

A Study of Dietary Practices and Nutritional Awareness among Adolescent Girls of Ranchi district (Jharkhand)

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Abstract

The World Health Organization (WHO) defines an adolescent as any person between ages 10 and 19 years. Adolescence is characterized by the growth spurt, a period in which growth is very fast. During this time, the body's nutritional needs are affected by the physical development, while changes in one's lifestyle may also affect eating habits and food choices. Adolescence is the transition period between childhood and adulthood, a window of opportunity for the improvement of nutritional status and correcting poor dietary practices. Good nutrition is therefore very important for the proper growth and development and the prevention of any health problems in adolescents in the future. Thus, in the present study, an attempt was made to study the Dietary practices and awareness level of the adolescent girls. The study was conducted in rural and urban areas of Ranchi district of Jharkhand state. Self-made questionnaire was used to assess the level of Nutritional awareness and dietary practices of adolescent girls of Ranchi district. The survey method of research was used to get the desired information in the study. Two hundred adolescent girls of 13 to 17 years of age were selected through simple random sampling technique. Findings showed that when compared to urban adolescents, rural adolescents were less informed and have less awareness about health and Nutrition. The majority of rural adolescent girls have poor dietary practices and moderate nutritional awareness and in urban area majority of the respondents have relatively better nutritional awareness. Nutritional awareness has impact on dietary practices of adolescents, which also adversely affects their health. So, adolescent girls need nutrition education to improve their knowledge and nutritional awareness.

Keywords: Adolescents, Dietary practices, Nutrition, Nutritional Awareness

Introduction

The age group between 10–19 years which is called adolescence is the period of life when there is a rapid physical, social and psychological growth occurs. Adolescent girls are a very important section of our society, as they are the potential mothers and homemakers in the future. These girls also perform various other roles in the family and the community. The characteristic of this period is rapid and sequential physical and mental changes that transform a small child into a young adult girl. Adjusting with their physical growth, development and their surroundings too is a new challenge with the adolescents. In India, large number of adolescent girls get married at below the age of 20. It may also be a time period to shape and consolidate healthy eating and lifestyle behaviour thereby preventing or

postponing the onset of nutrition-related chronic diseases in adulthood (Kauret al., 2007) [1]. Unfortunately, in India, there is no period of adolescence as they budge from childhood to adulthood and soon become pregnant. The adolescent girls who are the impending mothers and homemakers of the future continue to face the suppression of nutritional deficiency. Usually, in developing countries, most of the nutrition schemes have been focusing on children and women, thus neglecting the adolescents. If the focus is shifted on the nutritional needs of adolescents, it could be an important step towards breaking the vicious cycle of malnutrition, chronic diseases, and poverty. Epidemiological evidence from both the developed and developing countries indicates that there is a link between foetal undernutrition and increased risk of various chronic diseases during adulthood (Adolescent Nutrition, WHO, 2006) [2]. The girls of the adolescent period are tomorrow's adult population. Adolescent females are more prone to nutritional difficulties than adolescent males. In early childhood (0–4 years), the available international evidence suggests that differences in nutritional status between girls and boys are statistically negligible. Healthy diet is a diet that helps to maintain or improve overall health. A healthy diet provides the body with essential nutrition: fluid, macronutrients, micronutrients, and adequate calories. A healthy diet should include a wide variety of nutritious foods for sufficient intake of all nutrients, including vitamins and minerals. Foods to include are breads, pastas, lean meats, fish, fruits and vegetables. Melaku et al., (2018)[3] studied optimal dietary practices and nutritional knowledge of school adolescent girls. The study pointed that common nutritional problem of adolescent girls was malnutrition. The author revealed that majority (55.8%) of the adolescent girls had good nutritional knowledge that they learned from the school (86.6%). The occupational status of parents plays a major role on the dietary practices of adolescent girls. The author suggested that it can be further improved with school-based nutrition education, nutrition sensitive interventions and comprehensive community based programs to reach both the students and their families. Pavithran and Bant (2018)[4] revealed the nutritional status of adolescent school girls residing in rural areas of Dharwad district, India. They studied their socio demographic profile, anthropometric measurements (height, weight and BMI) and dietary pattern of rural adolescent girls. The study revealed that rural adolescent girls - 14.9% of were underweight for their age and based on BMI, 25.2% were under-nourished and 3.7% were over nourished. And there is high prevalence of under nutrition among adolescent girls and it is associated with micronutrient deficiencies like anaemia. Nutritional awareness should be done to improve the nutritional needs of adolescent girls in rural areas. Nairet al., (2017)[5] studied the nutritional status of adolescent girls in a rural area of a district of Maharashtra. The study was a community based cross sectional study done among 583 adolescent girls in 10 villages of a district. In this study the prevalence of underweight (36.54%) and stunting (48.37%) was found, moreover under nutrition was high among adolescent girls. To improve their nutritional status appropriate health education and nutrition intervention should be directed towards them.

The main objectives of this study include, to study the general profile of rural and urban adolescent girls; to study the dietary practices of rural and urban adolescent girls and also to study the nutritional awareness of rural and urban adolescent girls.

Materials and Methods

The study was conducted in Ranchi district of Jharkhand. Simple random sampling procedure was used for selection of respondents. A total of 200 adolescent girls, 143 adolescent girls from rural area and 57 adolescent girls from urban area who were studying in government and private schools and colleges

were randomly selected for the study. Survey method is employed to collect the data. A survey is a research method in which subjects respond to a series of statements or questions in a questionnaire or an interview. Surveys target some population, which are the people who are the focus of research. The sample of 200 girls of 13-17 years of age was selected by way of simple random sampling by giving equal weight to a rural and urban area. The statistical technique used is a percentage analysis of the responses from the sample. Self-made questionnaire was used to collect data. Open ended questions were included in the questionnaire along with multiple choice questions. Interviewer noted down the responses of all respondents, who are not able to fill the questionnaire properly. 24- hour food recall method was used to know about dietary practices of respondents.

Findings of the study

Table1: Family Type

S.N.	Variables	No. of Respondents	Percentage
A	Nuclear Family	145	72.5
B	Joint Family	55	27.5

Table2: Residence Area

S.N.	Variables	No. of Respondents	Percentage
A	Rural	143	71.5
B	Urban	57	28.5

N=200

Table3: Family Income

S.N.	Variables	No. of Respondents	Percentage
A	Up to Rs. 5000	56	28
B	Rs 6000- Rs 10000	94	47
C	Rs 11000- Rs 20000	20	10
D	Rs 21000- Above	30	15

N=200

Table4: Educational Qualification of Girls

S.N.	Variables	No. of Respondents	Percentage
1	Up to elementary level	54	27
2	Matriculate	87	43.5
3	Intermediate	59	29.5

Table5: Educational Qualifications of Parents of respondents

S.N.	Variables	Mothers		Fathers	
		No. of Respondents	Percentage	No. of Respondents	Percentage
A	Illiterate	25	12.5	19	9.5
B	Upto Elementary level	74	37	81	40.5
C	Matriculate	26	13	30	15
D	Intermediate	33	16.5	20	10
E	Graduation and above	42	21	50	25

N=200

Table 6: Sources of health-related information

S.N.	Sources of Information	Percentage
A	Family	70
B	School	43
C	Electronic Media	30
D	Print Media	27
E	Friends	23
F	Hospital	19
G	Poster and Pamphlet	16
H	All of the above	4

Table 7: Distribution of Respondents according to their Nutritional Awareness

S.N.	Nutritional Awareness	Rural N=143	Urban N=57	Total N=200
1	Low Level	49 (34%)	3 (5%)	52 (26%)
2	Moderate level	90(63%)	30(53%)	120(60%)
3	High level	4(3%)	24(42%)	28(14%)

Table8: Dietary practices of Respondents

S.N.	Dietary Practices	Rural Population N=143			Urban Population N=57		
		Daily F(%)	Occasionally F(%)	Never F(%)	Daily F(%)	Occasionally F(%)	Never F(%)
1	Eating Protein rich food	23(16%)	90 (63)	30(21)	32(56)	18(32)	7(12)
2	Eating green leafy	67(47%)	60 (42)	16(11)	19(33)	27(47)	11(20)

	vegetables						
3	Skipping meals	10 (7)	73(51)	60(42)	2(3.5)	33(58)	22(38.5)
4	Eating Fruits	14(10)	104 (73)	25(17)	15(26)	31(54)	11(20)
5	Eating Non-veg foods	48(33)	56(4)	39(27)	17(30)	28(49)	12(21)
6	Eating fast foods/junk foods	15(10)	110(77)	18(13)	26(46)	28(49)	3(5)
7	Drinking Milk	5 (3)	40(28)	98(69)	9(16)	17(30)	31(54)
8	Eating millets and coarse grains	34(24)	41(29)	67(47)	2(4)	23(40)	32(56)

The sample consisted of 200 adolescent girls aged between 13–17 years. Majority of the sample, 72.5% belonged to the Nuclear families and only 27.5% from joint families (Table-1). The reason for the above distribution could be because tradition of having Joint family system is decreasing year by year and people prefer to live in nuclear families for the sake of better harmony and satisfaction of basic needs, lesser responsibilities, privacy, and also due to their thinking that they can take better care of their family. Data regarding residential area of respondents indicates that majority of respondents (71.5) were living in rural areas and only few girls (28.5%) belonged to urban communities (Table-2). The financial status of the students seems to be low as the majority of the families have monthly income up to five thousand and ten thousand rupees only, which is not sufficient to fulfil all nutritional and other needs of a normal family having average number of five members (Table-3). Further, the educational level of the respondents is noted. It was found that only 27% girls were less educated i.e. only up to elementary level. Most girls were having education up to matriculation (43.5%) and some 29.5% were having Intermediate degree (Table-4). Parent’s educational level was classified into five categories namely illiterate, elementary level, Matriculate, Intermediate, graduation & above. So far, the educational level of parents of the sample was concerned, many of the student’s mothers were illiterate (12.5%) or less educated (37%) (Table-5). As far as education of Fathers is concerned, majority of them (40.5%) were matriculate. In context of Nutritional awareness, it was noted that, Majority of the students were found to get health related information from family (70%) and school (42%) , very few girls reported that their source of information was hospital, and friends etc, (Table-6). It was observed that in rural community majority (63%) of the respondents had moderate level nutritional awareness followed by (34%) low level nutritional awareness and only few (3%) have high level of nutritional awareness (Table 7). In urban, majority (42%) of the respondents have high level of nutritional awareness followed by (53%) moderate level nutritional awareness and (5%) low level of nutritional awareness (Table 7). By taking into consideration the total respondents ,majority 60% of the respondents have moderate nutritional awareness followed by 26% low nutritional awareness and only 14% high nutritional awareness.

Data regarding their dietary practices indicates that more than half (63%) of the respondents from rural background were eating pulse products occasionally, Where(56%) majority of respondents from urban background were taking it regularly. In rural 67 % and in urban 19 % of the respondents were consuming green leafy vegetables daily . Food habit in rural areas of Jharkhand is slightly different from rural areas of other parts of country,here green leafy vegetables i.e. different types of sag like drumstick leaves, putkal sag, sarson sag, etc. are part of their everyday meal. So significant difference in consumption pattern of leafy vegetables was observed among rural and urban communities. In rural 10 % and in urban 15 % of the respondents were having fruits daily. About 7% rural and 3.5% urban girls were skipping their meals regularly due to fasting (religious reasons) or for other reasons. This data is surprising and needs immediate attention. Another important point was that in rural and in urban communities less than 50 percent of the respondents were having milk and egg in their daily meal pattern. In rural communities only 42% and in urban communities 38.5% of the respondents were following three meal pattern per day. When compared with rural adolescents, food habits of urban adolescents were different and majority (46%) of them were eating junk food daily, where it was noted that in rural communities only 10% of the respondents were eating junk food daily. This result may be due to their low income levels and non-availability of junk foods to them. Respondents were asked to indicate their meal pattern whether they were eating every meal or skipping any meal in their daily life. From the Table 8, it was revealed that the meal pattern of the adolescent girls was same in rural and urban areas, but some respondents in rural areas were skipping their breakfast but it was observed that both the groups were not skipping their lunch. The reason in rural areas may be due to mid-day meal programme the children who were studying in government school are having their lunch at school and there is no chance of missing their meal. When compared with rural adolescent girls, urban adolescent girls were following better meals pattern.

The overall indication from data collected was that adolescent girls residing in Ranchi district were adopting faulty dietary pattern and this may lead to nutritional disorders in them. Poor level of Nutritional awareness among adolescent girls is also a remarkable fact ,which needs immediate attention

Conclusion

Health and Nutrition are the prime concerns for development of a society. Adolescent girls having a crucial phase of life need more care and attention in order to develop as a healthy woman, who can contribute in forming a healthy society. Findings of the study shows that most of the girls belonging to rural area (71.5%) and are having poor economic status (75%). The pervading poverty has made constant indulgence of the people of the region under study in economic pursuits for earning their livelihood and pushed back education and health-related priorities to secondary preference. They are also found to have very little knowledge about health and Nutrition, which may be one of the reason behind their poor Dietary practices like low intake of nutrients and habit of skipping meals regularly. 42% Urban girls have high level of Nutritional awareness where only 3% rural girls have high level of nutritional awareness. As reported by respondents, Family is the prime source of information for them, followed by school and electronic media. It along with other related factors resulted in poor dietary practices and Nutritional status of adolescent girls. It was observed that very little percentage of girls were taking protein rich diet and other nutritious food regularly. Skipping meals was also observed as a common habit in both groups. Dietary practices was reported better in urban adolescents in comparison with rural girls. This is due to their educational status, more exposure to electronic media and also may

be impact of family status. our policy makers should think to ensure proper dissemination of knowledge through schools and other communication channels for improving Nutritional awareness among adolescent girls of our society. Parents and family members should also be made aware about importance of healthy lifestyle, good dietary practices and other health issues so that they can become motivating forces for the betterment of girl's health and nutritional status. Most of the girls accepted the fact that they should be given proper nutrition education in schools also. The combined efforts at all levels will definitely make a change in Girl's attitude and knowledge towards health and Nutrition.

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