

Research Article

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Health awareness and behavior among adolescent students in a rural school: a cross sectional observational study

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ABSTRACT

Background: Adolescents are particularly vulnerable to many health issues. Studies in Indian literature have documented low health awareness and many health related issues in adolescents. The aim and objective of the study was to evaluate health awareness and behavior among adolescents studying in a rural school in Maharashtra, India.

Methods: A cross-sectional, quantitative, observational questionnaire-based survey was conducted among high school students between 15 to 19 years of age studying at a local rural school in Maharashtra, India. The questionnaire assessed health awareness and behavior related to (a) exercise and nutrition; (b) malnutrition and obesity; (c) tobacco and (d) sexually transmitted diseases (HIV/AIDS).

Results: The overall response rate of survey was 92.72%. Out of 102 students surveyed, 58.82 % (60) were males and 41.18 % (42) were females. 93.13% students were aware of importance of exercise on health and 70.58% devoted time for exercise & recreational activities. 85.29% students were aware of the ill effects of Malnutrition and Obesity. 85.29% were aware of ill effects of taking Tobacco and only 4.90% consumed tobacco. 98.04 % were aware of Sexually transmitted diseases and 90.19 % knew the correct route of spread.

Conclusions: Overall, the health awareness among adolescent students was high. Males tend to be more aware about the importance of exercise on health while females were more aware about the ill effects of taking tobacco. Further qualitative studies should be conducted to identify potential adolescent issues so that an intervention can be planned at school, community and home level.

Keywords: Adolescent, Health awareness, Rural

INTRODUCTION

The World Health Organization (WHO) defines "adolescent" as an individual whose age is between 10 to 19 years.¹ According to UNICEF, there are more than 243 million adolescents in India which is about 20% of the total population.²

Adolescents not only form a unique group, rapidly developing both physically and mentally but also are often dependent on their parents or guardians for their

health matters. Adolescents are particularly vulnerable to many health issues. It is also a time when critical behaviours are shaped which may affect health in the future. For example, tobacco use, sexually transmitted infections including HIV, poor eating and exercise habits may lead to illness or premature death later in life.^{1,3}

Adolescents in Indian rural areas are often devoid of health care facilities and therefore there is a need to assess the concept of health and awareness of health-related issues in rural areas. Several studies in Indian

literature have documented low awareness and health issues in adolescents related to malnutrition, reproductive health, sexual transmitted diseases and tobacco consumption especially in rural areas.⁴⁻¹¹ Therefore this study was conducted to understand the health awareness and behavior among adolescents studying in a rural school.

METHODS

The present study was a cross-sectional, observational questionnaire-based survey conducted in the months of September and October, 2014 at a local rural school in Nhava village, Raigad District in Maharashtra State, India.

A self-designed and well-structured questionnaire was distributed randomly to high school students between 15 to 19 years of age. After obtaining permission from the school principal and class teachers, the students were interviewed during the recess and free period. After obtaining informed consent, they were asked to complete questionnaire assessing awareness of health and related issues. After obtaining informed consent, they were asked to complete questionnaire assessing awareness of health and related issues. Demographic details were also recorded.

The questionnaire assessed health awareness and behavior related to (a) exercise and nutrition; (b) malnutrition and obesity; (c) tobacco and d) sexually transmitted diseases (HIV /AIDS). Students returning incompletely filled questionnaire and not willing to give consent/assent were excluded. One hundred and ten questionnaires were distributed and one hundred and two (102) completely filled questionnaires were obtained and further analysed.

Inclusion criteria

1. All Students between 15-19 years present in the school during the timeframe of the survey.
2. Students who were willing to participate in the survey.

Exclusion criteria

1. Students out of target i.e. above 20 years of age and below 15 years.
2. Students who did not give the consent.
3. Incomplete data or the questionnaire.

Data was entered in Microsoft 2007 Excel and was statistically analysed. Data was expressed in actual number, mean \pm standard deviation, and percentage. Pearson's Chi-Square test was used for categorical data. 'P' value of less than 0.05 was considered as statistically significant.

RESULTS

A total of 102 completely filled questionnaires out of 110 distributed were analysed. The overall response rate of survey was 92.72%. Out of 102 students surveyed, 58.82 % were males (60/102) and 41.18% were females (42/102). The mean age of the students was 17.08 ± 0.92 years (Table 1).

Table 1: Assessment of health awareness and behavior domains (positive responses).

No.	Health questions (awareness and behavior)	Values
1	Awareness of Importance of exercise on health (yes)	93.13% (95)
2	Devoted time for exercise activity (yes)	70.58% (72)
3	Awareness of ill effects of Malnutrition and obesity (yes)	85.29% (87)
4	Awareness of Healthy food concept (yes)	79.14% (81)
5	Consumes Breakfast and meal everyday (yes)	76.5% (78)
6	Awareness of ill effects of taking Tobacco (yes)	85.29% (87)
7	Consumes tobacco (yes)	4.9% (5)
8	Awareness of Sexually transmitted diseases (HIV /AIDS) (yes)	98.04 % (100)
9	Correct Information about route of spread of Sexually transmitted diseases (HIV /AIDS)	90.19 % (92)

Exercise and nutrition: In this study, 93.13% (95) students were aware of importance of exercise on health and 70.58% (72) devoted time for exercise activity. 85.29% (87) were aware of the ill effects of Malnutrition and obesity.

Healthy diet: In this study, 79.14% (81) students were aware of healthy food concept and 76.5% (78) students have breakfast and meals every day.

Tobacco: In this study, 85.29% (87) students were aware of ill effects of taking Tobacco and only 4.90% (5) individuals disclosed the behavior of consuming tobacco.

Sexually transmitted diseases (HIV/AIDS): In this study, 98.04 % (100) students were aware of Sexually transmitted diseases and 90.19 % (92) knew the correct information about route of spread of the disease.

Association between health awareness and gender (Table 2): In this study, the association between health awareness (importance of exercise on health and ill effects of taking tobacco) and gender was statically significant ($p<0.05$). Males tend to be more aware about the importance of exercise on health while females were more aware about the ill effects of taking tobacco (Table 2).

Table 2: Association between health awareness and gender.

No.	Health awareness questions	Answer	Male	Female	Chi square	P value
1	Awareness of Importance of exercise on health	yes	48	24	6.217	0.0126
		no	12	18		
2	Awareness of ill effects of Malnutrition and obesity	yes	54	33	2.572	0.1087
		no	6	9		
3	Awareness of Healthy food concept	yes	50	31	0.241	0.3204
		no	10	11		
4	Awareness of ill effects of taking Tobacco	yes	47	40	5.628	0.0176
		no	13	2		
5	Awareness of Sexually transmitted diseases (HIV /AIDS)	yes	58	42	1.428	0.2320
		no	2	0		

DISCUSSION

Health is an important aspect of life. World Health Organization (WHO) defines Health as a complete state of physical, mental and social well-being, and not merely the absence of disease or infirmity.¹² In the present study, an attempt was made to understand the health awareness and behavior among adolescents studying in a rural school. The key findings of the study suggest that health awareness was high. The key findings of the study suggest that health awareness among the students was high.

Adolescents are the future of the country. As they reach puberty, they face a lot of changes in many ways which includes physiological, hormonal, emotional and mental. Adolescents as a group are particularly vulnerable to many health issues and critical behaviors that will affect health in the future.³ Realizing the need to address health issues in this vulnerable population, international agencies like WHO/UNAIDS has launched new schemes to improve adolescent care focusing on key areas of adolescent health including related to malnutrition, reproductive health, sexual transmitted diseases and tobacco consumption issues.¹

In our study, majority of the students were aware of the importance of exercise, nutrition and healthy food diet concepts. Developing healthy eating and exercise habits at this age are foundations for good health in adulthood. Reducing the marketing of foods high in saturated fats, trans-fatty acids, free sugars, or salt and opportunities to engage in physical activity are important for good health, especially for children and adolescents.³

In our study, majority of students were aware of the ill effects of Tobacco and smoking on the health. But 4.9% of students still agreed to have tobacco regularly. Studies have documented rise in increase of cigarette smoking

among adolescents and students are vulnerable to tobacco addiction, especially males.^{13,14} Studies have documented increase in rate of cigarette smoking among adolescents. This can have harmful effect. A study conducted in state of Gujarat, India, showed that there has been increasing trend of smoking cigarettes at a younger age which is a matter of great concern.⁹

A study conducted by Sharma et al, showed 18.4% males have tried cigarettes or bidis at least once in life time compared to 11% females in adolescent age group. Tobacco use was much higher among the adolescent aged 16–19 group than those in the age group of 14–15 years. Tobacco use was appreciably higher among the males (23.8%) than the females adolescent age group (14.9%), (P=0.016).The prevalence rate of current smoking is 7.1%.¹⁵

Our study showed that 4.9% males have consumed tobacco in any form in a rural area which leads to a conclusion that the tobacco consumption might be at a larger scale in urban areas. In our study females are more aware of the ill effects of taking tobacco than males which is comparable to study done by Sharma et al.¹⁵

In later years of adolescent age, teenagers tend to get physically attracted and intimated with the opposite sex which may lead to increase in the risk of contracting STD's, if proper protection not used.¹⁶ Several studies in Indian literature have raised issues on the awareness of reproductive and sexual health in adolescents.^{4,6-8} Study conducted by Kotecha et al documented that, two-third percentage of boys and girls had information of HIV/AIDS, and about half of them correctly knew various modes of transmission of HIV in both urban and rural areas.^[11] In our study, 98% students were aware of sexually transmitted diseases and more than 90% knew the correct route of transmission. Thus the awareness among rural students in our study was on higher side than

previously documented studies and equal between the genders.^{4,6-8,11}

Overall the adolescent health awareness in a rural school setup was high. This could be due to the educational and health policies of the local school and also may be due to health related initiatives of Government of India at community level in rural areas.

Limitations

1. Survey was conducted at a single rural school
2. Limited sample size
3. Subjective rating questionnaire
4. Quantitative survey

CONCLUSION

Overall, the health awareness among adolescent students in a rural school was high. Males had more awareness regarding importance of exercise on health while females were more aware about the ill effects of tobacco. Further qualitative studies should be conducted to identify potential adolescent issues so that an intervention can be planned at school, community and home level.

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Ethical approval: The study was approved by the Institutional Ethics Committee

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