

# **Sexual Behaviour and Its Determinants among Young Never-married Male Factory Workers in a South Indian Knit City**

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## **Introduction**

In India, there has been a sudden surge of interest during the last decade, mainly on account of threat of the HIV/AIDS pandemic, in studying the matters related to sexuality and sexual behaviour among special groups in general and among never-married youth in particular. In addition to this, there have been incidences of sexually transmitted diseases (STDs) from unsafe sexual and multi-partner relations. In this context, it is widely argued that the attitudes and beliefs of young people towards sexuality are becoming more liberal and as they lack correct knowledge about sexuality, contraception and STDs, including HIV/AIDS, the likelihood of high-risk sexual behaviour is higher, especially among never married men. Moreover, studies on abortion and the prevalence of STDs in India, though very few, confirm that much premarital sex is unprotected (Rangaiyan, 1996; Khanna, Gurbaxani and Sengupta, 2002; Ghule, 2004).

Youth, generally the stage falls between childhood and full manhood or womanhood, roughly the ages of 15-24, is distinct and crucial phase of development of human being. Specific attributes attached to this phase of life includes rapid physical growth and development, social and psychological maturity, but not all at the same time, sexual maturity and the onset of sexual activity experimentation, development of adult mental process and adult identity, and transition from total socio-economic dependence to relative independence (WHO, 1999). According to 2001 Census, in India, young men (15-24 years of age) occupy a substantial proportion (18.7 %), who are said to be more vulnerable to participate in sexual activities as compared to their

young girl counterparts. Moreover, during the recent past, the age at marriage, after which sexual relations are culturally accepted, among these young men is comparatively higher, as they are mostly either in the college or in search of employment so as to marry and establish a family, and thereby, such young men are more likely to be exposed to pre-marital sexual relations. Among young men, those working in factories are at greater risk, since they have ample chances of interaction with young girls, in addition to peer group interaction.

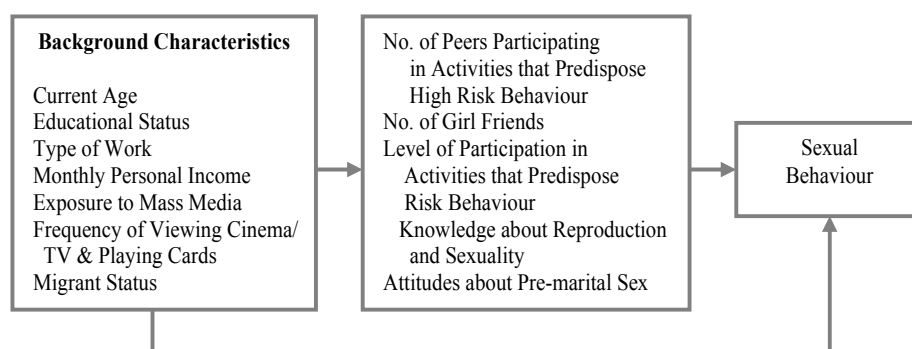
Earlier studies in India demonstrate that substantial proportions (about 20-25%) of young never-married men are sexually experienced before marriage and such proportions are still higher among those working and economically independent, especially in urban areas. However, except a few, most of such studies significantly differ from each other in their objectives, approaches and methodologies and therefore, they have cautioned that their findings cannot be generalized, as those studies are based on very small and/or convenience samples. Moreover, the major focus of those studies was to investigate the extent of sexual behaviour among youth rather than correlates of such behaviour. Obviously, most of these studies are restricted by their statistical analysis, and often do not proceed beyond the univariate or bivariate descriptive level. Therefore, this study builds on existing research by using a more analytic methodology with fairly sufficient large sample size of young factory workers, who are more vulnerable to pre-marital sexual behaviour.

### **Theoretical Framework and Earlier Research**

It has been noted that contact with western societies influenced the economy, urbanization, migration, education and religion in many African and Asian societies and cultures. These changes altered the religious customs and practices, which in turn led to a gradual change in sexual norms and behaviour. Consequently, there were changes in marriage customs, especially later ages at marriage, the abandonment of formal polygamy and non-marital (both pre-marital and extra-marital) sexual activity (Billet, 1993). Based on the theoretical understanding and earlier research, the following

simple conceptual framework has been proposed for empirical examination in this research work.

**Figure 1**  
**Theoretical Framework showing the inter-relationships between Young Men Workers' Background Characteristics and Sexual Behaviour**



It has been widely mentioned and empirically examined that a variety of individual characteristics of the young men like their own age, education, type of work, exposure to mass media, monthly personal income, frequency of participation in watching TV/Cinema & playing cards and migrant status would not only have large independent effects on their sexual behaviour, but also exercise net effects through the (intermediate) variable like number of peers exposed to high risk behaviour, their level of participation in activities that predispose risk behaviour like smoking, use of alcohol and drugs, etc., knowledge about reproduction and sexuality and attitudes towards pre-marital sex (Reddy, Eswhar and Shreedharan, 1983; Rakesh, 1992; Bhende, 1994; Family Planning Association of India, 1995; Sharma and Sharma, 1996; Rangaiyan, 1996). Further, in India, some studies have conclusively proved that the intermediate variables specified here would determine to a great extent the sexual behaviour of the young men (Family Planning Foundation and Operations Research Group, 1992; Goparaju, 1994; Savara and Sridhar, 1994; Rangaiyan, 1996; Sharma and Sharma, 1997; Sachdev, 1997; Awasthi and Pande, 1998; Abraham and Kumar, 1999;

Sankaranarayanan, 1999; Collumbien, Das and Bohidar, 2001; Ghule, 2004; Ramakrishna et al., 2004; Verma and Lhungdin, 2004;).

### **The Setting**

Tirupur (well-known as Knit City in this part of the country), one of the fastest growing cities in Coimbatore district, Tamil Nadu, has been selected purposively as the study area for this research. This city is situated about 55 kms. in northern direction of Coimbatore city, which is popularly known as *the Manchester of South India*, the district headquarters. The Knit city is well connected with railway and bus transportation. According to 2001 Census, Tirupur Municipality (urban centre) has a population of 344,543 with a sex ratio of 109 (males per 100 females), in addition to 196,202 in the surrounding urban area (Director of Census Operations, Tamil Nadu, 2004). This city is prominent for hosiery and as an export centre for hosiery products. It has more than 5000 units and about 85 percent of its products are sold in other states of India / countries of the World. The most important input is yarn, which is in abundance, besides the other products like sewing thread, labels, alkathens bags, elastic tapes, lace card box, etc. It is also on the rise in the export oriented power loom industry, which may overtake the cotton hosiery industry.

Generally, for most of these industrial establishments children and youth, irrespective of their gender background, are in great demand as workers to extend their labour and services, and thereby, such people are large in number in this town. However, in the recent past, with the Government's strict enforcement of Child Labour Abolition Act, children (aged 14 years or less) are not entertained to work in the factories. Therefore, young people, aged 15-24 years, especially boys, in considerable number migrate to this city from other districts of Tamil Nadu and even from other neighbouring states like Andhra Pradesh, Kerala and Karnataka, in addition to the daily commuters from nearby villages and natives of the same town so as to meet the demand of labour. These boys are mostly pass-outs and/or drop-outs from high schools. Of course, some do have education up to higher secondary level and/or a degree (Under Graduate or Post Graduate). They will come over to this city, leaving behind their

family members, to earn money by working one or the other industrial establishments. They generally live in small rented rooms mostly with peers. Initially, they work on daily wage basis, at times even work in two shifts (the duration of each shift is 8 hours), and get reasonably good income. Such environment is somewhat conducive to them to participate in activities that predispose risk behaviour viz., gambling, smoking, drinking of alcohol, use of drugs, viewing blue films / porno sites, reading pornographic literature, etc, in addition to working with girl colleagues, which in turn may motivate the young workers to participate in various forms of sexual activities. Therefore, the present study aims to concentrate only on the young men who work in the hosiery companies / establishments of Tirupur city.

### **Data and Methods**

Data for the present study was collected from 995 never-married young male workers of Tirupur City, Tamil Nadu during 2003 as part of a research project entitled “Youth Sexuality Project”. The sample young men were in the age group of 15-24 years, working in hosiery establishments only and who had working experience of at least one year (or more). They were selected (on census basis) from 5 clusters (streets or part of streets) of 52 wards (smaller administrative units in the city), which were selected on the basis of simple random sampling technique (Audinarayana, 2005).

The analysis is done at three stages. Firstly, the patterns of sexual behaviour among the young males working in the hosiery companies are analysed with the help of uni-variate analysis. At the second stage, the percent of young men who ever had experience in any sexual activity and the percent of young men participated in sexual (vaginal) intercourse (indicators of sexual behaviour) are examined across their background characteristics (differentials) through cross-tabular analysis and the associations have been tested with the  $\chi^2$  – test of significance. Lastly, the determinants of the young men ever had experience in any sexual activity and participated in sexual intercourse are analysed adopting the logistic regression analysis (Kendall, 1975, for details see Appendix).

## Variables Used for Analysis and their Measurement

**Dependent Variables** – Young Men Ever Had Experience in Any Sexual Activity  
(excluding any type of Masturbation) = 1, and  
If Not = 0

Young Men Ever Participated in Sexual Intercourse = 1, and  
If Not = 0

### **Independent Variables**

Young Men Workers' Current Age (in completed years)  
Educational Status (number of years of schooling)  
Type of Work (Tailor and Related, and Supervisor and Other  
White Collar Workers)  
Monthly Personal Income (Actual Monthly Income in  
Indian Rupees)  
Frequency of Exposure to Mass Media (Index - Pooled scores)  
Time Spent in Viewing Cinema / TV & Playing Cards  
(Actual time spent in hours per day)  
Migrant Status (Whether migrant or not)  
Number of Peers Participating in Activities that Predispose  
High Risk Behaviour (Index – Pooled Scores)  
Number of Girl Friends (Actual Number)  
Level of Participation in Activities that Predispose  
Risk Behaviour (Index – Pooled Scores)  
Knowledge about Reproduction and Sexuality  
(Index – Pooled Scores)  
Attitudes about Pre-marital Sex (Index – Pooled Scores)

All the independent variables are used as categorized form. The details of the indices are provided in Appendix and the descriptive statistics of the background characteristics of young men workers are provided in the last column of Table 2.

## Results and Discussion

### Patterns of Sexual Behaviour

Information about young men workers' experience in various forms of sexual behaviour is provided in Table 1. About 73 percent of never-married factory workers ever had experience with self masturbation, whereas substantial proportions of them (21-29%) had experience in other sexual acts like deep kissing, biting neck, hugging, etc., caressing of breast, and caressing hips / thighs. Only 19 percent of the young men workers reported to have participated in vaginal intercourse. Very few had experience in sexual activities like masturbation/oral/anal sex and sex between thighs with person(s) of same /opposite gender. About 32 percent of the sample workers said to be ever participated in any sexual activity (excluding masturbation).

**Table 1: Percentage Distribution of the Young Men Workers by Whether they Ever Had Sexual Experience in Various Sexual Activities**

N= 995

Sexual Activities	Ever Had Sexual Experience	
	%	Frequency
Self Masturbation	73.4	730
Masturbation with Same Gender	3.8	38
Masturbation with Opposite Gender	3.5	35
Deep Kissing	28.7	286
Biting Neck, Hugging, etc.	26.5	264
Caressing of Breast	24.4	243
Caressing Hips / Thighs	20.8	207
Sex between Thighs	1.5	15
Oral Sex with Same Gender	0.4	4
Oral Sex with Opposite Gender	1.2	12
Anal Sex with Same Gender	0.8	8
Anal Sex with Opposite Gender	0.3	3
<b><i>Vaginal Intercourse</i></b>	<b><i>18.8</i></b>	<b><i>187</i></b>
<b><i>Had Any Sexual Experience</i></b>	<b><i>31.6</i></b>	<b><i>314</i></b>

**Note:** Percentages would not add up to 100 because of multiple answers.

### Results based on Bivariate Analysis on Sexual Behaviour

Results provided in Table 2 reveal that among the major background characteristics of the respondents, the percent who ever had experience in any sexual act as well as the percent participated in sexual intercourse found to be higher (Chi-square results also turn out to be highly significant) among those young men workers who ever participated (at lower and higher level) in activities that predispose risk behaviour, closely followed by their higher level of knowledge on reproduction and sexuality aspects, and earning better monthly personal incomes (moderate and higher levels) than their counterparts. Likewise, the two patterns of sexual behaviour under consideration are also found to be higher among those who are little older in age (20-24 years), educated up to middle school and high school & above, and migrant workers than their counterparts.

**Table 2: Percentage Distribution of the Young Men Workers by their Experience in Any Sexual Act and Sexual Intercourse across their Background Characteristics**

Background Characteristics of the Respondents	Experience in Any Sexual Act		Participation in Sexual Intercourse		No. of Young Men	
	%	No.	%	No.	No.	%
<b>Current Age</b>						
15 – 19	19.6	76	10.8	42	388	39.0
20 – 24	39.2	238	23.9	145	607	61.0
$\chi^2$ - Value; p-level	42.193; 0.001		26.466; 0.001			
<b>Education</b>						
Up to Primary School	25.9	58	10.3	23	224	22.5
Middle School	32.3	140	21.0	91	434	43.6
High School and above	34.4	116	21.7	73	337	33.9
$\chi^2$ - Value; p-level	4.706; 0.01		13.829; 0.001			
<b>Type of Work</b>						
Tailor and Related works	29.3	218	16.5	123	745	74.9
Supervisors / White Collar Workers	38.4	96	25.6	64	250	25.1
$\chi^2$ - Value; p-level	7.237; 0.01		10.134; 0.001			
<b>Monthly Personal Income (in Rs.)</b>						
< 2000	21.1	51	12.4	30	242	24.3
2000 – 2999	28.3	132	17.8	83	467	47.0
3000 +	45.8	131	25.9	74	286	28.7
$\chi^2$ - Value; p-level	41.532; 0.001		16.202; 0.001			
<b>Exposure to Mass Media (Index)</b>						
Lower	29.6	69	20.2	47	233	23.4
Moderate	34.1	98	18.5	53	287	28.8
Higher	30.9	147	18.3	87	475	47.8
$\chi^2$ - Value; p-level	1.380; NS		0.381; NS			



**Table 2: (Continued)**

Background Characteristics of the Respondents	Experience in Any Sexual Act		Participation in Sexual Intercourse		No. of Young Men	
	%	No.	%	No.	No.	%
<b>Time Spent on Viewing TV/ Movie and Playing Cards (Index)</b>						
< 2 hours per day	32.6	124	19.7	75	380	38.2
2 hours or more per day	30.9	129	18.2	112	615	61.8
$\chi^2$ - Value; p-level	0.328; NS		0.358; NS			
<b>Number of Girl Friends</b>						
0	28.8	159	17.7	98	553	55.6
1 - 5	33.6	79	19.1	45	235	23.6
6 +	36.7	76	21.3	44	207	20.8
$\chi^2$ - Value; p-level	5.026; 0.10		1.258; NS			
<b>Number of Peers Participating in Activities that Predispose High Risk</b>						
0	26.3	103	14.0	55	392	39.4
1 - 4	33.9	120	22.9	81	354	35.6
5 +	36.5	91	20.5	51	249	25.0
$\chi^2$ - Value; p-level	8.831; 0.01		10.168; 0.01			
<b>Participation in Activities that Predispose Risk Behaviour (Index)</b>						
Not Participated	2.7	5	1.6	3	188	18.9
Participated to Some Extent	26.3	129	13.8	68	491	49.3
Participated to a Large Extent	57.0	180	36.7	116	316	31.8
$\chi^2$ - Value; p-level	173.459; 0.001		110.753; 0.001			
<b>Knowledge about Reproduction/ Sexuality and Related Issues (Index)</b>						
Lower	17.7	93	9.7	51	525	52.8
Higher	47.0	221	28.9	136	470	47.2
$\chi^2$ - Value; p-level	98.587; 0.001		60.037; 0.001			
<b>Attitudes towards Premarital Sex (Index)</b>						
Conservative	34.9	324	24.4	104	427	42.9
Liberal	29.0	451	14.6	83	568	57.1
$\chi^2$ - Value; p-level	3.856; 0.05		15.162; 0.001			
<b>Migrant Status</b>						
Non-Migrant	23.9	108	9.7	44	452	45.4
Migrant	37.9	206	26.3	143	543	54.6
$\chi^2$ - Value; p-level	22.524; 0.001		44.541; 0.001			
Total	31.6	314	18.8	187	995	100.0

**Note:** The percentages of those ever had experience in any sexual activity and sexual intercourse have been calculated for each category of the variables (row-wise).

In the last column, the total number of sample in each category of the variable and their percent has been presented (column-wise).

Chi-square values which ever are significant at least 0.10 level and above have been marked as *Italics*.

The percent of young men participated in any sexual activity as well as sexual intercourse is noted to be higher (and highly significant) among those who are working as supervisors and other workers in office (mostly as white collar workers), and also among those who have comparatively higher number of peers participating in activities that predispose high risk behaviour, whereas such percent is found to be lower among those who are liberal in their attitudes towards pre-marital sex compared to their counterparts. On the other hand, the percent of young men ever had experience in any sexual activity is appears to be comparatively higher among those who have some (1-5 in number) and large (6 or more) girl friends than those who did not have a single girl friend. The Chi-square results also turn out to be highly significant (at different levels) in this regard. Rest of the variables showed neither consistent nor statistically significant patterns of associations with the two indicators of sexual behaviour under consideration.

#### **Results based on Multiple Regression Analysis on Sexual Behaviour**

Multivariate results suggest that controlling for other factors used in the model, the odds of young men ever having experience in any sexual activity as well as in hetero-sexual intercourse are significantly ( $p < 0.001$ , respectively) higher among those young men who are participating at large as well as some extent in activities that predispose risk behaviour than those who did not participate in such activities. Likewise, the likelihood of participation in any sexual act as well as in sexual intercourse is found to be significantly ( $p < 0.001$ ) higher among those young men whose level of knowledge about reproduction and sexuality related issues is observed to be higher than among whom such knowledge is comparatively less. It is conspicuous to note that the odds of participating in any sexual act and sexual intercourse are higher among the young migrant workers than their non-migrant counterparts ( $p < 0.01$  and  $p < 0.001$ , respectively). Another pertinent point noted here is that young workers who are liberal in their attitudes towards pre-marital sex tend to participate in any sexual activity as well as premarital heterosexual intercourse significantly ( $p < 0.01$  and  $p < 0.001$ , respectively) lesser extent than those young men who appeared to be conservative in such attitudes.

**Table 3: Results of Logistic Regression Analysis on Young Men Workers' Experience in Any Sexual Activity and Sexual Intercourse**

Explanatory Variables	Odds Ratios	
	Ever Had Any Sexual Experience	Participated in Sexual Intercourse
Current Age ( <i>Ref: 15-19 years</i> )	1.000	1.000
20-24 years	1.286	1.329
Education ( <i>Ref: Up to Primary School</i> )	1.000	1.000
Middle School	1.134	2.029**
High School and above	0.872	1.372
Type of Work ( <i>Ref: Tailor and Related works</i> )		
Supervisors / Other White Collar Workers	1.028	1.184
Monthly Personal Income ( <i>Ref: Rs. &lt;2000</i> )	1.000	1.000
2000 – 2999	1.011	1.176
3000+	1.580*	1.251
Exposure to Mass Media (Index) ( <i>Ref: Lower</i> )	1.000	1.000
Moderate	1.401	0.886
Higher	0.999	0.740
Time Spent to view TV/Movie and Playing Cards (Index) ( <i>Ref: &lt;2 hours per day</i> )	1.000	1.000
2 or more hours per day	0.884	1.043
Number of Girl Friends ( <i>Ref: 0</i> )	1.000	1.000
1 - 5	1.324	1.156
6 +	1.733**	1.441
Number of Peers Participating in Activities that Pre-dispose High Risk ( <i>Ref: 0 – 2</i> )	1.000	1.000
3 - 5	1.011	1.293
6 +	1.215	1.197
Level of Participation in Activities that Predispose Risk Behaviour (Index) ( <i>Ref: Not Participated</i> )	1.000	1.000
Participated to Some Extent	8.883***	6.394***
Participated to a Large Extent	27.103***	19.085***
Knowledge of Reproduction / Sexuality and Related Issues (Index) ( <i>Ref: Lower</i> )	1.000	1.000
Higher	2.743***	2.513***
Attitudes towards Premarital Sex (Index) ( <i>Ref: Conservative</i> )	1.000	1.000
Liberal	0.677**	0.485***
Migrant status ( <i>Ref: Non Migrant</i> )	1.000	1.000
Migrant	1.600**	2.690***
-2 Log Likelihood	962.262	755.146
Chi-Square (d. f.)	278.485 (18)	212.293 (18)
Level of Significance	0.000	0.000
N	995	995

**Note:** +, \*, \*\*, and \*\*\* = t-values are significant at 0.10, 0.05, 0.01, and 0.001, respectively.

Some of the background characteristics of young men workers have exhibited significant associations with one or the other patterns of sexual behaviour under consideration. The odds of ever having experience in any form of pre-marital sex are comparatively higher among those who earned comparatively higher level of income as well as among those who have large number of girl friends than among those who are earned less income and no girl friend at the time of survey ( $p < 0.05$  and  $0.01$ , respectively); such patterns exist even in the case of those participated in heterosexual intercourse, but in an insignificant manner. On the other hand, the likelihood of participating in sexual intercourse is noted to be higher among those who had education up to middle school level and high school & above, but turned out significant only in the case of former one ( $p < 0.01$ ) as against to those who are educated up to primary school or less, but these patterns are inconsistent in the case of those who ever had any sexual experience. Young men's current age, type of work and no. of peers participating in activities that predispose high risk have exhibited the expected direction of net effects on the forms of sexual behaviour, but the results didn't turn out as statistically significant. On the other hand, young workers' level of exposure to mass media and time spent to view TV / movies and playing cards (index) did not showed consistent individual effects on the patterns of sexual behaviour under considerations.

### **Conclusions and Implications**

Among young male hosiery workers of Tirupur city, Tamil Nadu, India, about one-third (32%) ever had experience in some form of sexual act (excluding masturbation), whereas 19 percent had hetero-sexual intercourse. Bivariate analysis, by and large, shows that young male workers who are comparatively higher in age, better educated, working as supervisors and other office workers, earning better income, participated in activities that pre-dispose high risk behaviour, have more number of friends (peers) participating in activities that predispose high risk, better knowledgeable about reproduction and sexuality, and migrated to the city have exhibited higher percent of having experience in any sexual activity as well as pre-marital sexual intercourse than their counterparts. Conversely, the never-married young workers who are

comparatively liberal in their attitudes as against conservative in nature have showed a higher tendency to indulge in pre-marital sex.

Through logistic regression analysis, it is reiterated that young male workers who participated in activities that predispose high risk behaviour and whose level of knowledge about reproduction and sexuality related issues to large extent tend to have experience in any sexual activity as well as in hetero-sexual intercourse at a higher extent. While there is a theoretical support for both the propositions, the reverse causation may not be ruled out in the case of latter one. Another major result of this study is that workers who migrated from other places to the Tirupur city (place of study) are more likely to have sex than their non-migrant counterparts. The possible reasons for such finding are: a large number of migrant workers reside in rented rooms with peers, would have more opportunities to indulge in activities that predispose risk taking behaviour, more interaction with peers who have experience in risky life styles and to some extent less parental supervision on their daily activities (Audinarayana, 2005). It is also conspicuous to note that young workers who are comparatively liberal in their attitudes towards pre-marital sex tend to participate in any sexual activity as well as hetero-sexual intercourse to a significantly lower extent than their counterparts, which is contradictory to the general contention. This could be because of the reason that the items included in the composite index on attitudes towards pre-marital sex (see Appendix) are mostly related to young boys (in comparison with girls), which demonstrate some sort of gender-specific attitudes prevailing in the society. Such attitudes did not transform in reality may be due to the upper hand of the societal norms (related to stricter opposition to pre-marital sex) over liberal attitudes towards pre-marital sex. Young never married male workers with higher income and more number of girls friends have shown higher odds of indulging in any sexual activity than their counterparts, whereas workers with middle school education have exhibited significant odds of having experience in hetero-sexual intercourse.

Based on the findings, a few policy and programme implications can be suggested so as to improve the sexual and reproductive health of the young men workers. There is an urgent need to educate the young never-married workers in

general and those working in hosiery establishments, in particular about the dangers involved in participating in risky lifestyles and unsafe pre-marital sexual behaviour. Such attempts have to be taken up at the family, community and factory levels through social education and informal education involving parents, relatives/neighbours, and non-governmental organizations as well as through professionals engaged in counseling. Reliable and scientific information about the human reproduction and sexuality, consequences of unprotected sex and need for safe sex may be imparted to all young men through different mass media channels, in addition to special programmes at the factory premises so as to increase their knowledge, which may motivate them to avoid risky sexual behaviour.

Special programmes for migrant workers have to be organised so as to apprise them about the ill effects of participating in risky lifestyles, need for improving their standard of living and motivating to come up in life in a proper fashion rather than wasting their time and money in participating sexual activities, and to develop responsibility in family life as well as looking after their parents and family members. It is recommended that participatory, interactive and informal programmes may be designed for youth in general and for young male workers in particular focusing on clarification of values related to pre-marital sex, and decision-making skills so as to clarify the confusion with respect to sexual attitudes and values, and increased understanding about the use of condoms with a positive sense of care for the partner.

Under the umbrella of Reproductive and Child Health programme in India, adolescent girls of those attending high schools are being informed with issues related to menstruation, anatomy of reproductive organs and related issues. Similar attempts may be devised and carried out for the factory workers in general and migrant workers in particular so as to disseminate the information about the anatomy and physiology of male and female reproductive systems, and consequences of unprotected sex and the need for safer sex. For this purpose, weekly meetings / lectures may be conducted at schools, colleges and community and factory establishments by the Family Planning workers and/or by officials of Medical Colleges / Health Departments.

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## APPENDIX:

**Level of Exposure to Mass Media (Index):** Pooled Scores of young workers exposure to four mass media channels with frequency such as: Reading Newspapers / Magazines, Watching Movies, Watching TV / Cable TV and Listening to Radio. A score of '0', '1', and '2' have been assigned for those who are exposed to 'Never', 'Occasionally' and 'Frequently' for each of these channels. Based on the pooled scores for each respondent, they have been classified into three levels of exposure to mass media viz., Lower (Scores 0-6), Moderate (Scores 7-8) and Higher (Scores 9-10).

**Level of Participation in Activities that Predispose Risk Behaviour (Index):** Pooled scores of young workers' participation with frequency in activities such as Playing Cards for Gambling, Drinking Alcohol, Use of Drugs, Reading Pornographic Literature and Viewing Blue Films / Pornographic Sites. A score of '0' for 'Never Participated in any of these Activities', '1' for those who 'Participated Occasionally in these Activities', and '2' for those who 'Participated Frequently in these Activities' have been assigned. Based on the pooled scores for each respondent, they have been classified into three levels of participation in activities that predispose risk behaviour viz., not participated in any risk activity (Scores 0), participated to some extent (Scores 1-4) and participated to a large extent (Scores 5-12).

**Knowledge about Reproduction and Sexuality (Index):** Pooled scores of Young workers' knowledge about various items (12 in number) of reproduction and sexuality viz., Reproductive age for boys, Reproductive age for Girls, Bodily Changes after Attainment of Age among Boys like Growth of Mustache / Beard, Bodily Changes after Attainment of Age among Girls like Growth of Breast, No. of days each Menstruation lasts among Girls, Day of Releasing Egg in a Menstrual Cycle, Knowledge of Safe Period, Age attainment for Boys, Age attainment for Girls, Wearing Dhoties by Boys, Wearing Sarees by Girls and Using Condom for Safe Sex. Scores of '1' and '0', respectively for the responses of 'Correct knowledge' and 'Otherwise' have been assigned. Based on the pooled scores for each respondent, they

have been classified into two groups viz., Lower level of knowledge (scores 0-4) and Higher level of knowledge (5-10).

**Attitudes about Pre-marital Sex (Index):** Pooled scores of young workers' attitudes about four items of pre-marital sex viz., Boys have to taught about sex before marriage, It is right for boys to Masturbate, Boys should have experience in sex at least once before marriage and Boys can have multiple sex partners. A score of '1' and '0', respectively have been assigned for those who expressed 'Agree / Neutral', and 'Disagree' for each of these responses to these attitudes. Based on the pooled scores for each respondent, they have been classified into two groups, viz., 'Conservative' (scores 0-2) and 'Liberal' (scores 3-4).

**Logistic Regression Technique:** To understand the influence of each explanatory variable on the dependent variable, which is dichotomous, it is preferable to use logistic regression. The logistic regression technique can be used not only to identify the risk factor but also to predict the probability of success (Kendall, 1975). The logistic of the probability of occurrence (p) is expressed as a function of explanatory variables:

$$\text{Logit (P)} = \log (P/1-P) = \beta_0 + \sum \beta_i x_i$$

Where  $x_i$ 's are the explanatory variables and  $\beta_i$ 's are the coefficients. Logistic regression coefficients and also the level of significance have been estimated for each of the dependent variables separately.

