

Original Research Article

A study on sexual behaviour practiced by the adolescent and its source of inspiration

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ABSTRACT

Background: Adolescence is a developmental period of rapid physical, psychological, sociocultural, and cognitive changes characterized by efforts to confront and surmount challenges and to establish a sense of identity and autonomy. Objective was to study the sexual behavior practiced by the adolescent and its source of inspiration.

Methods: An observational cross-sectional study was carried out in Department of Community Medicine, Santosh Medical College, Ghaziabad and Urban area of district Ghaziabad. 750 Adolescents aged 10 to 19 years studying in the selected schools of urban Ghaziabad were included for the study. The period of study was from November 2011 to October 2012.

Results: 26.8% of the students were sexually active. Boys were sexually more active than girls (34.7% vs. 18.9%). Condom use was present in 51.2% of the sexually active students. Nearly half (52.3%) of sexually active males had sex under the influence of pornography, almost one-third (32.3%) had sex merely because of peer pressure and 15.4% did it for curiosity and fun. Among girls who experienced sex 70.4% succumbed to peer pressure and 23.9% under the influence of pornography. In the present study more boys (77.9%) than girls (54.1%) had knowledge about reproductive health issues and this difference between two sexes were found to be statistically significant.

Conclusions: The present health status of the study population has the potential possibility of leading to increased health problems for this vulnerable population, in future.

Keywords: Adolescent, Reproductive health issues, Sexual behavior, Source of inspiration

INTRODUCTION

Adolescence is a period of transition between childhood and adulthood. It occupies a crucial and important place in the life of human beings whereby transition is characterized by rapid rate of growth.¹ The origin of the term is from the Latin word, "adolescere" meaning "to grow, to mature" indicate the defining features of adolescence. However, a universally accepted definition of the concept has not been established.² WHO defines adolescence both in terms of the age (spanning the ages between 10 and 19 years) and in terms of a phase of life marked by special attributes. These attributes include: rapid physical growth and development; physical, 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; transition from total socio-economic dependence to relative independence.³

Risk behavior

Risk-taking refers to the tendency to engage in behaviors that have the potential to be harmful or dangerous, yet at the same time provide the opportunity for some kind of outcome that can be perceived as positive.⁴ Adolescents suffer from various health problems due to their risk

behavior like sexual activity, dietary behavior, physical activity and use of alcohol, tobacco, drug etc.

Positive risk-taking behavior

Risk-taking is a positive tool in an adolescent's life for discovering, developing and consolidating his or her identity. Adolescent's risk-taking becomes negative only when the risks are dangerous. Positive risks are often understood as 'challenges' and can turn unhealthy risks in a more positive direction or prevent them from ever taking place.

Negative risk-taking behavior

The troublesome adolescent years have been a documented topic of societal concern for centuries. Plato characterized the adolescents of his era as argumentative and easily excitable, while Aristotle found them impulsive, prone to excess and exaggeration and lacking self-restraint. For centuries, the decade of adolescence from puberty to early adulthood has been viewed as risky and problematic.⁵

Negative risk-taking behaviors, which can be dangerous for adolescents, include drinking, smoking, drug use, reckless driving, unsafe sexual activity, disordered eating, self-mutilation, running away, stealing, gang activity and others. Unhealthy adolescent risk-taking may appear to be 'rebellion' an angry gesture specifically directed at parents. However, risk-taking, whether healthy or unhealthy, is simply a part of a teen's struggle to test out an identity by providing self-definition and separation from others, including parents.⁶ These risks must be handled carefully.

The question, which comes to mind, is why adolescent behave in this manner and adopt risky behaviors. The meaning of word adolescence is 'to emerge'.⁷ Hence this study was conducted to study the sexual behavior practiced by the adolescent and its source of inspiration.

METHODS

The present observational cross-sectional study was carried out in Department of Community Medicine, Santosh Medical College, Ghaziabad and Urban area of district Ghaziabad. The unit of the study was selected adolescent students studying in randomly selected schools of Ghaziabad city. Adolescents aged 10 to 19 years studying in the selected schools of urban Ghaziabad were included for the study. The period of study was from November 2011 to October 2012. The required sample was taken using simple random sampling technique.

Sample size

The proposed study assessed sexual behaviours among the adolescents. In view of the above factors the sample

size was calculated by taking mean of the prevalence of the various individual risk behaviours.

Mean prevalence of the substance abuse = 25.38% (since the prevalence of substance abuse from various studies ranges between 2.28% - 45.9%. The mean prevalence comes out to be 25.38%).

Prevalence of risky dietary behaviour = 48% (since the prevalence of malnourishment and anemia among adolescents in studies from National Nutrition Monitoring Bureau (NNMB)).

Prevalence of risky sexual behaviour⁸ = 15%

Prevalence of physical activity⁹ = 53%

Therefore, mean prevalence (p) = 35%

The sample size for the study was calculated using the formula¹⁰

$$n = Z \cdot Z \cdot p \cdot q / L \cdot L \text{ or } n = Z^2 p q / L^2$$

$$Z = 2$$

$$n = \text{minimum required sample size}$$

$$p \text{ (prevalence rate)} = 35$$

$$q = 1 - p = 65$$

$$L = \text{Allowable error } 10\% \text{ of } p = 3.5\%$$

$$\text{Desired confidence level} = 95\%$$

$$\text{Hence, minimum sample size (n)} = 4 \times 35 \times 65 / 3.5 \times 3.5 = 742$$

So minimum required sample size was 742.

For convenience in equal distribution, 750 adolescents, i.e. 375 males and 375 females were taken up for the purpose of study as sample size.

Inclusion criteria

Adolescents (male and female) between 10 to 19 years of age who volunteered for study at the time of data collection from the selected schools were included in the study.

Exclusion criteria

Adolescents who did not volunteer for study and adolescents studying in the school for less than six months were excluded from the study.

Sampling procedure

The present study was conducted in the Ghaziabad City. All the coeducation schools of Ghaziabad City were included in the sampling frame for the study. Randomly five schools were selected, using lottery method. These were Bal Bharti Public School, Ghaziabad, Cambridge Public School, Ghaziabad, Delhi Public School, Ghaziabad, Diwakar Model School, Ghaziabad, DAV

Public School, Ghaziabad. Then considering absentees and non-response, 150 adolescents were chosen from each selected school. Further 75 male adolescent students and 75 female adolescent students were randomly chosen. A repeat visit was made for the students who were absent.

Methodology

After planning the modus operandi of the survey and after deciding the area of investigation, the next step was school visits for the active support and participation, it was imperative to explain the aim of the study to the principals of schools and the targets and consent was taken for the same. For the purpose of this study, detailed information was collected on a pre-designed structured questionnaire.

Data collection

The principals of the identified schools were contacted. They were informed about the purpose of study, and apprised of the fact that anonymity and confidentiality of the respondents will be maintained in the study. The principals were also informed, that following administration of the tools of data collection to the students, an interactive health education session would be held for the students, so that the exercise is mutually beneficial. In each school, adolescents in the class were encouraged to provide honest and unambiguous response to the question. A written permission and consent from the principals was obtained prior to conducting the study in schools. The investigator administered the tools of data collection and subjects were asked to fill the questionnaire. The opinion of the students was elicited and their queries were sought to be answered as far as possible.

Tools of data collection (Interview schedule)

A pre designed structured questionnaire was used to elicit the necessary information. The questionnaire was divided into following five sections -

Information on socio-demographic factors

Information pertaining to the subject’s age, sex, religion, type of family, parent’s education and occupation, socio-economic status according to revised Kuppuswamy scale, etc. was gathered.

Information on sexual behavior

Subjects were asked about questions related to sexual practices.

Statistical analysis

Data was analyzed using Microsoft excel 2007 and Epi info version 3.5.3 software. For proportions, Chi square test was applied to find out significant association between independent and dependent variables. A p value of less than 0.05 was considered significant.

RESULTS

The present study was carried out to study sexual behavior practiced, source of inspiration in adolescents aged 10 to 19 years. The maximum number of students 282 (37.6%) were mid adolescence (152 males and 130 females), minimum numbers of students 213 were early adolescence (101 males and 112 females). Late adolescence was 255 (34.0%) of which 122 were males and 133 females Table 1.

Table 1: Distribution of students according to their age and sex.

Sex	Boys (n=375)		Girls (n=375)		Total (n=750)			
	No.	%	No.	%	No.	%		
Age (Years)								
10	22	6.0	25	6.6	47	6.3		
11	25	6.6	23	6.2	48	6.4	213	28.4%
12								
13								
14	72	19.2	67	17.9	139	18.5	282	37.6%
15								
16	30	8.0	26	6.9	56	7.4	255	34.0%
17								
18								
19								

538 (71.7%) of the total students were Hindu (262 males and 276 females) whereas 111 (14.8%) were Muslim (61 male and 50 female) and 60 (8%) were Sikh (33 male and 27 female). Only 41 (5.5%) Christian students were found (19 male and 22 female). Maximum students 467 (62.3%)

belonged to General category (224 male and 243 female) followed by 192 (25.6%) OBC. Only 8.7% and 3.4% were in SC and ST category respectively.

636 (84.8%) student belonged to nuclear family while only 114 (15.2%) students were from joint family. Majority of students were from upper middle socioeconomic class 317 (42.3%) followed by upper class 179 (23.8%). Only 59 (7.9%) students were from lower socioeconomic status.

Table 2 shows comparative study among male and female students according to ever indulgence in sexual practice, 130 (34.7%) boys and 71 (18.9%) girls were indulged ever in sexual practices. This association between male and female was found to be statistically significant. among students who were ever indulged in sexual practice 68 (52.3%) of the males and 23 (32.4%) of females had a regular/single partner and this difference between two sexes was found to be statistically significant.

Table 2: Distribution of students who ever indulged in sexual practice.

Ever indulged in Sexual practice	Boys (n=375)		Girls (n=375)		Total (n=750)	
	N	%	N	%	N	%
Yes	130	34.7	71	18.9	201	26.8
No	245	65.3	304	81.1	549	73.2
$\chi^2 = 23.66, df = 1, p \text{ value} = 0.001$						

Table 3 shows that students who were sexually active, 82 (63.1%) male and 21 (29.6%) female used condoms and this difference between two sexes was found to be statistically significant.

Table 3: Distribution of condom use in sexually active adolescents.

Condom use	Boys (n=130)		Girls (n=71)		Total (n=201)	
	N	%	N	%	N	%
Yes	82	63.1	21	29.6	103	51.2
No	48	36.9	50	70.4	98	48.8
$\chi^2 = 20.63, df = 1, p \text{ value} = 0.001$						

68 (52.3%) of sexually active males had sex under the influence of pornography, almost one-third 42 (32.3%) males had sex merely because of peer pressure and 20 (15.4%) did it for curiosity and fun. Among girls who indulged in sex 50 (70.4%) female succumbed to peer pressure and 17 (23.9%) did it under the influence of pornography. The association between two sexes and source of temptation was found to be statistically significant (Table 4).

More boys 176 (46.9%) than girls 52 (13.9%) indulged in the practice of masturbation and this difference between two sexes was found to be statistically significant. 375 (100%) male and 375 (100%) female had no relaxation for sexual indulgence by their society.

Table 4: Distribution of sexually active students according to source of temptation.

Source of temptation	Boys (n=130)		Girls (n=71)		Total (n=201)	
	N	%	N	%	N	%
Peers	42	32.3	50	70.4	92	45.8
Pornography	68	52.3	17	23.9	85	42.3
Curiosity and fun	20	15.4	04	5.7	24	11.9
$\chi^2 = 26.97, df = 2, p \text{ value} = 0.001$						

182 (48.5%), 76 (20.3%), 58 (15.5%) male students discussed regarding to reproductive health issues with friends, doctor and father respectively. Among female, mothers 224 (59.7%) followed by the friends 97 (25.9%) and 35 (9.3%) doctor were the major source of information regarding reproductive health issues (Table 5).

Table 5: Distribution of students according to the best person to discuss about reproductive health issues.

Best person	Boys (n=375)		Girls (n=375)		Total (n=750)	
	N	%	N	%	N	%
Father	58	15.5	05	1.4	63	8.4
Mother	27	7.2	224	59.7	251	33.5
Teacher	32	8.5	14	3.7	46	6.1
Friend	182	48.5	97	25.9	279	37.2
Doctor	76	20.3	35	9.3	111	14.8

DISCUSSION

In the present study, out of 750 adolescents, 28.4% were between 10 to 13 years, 37.6% were in 14 to 15 years and 34.0% were between 16 to 19 years of age group, while Gupta et al in a study at Meerut reported 30.8% in the age group of 10 to 13 years, 27.3% in the age group of 14 to 15 years and 41.9% in the age group of 16 to 19 years while in Uttar Pradesh, the adolescents (10-19 years) total population is 24.5% respectively according to Census.^{11,12}

The adolescents predominantly (66.1%) belonged to upper and upper middle socioeconomic status. Only 7.9% students were from lower socioeconomic status that is contrary to the findings of Gupta et al in which adolescents were predominantly belonged to lower middle (43.1%) and upper lower (38.4%) socioeconomic status.¹¹

The present study revealed that 26.8% of the students were sexually active. Boys were sexually more active than girls (34.7% vs. 18.9%). This result is consistent with the finding of Sachdev et al in which 39.3 percent of males and 20.4 percent of females (29.85 percent of the total students) had engaged in premarital sex.¹³ A lower distribution was observed by Sharma et al 0%, Jejeebhoy et al, 20-30 percent of males, and up to 10 percent of

females are sexually active during adolescence before marriage.^{8,14} Males were sexually more active than females (20% vs. 4%), Tang et al 11% of the students had premarital sexual intercourse, Verma et al 14.7 percent of the male and 6.5 percent of the female respondents (10.6 percent of the total students) reported to have experienced sexual intercourse, Rajagopalan et al 7% of the boys and 2% of the girls had experienced sexual intercourse, UNFPA study indicates that between 20% and 30% of young men and upto 10% of young women have premarital sexual experiences, Mutatkar et al study showed that 10% of the unmarried male respondents reported pre-marital sex, while none of the females reported pre-marital sex.¹⁵⁻¹⁹

In the present study among students who were ever indulged in sexual practice, 52.3 percent of the males and 32.4 percent of females had a regular/single partner which is similar to that reported by Sachdev et al that 49.5 percent of the males and 36.1 percent of females had a steady dating partner, Abraham et al and Sathe et al revealed that among the males more than half (52.8%) reported that they had only one sex partner while 34.8% females said they had only one partner.^{20,21} On the contrary Smylie et al and Rahamefy et al observed opposite findings that among Grade 11 students who had ever had intercourse, 50% reported having more than one partner with approximately 15% of males and 9% of females reporting more than six partners.^{22,23} The present study observed that students who were sexually active, 51.2% used condoms which is similar to that reported by Gupta et al 53.1% in his study in urban Meerut.¹¹

This study revealed that nearly half (52.3%) of sexually active males had sex under the influence of pornography, almost one-third (32.3%) had sex merely because of peer pressure and 15.4% did it for curiosity and fun. Among girls who experienced sex 70.4% succumbed to peer pressure and 23.9% under the influence of pornography. These figures are in line with the studies by Abraham et al reporting (49.3% boys and 12.6% for girls), Campbell et al and MacPhail et al and Sathe et al reporting (22% boys and less than 5% of girls) respectively.^{20,21,24}

The practice of masturbation was more prevalent in boys (46.9%) than girls (13.9%) in this study, which is comparable to the findings by Sathe et al that 47% of the boys indulged in masturbation and Ramadugu et al found that more boys (45.9%) than girls (12.7%) indulged in the practice of masturbation but studies by Sharma et al revealed that 30.2% of the adolescent girls had masturbated, Virk et al revealed that 18.7% had a positive attitude towards masturbation.^{8,20,21,26}

In the present study, more boys (77.9%) than girls (54.1%) had knowledge about reproductive health issues. This result is in line with Sachdev et al, Virk et al revealed that 76.3% had correct knowledge about reproductive health issues, Ramagudu et al found that more boys (71.98%) than girls (55.89%) had good

knowledge on reproductive health issues.^{13,25,26} Main source of knowledge among boys were friends (48.5%) while among girls, mothers (59.7%) followed by the friends (25.9%) were the major source of information regarding reproductive health issues in the present study. Similar results were obtained by Awasthi et al that primary sources of knowledge about sex among boys were friends (26.6%), Dash et al observed that boys consulted mainly friends/peers (48%) while girls consulted their mothers (63%) on reproductive health issues and Prajapati et al depicted that most students prefer discussing sexual health problems with friends (74.64%) followed by doctor (14.49%), sibling (7.97%) and then teacher (1.93%).²⁷⁻²⁹ Contrary findings were revealed by Ramadugu et al found that the most important person these adolescents would consult in case of a sexual problem would be a doctor (38.2% girls and 50.1% boys) in their respective studies.²⁵

CONCLUSION

It was concluded that 26.8% of the students were sexually active. Boys were sexually more active than girls (34.7% vs. 18.9%). Condom use was present in 51.2% of the sexually active students and this difference between two sexes was found to be statistically significant. Nearly half (52.3%) of sexually active males had sex under the influence of pornography, almost one-third (32.3%) had sex merely because of peer pressure and 15.4% did it for curiosity and fun. Among girls who experienced sex 70.4% succumbed to peer pressure and 23.9% under the influence of pornography. In the present study (Table 2.7), more boys (77.9%) than girls (54.1%) had knowledge about reproductive health issues and this difference between two sexes were found to be statistically significant.

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