

Eating Habits among the Adolescents in Schools and Junior Colleges of Pune City

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"The secret to staying young is to live honestly, eat slowly, and lie about your age."

- Lucille Ball

Abstract

Adolescence is a period when peer pressure can affect teenage eating behaviour and they may start skipping meals or possibly under eating or over eating. The present study was therefore conducted to assess the eating habits among the adolescents (13 years-19 years) in selected Schools and Junior Colleges of Pune City. With the help of data available it was possible to assess the risk of getting eating disorders such as anorexia nervosa and bulimia nervosa among these adolescents. It was found that among study subjects, 81 percent students were practicing unhealthy or faulty eating behaviour, thus requiring serious attention.

Many adolescents see themselves as being too fat, while some, particularly males, see themselves as too thin. About 34 percent of females and 13 percent of males report dieting to lose weight. Anxiety, worry, loneliness and difficulty in managing family relationships are all factors that can lead to a refusal to eat or excessive eating. Behaviour such as extreme dieting, binge eating and bringing up food on purpose also affects more teenagers than adults and more girls than boys (nine girls to every one boy).

Objectives

The present study endeavoured:

1. To assess the eating habits among the adolescents.
2. To correlate the eating habits among adolescents with selected eating disorders.
3. To correlate the eating habits among adolescents with selected demographic variables.

Review of Literature

The review of literature for the present study was undertaken in relation to literature related to (i) eating habits; (ii) obesity; and (iii) eating disorders.

Tiejian Wu, et al (2007), in their study on eating habits among adolescents in rural Southern Appalachia among 274 adolescents aged 14-16 years

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showed that unhealthy eating habits were widely prevalent. A few adolescents were teased about weight whereas 20.1 percent witnessed weight teasing almost every day. Perception of parents' healthy eating and better social support for healthy eating were associated with healthier eating habits.

In a study on influence of individual and area level measure of socioeconomic status on obesity, unhealthy eating, and physical inactivity in adolescents [Am J Clin Nutr (2006 Jun); 83(1)], it was concluded that individual and area level SES measures were independently related to obesity, which suggests that both individual and environmental approaches may be required to curtail adolescent obesity.

Mayo Clinic staff, Mayo Foundation For Medical Education & Research (MFMER) (1998-2010) described the eating disorders especially about Binge Eating Disorders: When you have binge-eating disorder, you may be deeply embarrassed about gorging and vow to stop. But you feel such a compulsion that you can't resist the urges and continue binge eating.

Methodology

This study was an exploratory type. The research method for the study was descriptive method. Stratified random sampling was used: 150 samples were taken from the school setting and 150 samples from the junior college setting. Among 300 samples 50 percent were male and 50 percent were female samples. Strata were divided into male and female gender. The sample of the study consisted of 300

adolescent students of selected schools and junior colleges of city.

Inclusion criteria: Students above the age group 13 and below the age group 19 were included, the study was limited only to the selected schools and junior colleges, and to those students who had knowledge of English.

Exclusion criteria was the students with systemic disorders such as juvenile diabetes and the students with endocrine disorders.

Description of the Instrument

Tool was divided under three sections.

Section I: Self structured questionnaire to assess the demographic data of the sample.

Section II: Rating scale regarding assessment of eating habits among the adolescents.

Section III: Rating scale regarding assessing the risk for developing eating disorders.

Score Interpretation

For Section II : Unhealthy habits ranges between 10-30 & Healthy habits ranges between – 31-50 for item numbers 1, 2, 8, 9, 10, 11, 15, 16, 17, 20.

Always – 5, Most of the times – 4, Sometimes – 3, Rarely -2, Never -1, Total score = 50.

Healthy habits ranges between 10-30 & Unhealthy habits ranges between 31-50 for item numbers 3, 4, 5, 6, 7, 12, 13, 14, 18, 19.

Always –1, Most of the times – 2, Sometimes –3, Rarely – 4, Never -5, Total score = 50.

For Section III: Yes – 2, No – 1. No risk = 1- 6 (no risk for getting eating disorders)

Mild risk = 7- 12 (at mild risk of getting eating disorders)

Data Collection Procedure

The investigator approached the students and introduced herself, explained the purpose of visit, consent was obtained for willingness to answer the questionnaire. Majority of the respondents were co-operative. Data was collected with the help of five points rating scale to assess the Eating habits among adolescents.

Data Analysis and Statistical Methods

The demographic data was analysed using descriptive and inferential statistics which includes frequency and percentage and presented in the form of tables and graphs. Fisher's exact test of

association was used to find out correlation between eating habits and selected eating disorders. ANOVA was used to analyse the correlation between eating habits and selected demographic variables.

Results

There were 150 (50%) females and 150 (50%) males. Maximum samples (70%) were mix-vegetarians where as 30 percent were vegetarians. Most of the adolescents preferred oily and spicy food, they like eat pizza, burgers and other junk foods. As most of the adolescents did not follow regular meals pattern as they liked to eat outside and they had the habit of eating snacks in between the meal. About 81 percent adolescents were practising unhealthy or faulty eating habits whereas 19 percent adolescents were having healthy eating habits.

Overall assessment of eating habits show that 81 percent of the adolescents had unhealthy eating habits whereas remaining 19 percent of the adolescents had healthy eating habits.

The above figure indicates that 81 percent adolescents were practising unhealthy or faulty eating habits whereas 19 percent adolescents were having healthy eating habits.

Females have higher average scores than males meaning that females have more healthy habits than that of males. The overall interpretation of the findings is that 27 percent of adolescents are at no risk of getting eating disorders, whereas 73 percent adolescents are at mild risk of getting eating disorders. The association between eating habits and disorders was assessed using Fisher's Exact Test.

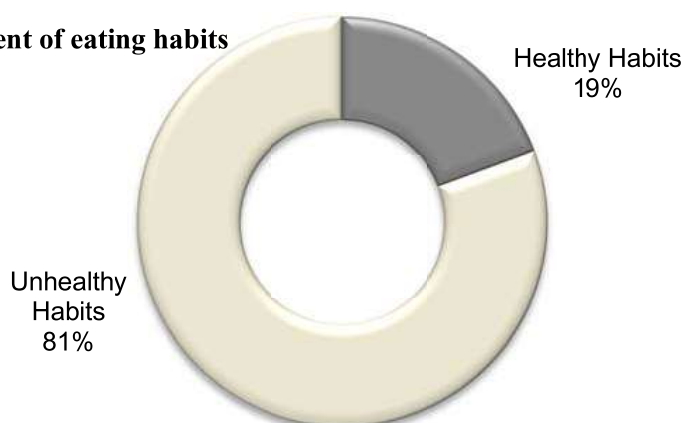
Hence there is significant association between the eating habits and selected eating disorders.

The above figure indicates that 27 percent of adolescents were at no risk of getting eating disorders, whereas 73 percent adolescents were at mild risk of getting eating disorders.

Discussion

As per study conducted by Monita Thokchom (2007), among adolescents, among 300 samples 64.7 percent were vegetarian, 33.3 percent were mix-vegetarian. A significant relation was observed between the age and kind of food adolescent prefer. Between the age group 15-17 years the association was found to be significant when asked about the relation between the dieting and maintaining in individual physique. Significant correlation between the type of family and the eating

Assessment of eating habits



pattern of the adolescents was also noticed when they were under stress.

In the present study maximum samples (70%) are mix-vegetarians whereas 30 percent were vegetarians. There was significant association between age and taking three proper meals, as well as association between age and fasting. Associations were also significant between age and skipping meals, between age and eating packaged food, between age and suffering from health problems, between age and tooth ache. Our findings showed statistically significant association with Demographic variable 'Gender'. Whereas association between the eating habits and selected eating disorders was also significant.

An article published in the *Sakal* newspaper, dated 13 January 2011 (Pune Today) reported a survey by Tulsi Trust in school going children of Pune city. After medical checkup of five lakh stu-

dents it was observed that 70 percent of the children were having dental caries because of the faulty eating habits. Further, 50 percent students are short heighted whereas maximum students from Marathi medium were malnourished and maximum students from English medium were obese. The team also revealed that such results were due to increase rate of eating outside food that is hoteling, eating fast food by students and their faulty eating habits.

In the present study similar findings were generated as 31 percent adolescents suffer from tooth ache whereas 52 percent adolescents suffer from digestive problems such as stomach ache, constipation, diarrhea etc. Findings also show that 117 (39%) of the samples had weight between 40 and 50 kg, 79 (26.3%) of them were from group 50-60 kg, 71 (23.7%) of them were from 30-40 kg, 30 (10%) of them were with weight more than 60 kg and remaining 3 (1%) of them were with weight less than 30 kg.

Implications

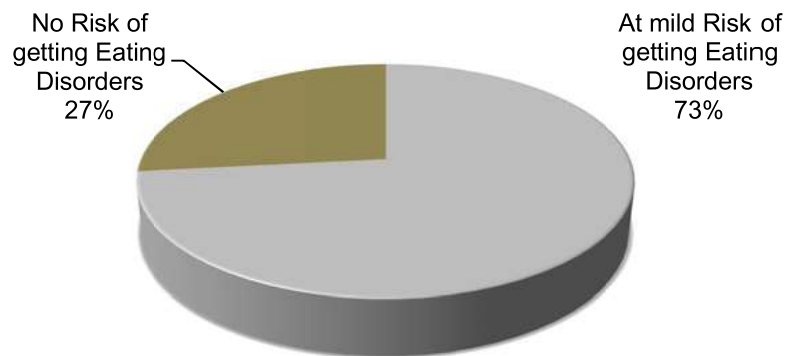
Nursing practice

It is very helpful for nurses to give proper health talk to the adolescents regarding the eating habits. Through this study eating pattern of the adolescents can be identified and discussed. The risk for getting eating disorders in adolescents can also be as-

Summary of Fisher's Exact Test of associations which were found to be statistically significant

Eating disorder	Eating Habit	Value	Exact significance	Conclusion
Persistent decrease in hunger and refusal to eat food	Take extra pinch of salt in food	15.35	0.004	Significant
	Like to eat chocolate	8.502	0.072	Marginally
	Suffer from any digestive problems	9.348	0.045	Significant
Eat more when sad	Think healthy eating habits helps us to live long	8.805	0.062	Marginally
Eat more when happy	Take snacks in between the meals	10.39	0.034	Significant
	Like to eat outside	11.11	0.025	Significant
	Eat packaged food	10.01	0.039	Significant
	Like to eat chocolate	9.865	0.041	Significant
Take large quantity of food in a short time (binge eating)	Like to eat outside	18.89	0.001	Significant
	Take extra pinch of salt in food	9.139	0.055	Marginally
	Drink a glass of milk	9.06	0.057	Marginally
	Regularly go for medical check up	17.19	0.002	Significant
	Wash hands with soap before eating	9.547	0.039	Significant
Vomit the food after eating for fear of gaining weight	Include green leafy vegetables in diet	9.716	0.029	Significant
	Like to eat chocolate	11.67	0.009	Significant

Risk assessment with respect to eating disorders



sessed. This will guide the nurses to give proper health care or balanced diet or nutrition towards the young adolescents.

Nursing education

The nurse educator can impart the knowledge of healthy eating practices in adolescent nurses where as it may be beneficial for them to practice in their daily routine.

Community

In the field of community our findings provide baseline information to community health nurse, so she can give health education to adolescents and their family members about the healthy eating habits for promotion of good health. Adolescents at the risk for getting eating disorders can be identified early and proper treatment can be given.

Nursing research

Findings of this study on the eating habits of the adolescents and eating disorder provide evidence in the field of research. Further research can be done on eating disorders to assess the health of affecting adolescents to improve the health of the adolescents and their eating habits.

Recommendations

- * An experimental study can be conducted to assess the physical health status of the adolescents regarding their eating habits.
- * A study can be conducted on effectiveness of planned health teaching on knowledge regarding eating habits among the adolescents.
- * A comparative study can be done on eating habits between school going and college going adolescents.

Conclusion

The present study showed that 81 percent adolescents were practising unhealthy or faulty eating habits whereas 19 percent adolescents were having healthy eating habits and 27 percent of adolescents are at no risk of getting eating disorders. Whereas 73 percent adolescents are at mild risk of getting eating disorders. The adolescents' eating habits could be well assessed with the help of Questionnaire and rating scale. These study findings will provide baseline information for other nursing professionals to educate adolescents regarding healthy eating habits and practices.

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