friends at the place destination are less than half times more likely to engage in age at first alcohol use ($OR = 0.47$, $p < 0.01$) than those are not engage in any activity with peers or friends. The corresponding odds ratio for those engaged in one or two activities with peers or friends during their leisure times is 0.693 ($P < 0.01$) as against those with no activity.

Table 5 indicates the determinants of the pattern of drinking among migrant youth. The adjusted effect of education on risky drinking, measured in terms of quantity and frequency of drinking, among migrants clearly demonstrate the effect of education with significant decline in the odds ratios with increasing levels of education ($OR = 0.41$, $p < 0.01$ for high school and above & 0.63 , $p < 0.10$ for middle school). A number of recent studies have analyzed the pattern of drinking among young male migrants in the context of their marital status and living arrangements and highlighted that those who are married and living away from their wives or never married are more likely than their married counterparts living with their wives to indulge in risky drinking and also in unprotected sexual transactions (Verma et.al. 2008). However, the same analysis by the migratory status of respondents portrays a contradictory pattern, where unmarried youth in the low-income slums of Mumbai is less likely to indulge in risky drinking after adjusting for the effect of their migratory status. Thus, migration HIV link seems to be complex in nature and may be governed by a number of implicit correlated of both in processes. Hyper-masculinity and leisure times activities are another two significant correlated of the pattern of drinking among migrant youth in low-income slums of Mumbai. Migrant youth who are engaged in three or more activities with their friends at the place of destination is over three and half times more likely to indulge in risky drinking ($OR = 3.5$, $p < 0.01$) than those who are not engaged in any activity with peers or friends. The corresponding odds ratio for those engaged in one or two activities with peers or friends during their leisure times is 2.1 ($p < 0.01$) as against those with no activity.

Policy implication

These findings bring out an urgent need to increase awareness about substance abuse among adolescent at the school level and creating mass media exposure such as more TVs and Radios.

In addition, the reach workers of different NGOs/CBOs are expected to play a vital role in enhancing awareness of this issue among migrant youth in low-income slums of Mumbai.

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Table 1: Socio-demographics profile of migrants and Non-Migrants of youth in Mumbai

Socio-demographic Characteristics	Migrant	Non-Migrant
Age Group		
20 and Below	26.3	13.8
21-24	33.0	32.2
25 and Above	40.7	54.0
Education		
Illiterate	16.2	13.9
Up to primary	22.3	17.7
Middle school	34.3	27.7
High school	18.6	27.5
Above high school	8.5	13.2
Occupation		

Factors Affecting Substances Abuse among Male Migrants Youth in Low-Income Slums in Mumbai, India

Rock breaker/loader/construction	10.6	13.3
Driver	24.7	16.1
Contract/self-home	7.2	5.8
Factory workers and others	57.4	64.8
Standard of Living Index		
Low	31.1	62.9
Medium	46.3	32.0
High	22.1	5.1
Religion		
Hindu	72.6	83.8
Muslim	11.2	11.1
Buddhist & others	16.2	5.10
Marital Status		
Married Live with wife	36.5	45.5
Married Live away from wife	29.1	2.7
Unmarried	34.4	51.9

Table 2: Percent Distribution of Respondents by consumption and Alcohol use among Migrants and Non-Migrants in Mumbai

Behavioral Characteristics	Migrants	Non-Migrants
Consumed Substances		
Pan with Tobacco	52.0	28.7
Bidi/Cigarettes	30.1	27.7
Gutka/ Chewing Tobacco/Mawa ganja/cannabis	64.9	66.2
Ever Used Special Type of Alcohol	82.5	89.4
Special Type of Alcohol in last 30 days	79.7	86.7
Childhood Exposure of Alcohol		
Low	46.3	30.9
Moderate	50.8	64.4
High	2.9	4.8
Age at First Alcohol Used		
Less than 15 years	5.1	4.7
15-20 years	57.1	72.1
more than 20 years	37.8	23.3
Pattern of Drinking		
Low	32.8	31.6
Moderate	23.8	20.2
High	43.3	48.2

Table 3: Odds of Substance use among male youth with selected explanatory variables

Independent Variables	Dependent Variable Substance use	95% Confidence Interval for Substance Use	
		Lower	Upper
Migration Status			
Non-Migrants®	1.000		
Migrants	1.101	0.764	1.587
Education			
Illiterate or Primary®	1.000		
Middle School	0.449***	0.296	0.682
High School and Above	0.205***	0.13	0.323
Standard of living Index			
Low®	1.000		
Medium	0.54***	0.382	0.765
High	0.395***	0.235	0.663
Marital Status			
Married Live with wife®	1.000		
Married Live away from wife	0.970	0.617	1.522
Unmarried	0.555***	0.395	0.78
Media Exposure			
Low®	1.000		
Moderate	2.426*	1.085	5.428
High	2.534*	1.146	5.603
Hyper masculinity			
Low®	1.000		
Moderate	1.218	0.862	1.722
High	1.171	0.789	1.738
Leisure Activity			
None®	1.000		
One or Two	2.828***	2.022	3.956
three or More	3.435***	2.146	5.499
Constants	3.041		
-2Log likelihood	1091.423		

Note: ® Reference category

*** (p<0.01), ** (p<0.05), * (p<0.1)

Table 4: Odds of age at first alcohol use among youth with selected explanatory variables

Independent Variables	Dependent Variable Age at first Alcohol use	95% Confidence Interval Age at first Alcohol use	
		Lower	Upper
Migration Status			
Non-Migrants®	1.000		
Migrants	1.45**	1.035	2.031
Education			
Illiterate or Primary®	1.000		
Middle School	1.076	0.779	1.486
High School and Above	1.802***	1.199	2.709
Standard of living Index			
Low®	1.000		
Medium	0.939	0.683	1.292
High	1.016	0.604	1.708
Marital Status			
Married Live with wife®	1.000		
Married Live away from wife	1.203	0.84	1.721
Unmarried	0.357***	0.257	0.498
Media Exposure			
Low®	1.000		
Moderate	1.601	0.709	3.618
High	2.121*	0.938	4.799
Hyper masculinity			
Low®	1.000		
Moderate	1.111	0.809	1.525
High	1.43**	0.997	2.051
Leisure Activity			
None®	1.000		
One or Two	0.693**	0.512	0.939
three or More	0.47***	0.306	0.721
Constants	0.38		
-2Log likelihood	1241.261		

Note: ® Reference category

*** (p<0.01), ** (p<0.05), * (p<0.1)

Table 5: Odds of Pattern of drinking among youth with selected explanatory variables

Independent Variables	Dependent Variable Pattern of Drinking [©]	95% Confidence Interval for Pattern of Drinking	
		Lower	Upper
Migration Status			
Non-Migrants [®]	1.000		
Migrants	1.209	0.868	1.684
Education			
Illiterate or Primary [®]	1.000		
Middle School	0.634*	0.453	0.887
High School and Above	0.414***	0.272	0.629
Standard of living Index			
Low [®]	1.000		
Medium	0.958	0.696	1.319
High	0.959	0.569	1.618
Marital Status			
Married Live with wife [®]	1.000		
Married Live away from wife	0.728	0.493	1.075
Unmarried	0.616**	0.447	0.849
Media Exposure			
Low [®]	1.000		
Moderate	1.32	0.625	2.79
High	1.367	0.648	2.881
Hyper masculinity			
Low [®]	1.000		
Moderate	0.928	0.67	1.285
High	0.627*	0.438	0.897
Leisure Activity			
None [®]	1.000		
One or Two	2.019***	1.47	2.772
three or More	3.546***	2.276	5.527
Constants	1.737		
-2Log likelihood	1205.239		

Note: [®] Reference category

*** (p<0.01), ** (p<0.05), * (p<0.1)

© Pattern of drinking has been categories into low and highsubstantial