



ISSN: 2395-7476

IJHS 2020; 6(3): 67-70

© 2020 IJHS

www.home-sciencejournal.com

Received: 04-07-2020

Accepted: 06-08-2020

Dr. Renu Bose

Ex. H.O.D., Dept. Of Home
Science V.B.U, Hazaribag
Jharkhand, India

Gayatri Singh

Research Scholar, Dept. Of
Home Science V.B.U Hazaribag,
Jharkhand, India

Dietary pattern of diet of adolescent girls (a comparative study in various economic and educational groups in Hazaribag)

Dr. Renu Bose and Gayatri Singh

Abstract

The word adolescence come from the Latin verb adolescence which means “to grow up” or “to grow to maturity”. Dietary pattern reveals the daily consumption of various food stuffs, their schedule (daily /weekly /monthly and rarely) as well as method of eating and other related aspects of likes and dislikes. The main objective is to know the dietary pattern of adolescent girls and hypothesis the dietary pattern of high educated groups and high economic groups better compare to other groups. Economic status and Educational level affects the dietary pattern of adolescent girls regarding selection of food stuffs to add in every day diet. Dietary Survey was conducted to assess them. The total sample of 270 adolescent girls of parents of various educational and Economic groups selected under study. The main findings were nutritional quality of dietary patterns of adolescent girls of high educated-middle income group seen better compare to other groups under study. Therefore, education is most influential factor to affect the dietary quality.

Keywords: Adolescent, nutritional, economic, status, dietary, pattern

1. Introduction

The present study dealt with the empirical findings of the survey conducted on “Dietary pattern of diet of adolescent girls”. This is study was both descriptive and analytical. The study area was Hazaribag District in Jharkhand state.

The study of dietary pattern and nutritional quality of adolescent girls was based on to compare the difference among adolescent girls of various economic and educational groups in Hazaribag district. Adolescence is the phase usually 10 to 20 years. All the body dimensions, development and maturation are generally being completed in this stage. Many factors such as life style and poor eating habits acquired during adolescence can lead to serious disease later in life. Healthy eating behaviour during adolescence is a fundamental prerequisite for physical growth, psychosocial development and cognitive performance as well as for the prevention of diet related chronic disease.

Knowledge regarding the dietary pattern of girls is provided by many disciplines. A number of factors influence the dietary pattern. These includes among other educational and economic level of the community availability and costs of foods and social and cultural practices. The main problem is related to the geographic, religious beliefs traditional beliefs and food habits. The types of food consumed determines the types of food can be grown in the locality usually dietary patterns are adopted with the zeal of religious fanaticism by certain segments of our population as a means of creating spiritual awakening or rebirth.

2. Review of literature

The word Adolescent is derived from Latin word “Adolescere” means to grow to maturity. This Adolescent period accelerated physical, biochemical and emotional development. There are nearly one billion adolescents in the world accounting for 20- 25% of the total population in the developing countries in India, the Adolescence population constitutes more than one fifth (23%) of the total population (Roy *et al.* 2000) [9].

Adolescence, one of the nutritional stress periods of life with profound growth, comes with increased demands for energy, protein, minerals and vitamins (Gopalan *et al.* 2001) [4].

Corresponding Author:

Gayatri Singh

Research Scholar, Dept. Of
Home Science V.B.U Hazaribag,
Jharkhand, India

In India, poor nutrition, early bearing and reproductive health complication compound the difficulties of physical development in adolescent girl (Manford and Picciano 2000) [6]

In a country like India with varying social customs and common beliefs against females there is a high prevalence of malnutrition amongst girls. Increased physical activity combined with poor eating habits and the onset of menstruation contribute to accentuating the potential risk for adolescent's poor nutrition (Bhaskaran 2001) [1]. The nutritional status of the adolescent girls was assessed in the present study. Different parameters used for assessing their nutritional status were 24 hour dietary recall survey and anthropometric measurements. Intake of nutrient was computed using the values given in the nutritive value of Indian foods (Gopalan *et al.* 2001) [4].

The girls constituting nearly one tenth of Indian population, from a crucial segment of the society (Government of India, 2001) [5]

The girls constitute a more vulnerable group especially in the developing countries where they are traditionally married at an early age and are exposed to greater risk of reproductive morbidity and mortality. In general adolescent girls are the worst sufferers of the ravages of various forms of malnutrition because of their increased nutritional needs and low social power (Choudhary *et al.* 2009) [2].

Mothers, contributes significantly to the nutritional status of the community (Venkaiah, 2002) [14].

Under-nutrition among adolescent girls is a major public health problem leading on impaired growth (Kalhan *et al.*, 2010).

Nutritional deficiencies has far reaching consequences, especially in adolescent girls. If their nutritional needs are not met, they are likely to give birth to undernourished children, thus transmitting under nutrition to future generations (Mulugeta *et al.*, 2009) [8].

The dietary pattern and nutritional quality of diet varies

region to region and have great impact from education and income of the parents so due to lack of studies related to this aspect the present research is important and taken for study.

3. Methodology

sample of 270 girls from Hazaribag had been selected for assessing the dietary pattern and nutritional quality of diet of adolescent girl with the impact of economic status and educational level. The sample of 270 girls was divided into three main groups as High education (90), Middle education (90), Low education (90). These three main groups were further divided into three -three sub groups on the basis of high income middle income, low-income. The high educated group will constitute parents with B.A/B.Sc./ equivalent level and above degree obtained, Middle educated belongs to matriculation, inter mediate or equivalent pass low educated belongs to between 5th class to 7th class pass.

Income range of high income family was above 1 lack monthly income, middle-income family Rs30000 to 1 lacks/ monthly and lastly the low income family constitute income below Rs 30000 per month. A complete sample design has been given in chapter 3.

The personal data bank and questionnaire or schedule were applied for collecting information regarding dietary pattern and nutritional quality of diet of adolescent girl. The data were tabulated on the basis of hypothesis and suitable statistical test were applied for the verification of different research hypothesis. The result of data shown in various tables systematically and in scientific basic for analysis and to find out conclusion

4. Result and Discussion

The overall survey work was analysed in two main sections

1. Section-A-Detail general information of respondents such as religions and type of family.
2. Section- B- Details of dietary pattern of respondents. General information of respondents

Section-A

Table 4.1: Detail of religious respondents

S. No.	Group	Sample Size	Hindu	Muslim	Christian	SC/ST
1	I	1-30	21	2	1	6
2	II	31-60	18	3	0	9
3	III	61-90	15	6	3	6
4	IV	91-120	20	1	1	8
5	V	121-150	5	5	2	18
6	VI	151-180	8	0	0	22
7	VII	181-210	6	12	6	6
8	VIII	211-240	8	2	4	16
9	IX	241-270	1	10	0	19
10	Total	270	102	41	17	110
11	Percentage	100%	37.7%	15.1%	6.2%	40.7%

Table No-4.1 Shows the percentage of religions of respondent Hindu, Muslim, Christian, and sc/st were respectively 102%, 41%, 6.2% and 40.7%. In Which maximum numbers of respondents were Hindu.

5	V	121-150	20	10
6	VI	151-180	27	3
7	VII	181-210	11	19
8	VIII	211-240	21	9
9	IX	241-270	30	0
10	Total	270	203	67
11	Percentage	100%	75%	24.8%

Table 4.2: Details of types of family

S. No.	Group	Sample Size	Nuclear	Joint
1	I	1-30	26	4
2	II	31-60	22	8
3	III	61-90	28	2
4	IV	91-120	18	12

Table no- 4.2 Shows the types of family of respondents. 203(75.1%) Girls respondent were of nuclear family system and 67(24.8%) girls respondent were of joint family system.

Section-B

Details information of dietary pattern of respondent was dealt in this present section which was sub divided in given form or various groups for analysis and to draw conclusion.

Break Fast - B-GI- Poha/Daliya/ Upma /others.

B-GII Roti+ vegetables

B-GIII - Roti /bread+ Milk

B-GIV- Rice+ Dal+ veg

B-GV- Bread/Roti + Butter/Jam+/Egg or Roti+ Veg+ Egg

Lunch - L.G I Roti+vegetable

L.GII-Maggie/chowmin

L.GIII-Roti+ butter/Jam/souce+/Egg/paneer

L.GIV-Khichri+ veg/Egg

L.GV-Rice/Roti+ Dal + Veg/Egg

Tea Time - T.T.GI-Nothing

T.T.GII-Chowmin /Pasta

T.T.GIII-Pizza/burger

T.T.GIV- Chips/samosa/Roasted grains+ tea

T.T.GV-Milk+ biscuits

Dinner - D.G-I. Junk Food

D.GII-Roti+ veg

D.GIII-Rice/Roti+ dal+ veg

D.GIV--Roti+ veg+ milk

D.GV-Roti /Rice+Egg /Fish/chicken/mutton

For assessing the quality of diet Pattern of respondents of various groups. One day diet was divided in four phases as breakfast, lunch, tea items and dinner. Again all phases contains five types of items of each breakfast, lunch, tea and dinner were grouped and according to quality ranking were made. All five types of items of four phases were ranked with increasing value such as 1,2,3,4,and 5.The quality of Diet Pattern were judge with total secured scores(frequencies /%). The highest Score of each phases ranked with maximum 5, so the one-day maximum score of diet $5 \times 4 = 20$

Table 4.3: Dietary Details of respondents of various groups

S. No.	Group	Sample Size	Breakfast Score Frequency	Lunch Score Frequency	Tea Score Frequency	Dinner Score Frequency	Total -Score Frequency/%
1	I	1-30	147		75	94, 7	414/69
2	II	31-60	130	111	85	94	420/70
3	III	61-90	98	30	86	92	306/51
4	IV	91-120	103	96	72	91	362/63
5	V	121-150	85	85	52	74	296/49
6	VI	151-180	98	30	46	52	226/37
7	VII	181-210	77	103	111	70	361/60
8	VIII	211-240	35	78	98	79	290/49
9	IX	241-270	92	40	38	40	210/35
	Total Sample	270					
	Percentage	100%					

The frequencies/% both in all educated and all income sub groups. Let us examine the extent of quality of diet pattern as 4, 8,12,16 and 20 ranked with very low/low/normal/good /very good respectively. Sample of all responded on the basis of parental education and income mentioned in chapter- 3.

The above table indicates that scores of each phases of all sub groups differ in frequencies and in overall total scores differ in frequencies /% of sub groups. The frequencies /% of sub groups I, II, III, IV, V, VI, VII, VIII and IX were 414/69,420/70,306/51,362/63,296/49 226/37,361/60,290/49 and 210/35. The maximum score marked in group II (high educated -middle income) and group I (high educated-high income) were 420 and 414 respectively.

Hence, when the comp+arison made within the sub groups, it was found that the magnitude of differences marked of sub-groups were II, I, IV, VII, III, V, VIII, VI and IX as 420,414,362,361,306,290,226 and

210 respectively. When the magnitude of difference again compared the data indicated that high educated groups I (414) +II (420) +III (306) obtained maximum score 1140. The high-income groups I (414) +IV (362) +VII (361) obtained 1137 little lesser than high educated groups.

Through above results education seems to be major factor influences the diet pattern and high income also a major factor of influencing diet pattern because the magnitude of difference was very little may be due to nutritional knowledge.

Therefore, the hypothesis the dietary pattern of high educated groups and high economic groups better compare to other groups shows reality.

Conclusion

Dietary pattern reveals the daily consumption of various food stuffs, their schedule (daily /weekly /monthly and rarely) as well as method of eating and other related aspects of likes and dislikes. The main objective is to know the dietary pattern of adolescent girls. Economic status affects the dietary pattern of adolescent girls regarding food stuffs. Through above results education seems to be major factor influences the diet pattern and high income also a major factor of influencing diet pattern because the magnitude of difference was very little may be due to nutritional knowledge.

References

1. Bhaskaran P. Nutrition network for Tamil Nadu and Kerala. Newsletter. 2001; 6:3.
2. Choudhary S, Mishra CP, Shukla KP. Correlates of nutritional status of adolescent girls in the rural area of Varanasi, The Internet J of Nutr and Wellness. 2009; 7(2).
3. Golinko D. Emotional intelligence; why it matters more than IQ. Journal of Managerial Psychology. 1984; 15:66-92.
4. Gopalan C, Sastri BP, balasubramanian SC. Nutritive Value of Indian Foods. Hyderabad: National Institute of Nutrition (ICMR), 2001.
5. Government of India. Report of the working group on adolescents for the tenth Five - Year Plan. Planning Commission, 2001, 1-3.
6. Manford A, Picciano M. Nutrition for teenage girls. Nutrition. 2000; 56:86-89.

7. McCabe MP, Ricciardelli LA. Body image and body changes techniques among young adolescent boys. *European Eating Disorder Review*. 2001; 9:335-347.
8. Mulugeta A, Hagos F, Stoecker B, Kruseman G, Linderhof V, Abraha Z *et al.* Nutritional status of adolescent girls from rural communities of Tigray, Northern Ethiopia, *Ethiop J Health Dev*. 2009; 23:5-11.
9. Roy TK, Arnold F, Kulkarni S, Kishor S, Gupta K, Mishra V. National Family Health Survey-2. International Institute for Population Science and ORG Macro, India, New Delhi, 2000, 58p.
10. Rasmussen M, Krolner R, Brug J, Wind M, Klepke K, Dueprenille. Determinants of fruit and vegetable consumption among children and adolescents: a review of the literature. Part 1: quantitative studies. *International Journal of Behavioral Nutrition and Physical Activity*, 2006, 3(22).
11. Srilakshmi B. *Dietetic* (4th edition). Public new age International Ltd., India, 2004, 864.
12. Tanner JM. *Growth at adolescence* (2nd ed.) Oxford: Blackwell Scientific Publications. 1992; 31:63-74.
13. Thomsen SR, Weber MM, Brown I. The relationship between reading beauty and fashion magazines and the use of pathogenic dieting methods among adolescent females. *Adolescence*. 2002; 37:1-18.
14. Venkaiah K, Damayanti K, Nayak MU, Vijayaraghavan K. Diet and nutritional status of rural adolescents in India, *European J of Epidemiology*, 2002, 8(1).