A STUDY OF HEALTH RISK BEHAVIOUR AMONGST 14-19 YEAR ADOLESCENT STUDENTS IN URBAN AREAS OF DISTRICT JHANSI

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ABSTRACT:

Objectives: To study the prevalence of health risk behaviours amongst 14-19 year adolescent students in urban areas of District Jhansi (Uttar Pradesh).

Study design : Cross-sectional study.

Units of study and Study area : 14-19 year old adolescent students studying in various Colleges of Jhansi.

Sampling technique : Two stage cluster sampling.

Participants : 366 students [263 (71.86%) male and 103 (28.14%) female].

Results : Main risk behaviour among students found to be cigarette/bidi smoking, drinking alcohol and tobacco use.

15.30% students tried cigarette/bidi smoking at least once in lifetime while 5.46% smokers tried smoking at age less than 14 years. 0.82% students were found doing heavy smoking. Among smokers 21.03% never tried to quit smoking in past 6 months. All these behaviours were more common among male than in female. Out of all students, 19.95% had ever drink alcohol and 4.64% had their first drink of alcohol at age <= 14 years. Drinking habits were also more common among male than in female. Favourite celebrity were the most common role models seen smoking (38.79%) and drinking (16.94%) followed by father smoking (24.60%) and drinking (14.48%).

Key word : Adolescent.

Introduction:

The main health risk behaviour in adolescent is substance abuse. The problem of substance abuse has become a global public health concern and is fast assuming alarming proportions not only in developed countries but also in developing countries. Seven million deaths have been attributed to cancer in 2001, of these 35% were attributable to nine potentially modifiable risk factors, including smoking and excessive alcohol consumption. Alcohol consumption is a leading risk factor for cancer of the upper aerodigestive tract (esophagus, pharynx, larynx and oral cavity), liver and colon, while smoking increases the risk of mouth, oropharyngeal, and esophageal cancers as well as cancer of the trachea, bronchus, lung, liver, stomach and urinary bladder. [1]

The trend of urbanization made adolescent age group much vulnerable to substance abuse. [2] The use of illicit substances frequently starts among school children during adolescence. [3] The population groups at great risk are those undergoing rapid socio-economic and cultural changes. [4] Their age and often sudden wide exposure to new environments may render them extremely vulnerable for substance abuse. [5]

This study was carried out to find the main risk behaviours and their magnitude among adolescent so that reformative measures can be taken on time to prevent further complications arising from health risk behaviour.

Material and Method:

The study was a cross sectional analysis of the subject population. Units of study were 14-19 years students studying in various schools and colleges of Urban Jhansi. Two stage cluster sampling design was used. In 1st stage random selection of schools and colleges was done. 2nd stage comprised of random sampling of one class each from standards IXth, Xth, XIth and XIIth & 1st, 2nd Year of graduation from the selected colleges. Principles of the identified schools and colleges were contacted and informed about the purpose of the study. They were apprised of the fact that anonymity and confidentiality of the students will be maintained in the study. Students within age group of 14-19 years and wishing to participate in the study were only included. The data collection was done in selected class room with no teacher or staff being present in the room. At the beginning of the data collection students were informed not to write their name or any identification mark on the paper.

Data analysis was done using Microsoft excel software.

Results and Discussion :

Table 1

AGE AND GENDER WISE DISTRIBUTION OF STUDY POPULATION

Age (years)	Male	Female	Total
	N (%)	N (%)	N (%)
14	30(66.7)	15(33.3)	45
15	41(69.5)	18(30.5)	59
16	58(72.5)	22(27.5)	80
17	49(77.7)	14(22.2)	63
18	47(73.4)	17(26.5)	64
19	38(69.1)	17(30.9)	55
Total	263(71.8)	103(28.1)	366

Out of total 366 participants 263(71.86%) were male and 103 (28.14%) female.

Table 2

HEALTH RISK BEHAVIOURS CONCERNING TOBACCO USE

Behaviour	Male (N=263)	Female (N=103)	Total (N=366)
	(%)	(%)	(%)
Ever tried cigarette/bidi	19.01	5.83	15.30
Age at first smoking a whole cigarette/bidi =<14 years	6.84	1.94	5.46
Current cigarette/bidi use (>=1 time in past 30 days)	8.37	1.94	6.56
Current heavy smoking (>5/day on days of smoking)	1.14	0.0	0.82
Smokers not tried to quit smoking in past 6 months	30.10	0.0	21.03
Ever tried smokeless tobacco Forms	11.03	2.91	8.74
Current smokeless tobacco use (>=1 time in past 30 days)	7.99	0.97	6.01

15.30% (n=56) students tried cigarette/bidi smoking at least once in lifetime. 5.46%
(n= 20) smokers tried smoking at age less than 14 years.

Table 3
HEALTH RISK BEHAVIOUR CONCERNING ALCOHOL USE

Behaviour	Male (N=263) (%)	Female (N=103) (%)	Total (N=366) (%)
Ever had a drink of alcohol	20.91	17.48	19.95
Age at first drinking alcohol <= 14 years	4.94	3.88	4.64
Current alcohol use (>=1 time in past 30 days)	5.70	3.88	5.19
Episodic heavy drinking (binge drinking) >= 1 time in life	7.60	0.0	5.74

The percentage of students who had ever drink alcohol is 19.95%. (20.91% boys and 17.48% girls). In all 17 (4.64%) students have their first drink of alcohol at age <= 14 years. Their mean age for initiation of alcohol drinking was 15.2 years (+- 2 years SD). While the youngest age reported was 9 years.

Table 4
BEHAVIOUR CONCERNED WITH SUICIDE

Behaviour	Male (N=263) (%)	Female (N=103) (%)	Total(N=366) (%)
Seriously considered attempting suicide in past 12 months	3.42	4.85	3.82
Actually attempted suicide >=1time in past 12 months	0.76	0.97	0.81

Suicidal thoughts and attempting suicides was more in females than males. 4.85 % female students seriously considered suicide in comparison to 3.42% male. 0.97 % females went ahead and actually attempted suicide. 3 female (2.91%) and 2 male (0.76%) students reported having made multiple tries at committing suicide.

Table 5
ROLE MODELS SEEN SMOKING CIGARETTES AND / OR DRINKING ALCOHOL

Behaviour	Male (N=263) (%)		Female (N=103) (%)		Total (N=366) (%)	
	Smoking	drinking	smoking	drinking	smoking	drinking
Father	25.86	15.59	20.39	6.63	24.60	14.48
Mother	1.14	0.76	0.55	0.0	1.09	0.55
Brother/sister	4.56	3.42	4.85	2.76	4.64	3.82
Best fried	17.11	6.46	1.10	0.0	12.84	4.64
Favourite teacher	10.27	1.14	11.65	1.14	10.66	1.37
Favourite celebrity	33.84	16.73	51.45	9.94	38.79	16.94

Nearly 1/4th (24.60%) of the students have seen their father smoke, more boys than girls. 14.48% seen their father drinking. A very small number of students had seen their mother smoking (1.09%) and drinking (0.55%). Sibling had been seen smoking by 17(4.64%) and drinking by 14 (3.82%) and best friend by 12.84 & 4.64% respectively. Favourite teacher seen smoking by 10.66% & drinking by 1.37% while Favourite celebrity by 38.79% and 16.94% respectively.

Main risk behaviour among students found to be cigarette/bidi smoking, drinking alcohol, tobacco use and suicidal attempts. Suicidal thoughts and reporting of attempted suicides was more in females than males. All the behaviours regarding tobacco use were significantly higher among male than in female. Tobacco use was found to be significantly more among students who had seen their brother/sister, best friend smoke. Alcohol use was found to be more among college students, with increasing age and male gender. It was significantly more among students whose parents were graduates/post graduates, among children of working mothers.

Conclusion :

Prevalence of smoking, drinking alcohol and tobacco use is common among adolescent students and majority of them do not try to quit. Alcohol and drug abuse cost society an estimated $86.1 billion from direct costs and losses in productivity related to crime, social welfare expenditures, motor vehicle crashes, and fire destruction. Drugs are responsible for about 25 to 30 percent of property damage and 4 to 5 percent of violent crime (the causal values are slightly different for the specific offenses within types). Alcohol is responsible for about 25 to 30 percent of violent crime and 3 to 4 percent of property crime. So there is a urgent need to educate the students about the harmful behaviour, their short term and long term consequences and convince them to quit these habits

References:

1. Narayan KM, Chadha SL, Hanson RL, Tandon R, Shekhawat S, Fernandes RJ, et al . Prevalence and patterns of smoking in Delhi: Cross sectional study. Br Med J 1996;312:1976-9.

2. www.who.org : WHO: Young girls using tobacco almost as much as boys in many regions of the world.

3. Alcohol, tobacco and cancer ; Chi Hin Cho Hong Kong, Vishnudutt Purohit Bethesda, Md.

4. Park K. Park's textbook of preventive and social medicine. 19 th ed. Jabalpur: Banarsidas Bhanot Publishers; 2007.

5. Sinha DN, Gupta PC, Pednekar M. Tobacco use among students in Bihar (India). Indian J Public Health 2004; 48: 111-7

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FAILURE IS NEVER FINAL.