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Perception and Practice of Food Habit and Nutritional Status of Adolescent Girls: A Comparative Study between Garment Workers and School Going Girls

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Abstract
Adolescent health has become one of the most widely discussed and sensitive issues. In Bangladesh 21% is adolescent of the total population. In Bangladesh more than one third of adolescents are not properly aware of the increased nutritional requirement during the adolescent period for proper growth. Therefore our study was proposed to know the perception and practice of food habit and nutritional status of adolescent girls between two groups. To find out the perception and practice about food habit of garment workers and school going adolescent girls and their comparative nutritional status. A cross sectional study was conducted in Samars Fashion Tex Ltd. Badda, FS Sweater Ltd Mirpur, Dhaka and Azimpur Girls High School, Kurmitola High School, Ali Hussein Girls High School, Jatrabari Ideal School, Udayan High School in Dhaka city. Total sample size was 210 and study was based on adolescent girls' age between 10 to 19 years. 110 adolescent girls were randomly chosen from the 2 garment industries and 100 adolescent girls from the 5 schools in Dhaka city. In our study, both of the groups have well perception about nutritive food. (P value =0.004). Both of them think that they need more food during pregnancy,(P value = 0.005). The hygiene practices in both groups were almost 90% hygienic. With the results of this study it can possible to decrease the superstition and restriction about food habit. The improvements could have been possible due to correct and specific nutrition education to the garment workers and school going adolescent girls. The authors are very thankful to Nutrition Foundation of Bangladesh (NFB), and five schools, two garments, BMRC for their kind cooperation. Proper information should be given about nutritive food in both groups. Some steps should be taken to change their food habit and improve their nutritional status.
Keywords: Perception, Practice, Hygiene, Nutritional Status, Adolescent girls.

1.0 Introduction

Adolescence as defined by the "WHO" is the period of life between 10-19 years. According to UNICEF there are 27.7 million adolescents aged 10-19 years in Bangladesh – 13.7 million girls and 14 million boys – making up about one fifth of the total population. Most adolescents have limited scope for acquiring knowledge and skills for their self-development and protection. In Bangladesh (2011) adolescents comprised 21% of Bangladeshi's total population. Of these figures 52% are male while 48% are females. Moreover, adolescents tend to avoid health care providers for reproductive health problems because of shyness, lack of knowledge, and absence of adolescent friendly sources of care. Under the Health Nutrition and Population Sector Program (HNPSP) of the Government of Bangladesh, both married and unmarried adolescents had been identified as undeserved population and thus a priority target group for a variety of reproduction and sexual health services. According to report by the south-south center (2000), Bangladesh, almost 60% of adolescent girls are married off before they reach the age of 18 years. One third of them start child bearing in their teenage years, which about 28% of adolescent girls are already mothers. It has been shown the teen mothers are more likely to suffer from severe complications during delivery and infants born to adolescent mothers have a greater possibility of dying early. Overall, adolescent girls in the age group of 15-19 contribution 20% of the total babies born in a given year.

Analysis of available data suggests that adolescent in Bangladesh are exposed to the reproductive health risks as adolescent in other developing countries. Compared with other age group, adolescent in Bangladesh tend to have less contact with health care system, regardless their need for specific services (SC/UK, 2000).

Among the whole world the women from south East Asian nations are the worst sufferer of malnutrition. The situation of Bangladeshi women is most vulnerable of all the south East Asian countries. In the seminar jointly organize by Bangladesh National Nutrition Program and Helen Keller International present two-research result in this regard. 20% of the total world populations are adolescent girl and anemia is a big problem for the girl's ages between 10-19 years. Anemia is also one of the big problems for premature death of mother and infants. In the third world countries sufferer of anemia among 0-4 years of is 42%, 5-14 years is 43%, married women 43%, pregnant women 55%. Ages between 13-19 years are considered in the BNNP study. It was found that it was much less anemia for the adolescent girls in the year 2007 than year 2004. It was 52.4% in

2004 and 43.5% in 2007(Newspaper-Daily Janakontha, 1-04-08).

Below a summarize overview of health and developmental statistics (MOHFW, 1999 have demonstrated that adolescents may face challenges to a healthy development:

- 50% of female adolescents are illiterate;
- 25% of female adolescents are employed, but only 50% of those earn cash income, and of that number, only 66% control spending;
- 45% have no access to mass media;
- 14% of 15 years old and 58% of 19 years old have begun Demographic & Heath Survey (DHS); and
- 17% of married adolescents females had heard of AIDS (south-south center),
- 37% of rural compared to 25% of urban adolescents have begun childbearing;

Still 63% of children in primary school is used to defecate in the open field: only 8% children have had access to sanitary latrine facility at household level. Health seeking behavior of school children and their families were yet to be improved as 79% of the sample children reportedly sought medical care from village doctor during illness.

2.0 Objectives of the Study

The main objective of this study is to compare perception and practice of food habit and nutritional status of garment workers and school going adolescent girls. The specific objectives of this study are as follows-

- To explore the socio-demographic status of adolescent girl.
- To find social barrier for adolescent girls regarding their health status.
- To differentiate in perception and food intake behavior of garments adolescent girls and school going adolescent girls.

3.0 Literature Review

In Bangladesh (2000) adolescents comprised 23% of Bangladeshi's total population or approximately 30 million people. In 2001 it has been grown 26% of the total population and 16.2% belong to the age group B-19 years. (Bangladesh National Census 2001).

According to report by the south-south center (2000), Bangladesh, almost 60% of adolescent girls are married off before they reach the age of 18 years. There are no few researches done about adolescent girl. Although in spite of being an important part of society. During this time they different kind of food but unfortunately they don't eat or even they don't know about it. This is why we have done this research considering with nutritional status. Due to lack of nutritional status infant born by them suffer from malnutrition. So it is very need for the future generation nutritional status to be upgraded.

4.0 Methodology of the Study

The present study has been conducted with the help of quantitative method. The quantitative method mainly followed the sample survey. Of course this study is both of explanatory and analytical in nature and this study followed an interview survey method on collecting the data. There were two groups to compare for the nutritional status on perception and practices of diets.

4.1 Total Sample Size

The total sample size was 210. We have randomly chosen 110 adolescent girls from the two garments industry and 100 adolescent girls from the five schools situted in Dhaka city. We took 4 adolescent girls from each class of six, seven, eight, nine & ten.

5.0 Recent work in Bangladesh about Adolescent Girls

5.1 Food Intake

The adolescent were asked about the number of meals they ate in the last 2 weeks and where they skipped any regular meals in the last two weeks. One in 20 adolescent had not been able to eat 3 meals a day and 3 in 10 skipped regular meals during the recalled period. However, the main reasons for skipping regular meals were lack of appetite (11.5%), followed by shortage of food (7.3%) and sickness (4.0%). One in 9 adolescent girls ate alone. More than one-third (36.4%) of adolescents were not aware of the increased nutritional requirement during the adolescent period for proper growth, the situation in the BINP areas being better.

5.2 Nutritional Status of Adolescent Girls

The mean age of 5,106 adolescent girls interviewed is 15 years. They have mean height and weight of 149.2 cm and 41.5 kg respectively. The mean MUAC is 22.7cm, while the mean BMI is 18.6 (inter quartile range 17-19.9). The mean weight of girls in the BINP areas is 500g more than that of girls in the NNP areas. Similarly, the mean MUAC value of girls in the BINP areas is also significantly higher than that in the NNP areas. The mean BMI of

girls in the BINP areas is significantly higher than in the NNP areas, but it is similar to that in the comparison areas.

5.3 Complication

Adolescent mothers are 1.3 times more likely to suffer from non-fatal anemia (11%) or toxemia (9%) as a result of pregnancy and delivery than older females (8.8% of these have none-fatal anemia and 6.9% having toxemia). Toxemia and prematurely (low birth weight) predominate as complications. Maternal death rate is 60% higher for female who become before 15 years of age; this rate is 13% greater for mothers of 15-19 years old than their older counterparts. Prenatal mortality rates for teenagers range between 2.3-7.1 % in reports from western countries where as Indian Workers reports rates varying between 6.0-8.3% (12).

5.4 Effects of malnutrition

Different food practices attribute to higher malnutrition among female children and adolescents. Discrimination against females in intra family allocation of food leads to maternal malnutrition. Malnutrition in adolescence can cause poor growth or stunt the normal development of the body, which can results in small pelvis that lead to difficult labor with the consequences of chronic morbidity and even mortality for both mother and child. Moreover, adolescents tend to avoid health care providers for reproductive health problems because of shyness, lack of knowledge, and absence of adolescent friendly sources of care. Under the Health Nutrition and Population Sector Program (HNPSP) of the Government of Bangladesh, both married and unmarried adolescents have been identified as undeserved population and thus a priority target group for a variety of reproduction and sexual health services. Adolescent mothers belonging to poor socioeconomic strata suffer more because chronic under nutrition retards skeletal growth and maturation. Adolescent girls with height <145cm and weight <38kg are at risk for delivering low birth weight babies.

6.0 Data Analysis

6.1 Background Characteristics of Adolescent Girls

Table-1

6.1.1 Matrix of the age of the adolescent girls

Age	No. of girls	Percent	Mean	SD
11-14	93	44.3	15.29	1.86
15-19	117	55.7		
Total	**210**	**100.0**		

The table shows that age of the girls of (15-19) years were 55.7% and 44.3% were in the age of (11-14) years. The mean and standard deviation of the age of adolescent girls were 15.29 years and 1.863 years respectively.

Table-2

6.1.2 Matrix of the religion of the adolescent girls

Religion	No. of girls	Percent
Muslim	190	90.0
Hindu	20	10.0
Total	**210**	**100**

The table shows that 90% of the adolescent girls were Muslim and only 10% of them were Hindu.

Table-3

6.1.3 Matrix of the level of education of the adolescent girls

Level of education	No. of girls	Percent
Illiterate	20	9.3
Primary	44	20.7
Secondary	145	69.3
Higher Secondary	1	0.7
Total	**210**	**100**

This table shows that 69.3% of the adolescent girls were in secondary level, 9.3% were illiterate and only 0.7% of them were complete higher secondary.

Table-4

6.1.4 Matrix of the father's occupation of adolescent girls

Father's Occupation	Garment workers		Students	
	No of workers	%	No of students	%
Farmer	55	50.0	1	1.0
Service	1	0.9	32	32.0
Maid	20	18.2	2	2.0
Daily Labor	30	27.3	10	10.0
Business	2	1.8	52	52.0
Other	2	1.8	3	3.0
Total	**110**	**100**	**100**	**100**

The table indicates that majority of the school going adolescent's father were businessmen and that was 52.0%, and service were 32.0%. On the other hand most of garment worker's father were farmer and that was 50.0%, daily labor was 27.3%, maid 18.2% and others were 1.8%.

Table-5

6.1.5 Matrix of the mother's occupation of the adolescent girls

Mother's Occupation	Garment workers		Students	
	No of workers	%	No of students	%
Housewife	70	63.6	55	55.0
Service	0	0.0	30	30.0
Maid	10	9.0	2	2.0
Daily Labor	25	22.8	2	2.0
Business	3	2.8	10	10.0
Other	2	1.8	1	1.0
Total	**110**	**100**	**100**	**100**

The table indicates that majority of the adolescent's mother were housewife that were 63.6% for garment workers and 55.0% for school going girls. Daily labor were 22.8% for garment workers and service were 30.0% for school going girls.

Table-6

6.1.6 Matrix of the occupation of adolescent girls

Occupation	No. of girls	Percent
Garments worker	110	52.0
Students	100	48.0
Total	**210**	**100**

Table-7

6.1.7 Matrix of monthly family income of the adolescent girls

Monthly family income (Tk.)	No. of family	Percent	Mean	SD
1600-5000	68	32.4	**9832.1**	**7980.6**
5000-10000	86	40.9		
10000-30000	52	24.8		
>30000	4	1.9		
Total	**210**	**100**		

The table shows that family income of the adolescent girls and 40.9% fall in the income group of Tk.(5000-10000), 32.4% fall in the income group of Tk.(1600-5000), 24.8% in Tk.(10000-30000), and only 1.9% is above Tk.30000. The mean and standard deviation of monthly family income of adolescent girls were Tk.9832.1 and Tk.7980.6

Table-8

6.1.8 Matrix of monthly family food expenditure of the adolescent girls

Monthly food expenditure (Tk.)	No. of family	Percent	Mean	SD
700-5000	125	59.5	5834.2	4613.1
5000-10000	58	27.6		
>10000	27	12.9		
Total	**210**	**100**		

The table shows that 59.5% of the adolescent girl's family monthly food expenditure is less than Tk.5000 and only 12.9% families' food expenditure is more than Tk.10000. The mean and SD of family monthly food expenditure were Tk.5834.2 and Tk.4613.1 respectively.

6.2 Nutritional Status and habit of adolescent girls

Table-9

6.2.1 Matrix of association in Nutritional status with BMI

Level of BMI	No. of girls	Percent
Underweight (<18.5)	55	26.4
Normal weight (18.5-25.0)	138	65.7
Overweight (25.0-30.0)	17	7.9
Total	**210**	**100.0**

This table presents that according to BMI, 65.7% of the adolescent girls were normal weighted, 26.4% girls were underweighted and only 7.9% of the girls were over weighted.

Table-10

6.2.2 Association of Nutritional Status with food items and daily consumption

Food Items	Daily consumption	
	No. of girls	Percentage
Fish	152	72.4
Egg	83	39.5
Meat	66	31.4
Rice	204	97.1
Milk	63	30.0
Dal	125	59.5
Vegetables	112	53.3
Fruits	100	47.6
Others	67	31.9

Table-11

6.2.3 Association of Nutritional Status with food items and weekly consumption

Food Items	Weekly consumption	
	No. of girls	Percentage
Fish	188	89.5
Egg	140	66.7
Meat	153	72.9
Rice	210	100.0
Milk	111	52.8
Dal	164	78.1
Vegetable	167	79.5
Fruits	159	75.7
Others	41	29.3

According to these tables (Daily vs. weekly consumption) most of the girls took fish frequently that was for daily 72.4% and for weekly 89.5%, egg consumption 39.5% for daily and 66.7% for weekly, Meat consumption was 31.4% daily and 72.9% weekly, rice consumption was 97.1% daily and 100% weekly, milk consumption was 30.0% daily and 52.8% weekly, dal consumption 59.5% daily and 78.1% weekly, vegetable consumption was 53.3% daily and 79.5% weekly, fruits consumption was 47.6% daily and 75.7% weekly.

6.3 Hygiene practice of adolescent girls

Table-12

6.3.1 Types of Latrine of the adolescent girls

Type of Latrine	Garment workers		Students	
	No of workers	%	No of students	%
Sanitary Latrine	98	89.0	94	94.0
Water Sealed	10	9.1	4	4.0
Slab Latrine	2	1.9	2	2.0
Hanging	0	0.0	0	0.0
Others	0	0.0	0	0.0
Total	**110**	**100**	**100**	**100**

Hygiene practice of girls is shown by the above table where 94.0% school going girls used sanitary latrine, 4.0% used water sealed latrine and 2.0% girls used slab latrine. On the other hand 89.0% garment workers used sanitary latrine, 9.1% used water sealed latrine and 1.9% girls used slab latrine.

Table-13

6.3.2 Sources of drinking water of the adolescent girls

Sources of water	No. of girls	Percent
Deep tube-well	103	49.0
WASA	103	49.0
River	2	1.0
Others	2	1.0
Total	**210**	**100.0**

The table shows that 98% of the adolescent girls' sources of drinking water were deep tube well and WASA and only 2% used river and other sources.

6.4 Association of Nutritional Status with Socio-demographic characteristic.

Table-14

6.4.1 Association of Nutritional Status with age group

Age	Body Mass Index						Total
	Under weight(<18.5)		Normal weight (18.5-25)		Over weight (25-30)		
	Number	%	Number	%	Number	%	
11-14	28	13.3	54	25.7	11	5.2	93
15-19	27	12.9	84	40.0	6	2.9	117
Total	**55**	**26.2**	**138**	**65.7**	**17**	**8.1%**	**210**
	P-Value = 0.182						

There was no significant difference in the nutritional status(BMI) and age group of the adolescent girls. According to this table, most of the girls were normal weighted for the both age groups; 13.3% of the girls aged 11-14 years and 12.9% aged 15-19 years were under weighted and only 5.2% of the girls aged 11-14 years and 2.9% aged 15-19 year were over weighted.

Table-15

6.4.2Association of Nutritional Status with level of education

Level of education	Body Mass Index						Total
	Underweight (<18.5)		Normal weight (18.5-25)		Over weight (25-30)		
	Number	%	Number	%	Number	%	
Illiterate	5	2.4	15	7.1	0	0	20
Primary	7	3.3	33	15.7	3	1.4	43
Secondary	43	20.5	90	42.9	12	5.7	145
Higher Secondary	0	0	0	0	2	1.0	2
Total	**55**	**26.2%**	**138**	**65.7%**	**17**	**8.1%**	**210**
	P-Value = 0.001						

There was highly significant difference in the nutritional status (BMI) and level of education of the adolescent girls. According to this table 2.4% of the illiterate girls were under weighted, 7.1% were normal weighted and none was over weighted. 3.3% of primary level educated girls were under weighted, 15.7% were normal weighted and only 1.4% were over weighted. 20.5% of secondary level educated girls were under weighted, 42.9% were normal weighted and only 5.7% were over weighted. On the other hand 1.0% of higher secondary

level educated girls were overweighed.

6.5 Background characteristics of the adolescent girls by groups.

Table-16

6.5.1 Distribution of level of education by garment workers and students.

Level of education	Garment workers		Students	
	No of workers	%	No of students	%
Illiterate	20	18.2	0	0
Primary	46	41.8	0	0
Secondary	44	40.0	100	100
Total	110	100	100	100
	P-Value = 0.001			

There was highly significant difference in the level of education between the garment workers and the students. This table presents, all of the students were secondary level and most of garment workers were primary and secondary level that was 41.8% and 40.0% and 18.2% hadn't any education.

6.6 Perception of adolescent girls about health and nutrition by groups

Table-17

6.6.1 Matrix of the perception of nutritive food needed for adolescent girls.

Perception of nutritive food needed for a girl	Garment workers		Students	
	No of workers	%	No of students	%
Yes	70	59.1	68	68.0
No	34	30.9	22	22.0
Don't know	11	10.0	10	10.0
Total	**110**	**100.0**	**100**	**100.0**
	P-Value = 0.004			

There was significant difference in the perception of nutritive food needed for adolescent girls between the garment workers and the students. This table shows that both of the groups hadn't any perception about the necessity of nutritive food which was needed for girls that were 30.9% and 22.0% and knew 59.1% of garment workers and 68.0% of students and didn't know 10% of both garment workers & students.

Table-18

6.6.2 Matrix of the perception of the types of nutritive food by groups.

Perception of the types of nutritive food	Garment workers		Students	
	No of workers	%	No of students	%
Fish	47	42.9	45	45
Egg	17	15.7	10	10
Meat	6	5.7	2	2
Rice	2	1.4	0	0
Milk	2	1.4	0	0
Dal	2	1.4	0	0
Vegetables	28	25.7	35	35
Fruits	5	4.3	2	2
Others	0	0	4	4
Don't know	2	1.4	2	2
Total	110	100	100	100
	P-Value = 0.004			

There was highly significant difference in the perception of the type of nutritive food between the garment workers and the students. Majority of adolescent girls in both groups said fish (42.9% garment workers and students) and vegetables (25.7% garment workers and students) as nutritive food. Other food was egg, which said 15.7% garment workers and 10.1% students as a nutritive food. 4.3% garment workers said fruits and other percentages were negligible.

Table-19

6.6.3 Matrix of the perception about the requirement of food during pregnancy

Perception the requirement of food during pregnancy	Garment workers		Students	
	No of workers	%	No of students	%
Need more food	20	18.8	16	16.0
Need nutritive food	63	58.0	78	78.0
Not need more food	3	2.9	0	0.0
Don't know	22	20.3	6	6.0
Total	110	100	100	100
	P value = 0.005			

There was significant difference in the perception about the requirement of food during pregnancy between the garment workers and the students. This table shows that 58.0% of garment workers and 78.0% of students were found who had known for the need of nutritive food during pregnancy whereas more food need said 18.8% of garment workers and 16.0% of students and there were no perception among 20.3% of garment workers and 6.0% of school going adolescent girls.

7. Discussion

This study provides necessary information to find out the nutritional status of garment workers adolescent girls and school going adolescent girls. Perception and food habit practice and compares the nutritional status by those groups through several information. The important information obtained from this study includes perception, knowledge and practices about dietary intake pattern, water, sanitation, and nature of living place, nutritional status of adolescent girls from two garments and five schools of Dhaka city. These information are essential for designing, implementing and to improve the nutritional status of the two groups. The findings of the study especially to improve adolescent nutritional status due to take of proper food intake and proper knowledge of nutrition and hygiene.

We have done the research work among garment workers adolescent girls and school going adolescent girls and their age was 11-19 years but most of them were 15-19 years in age and majority of them were Muslims.

In case of education, most of the school going adolescent girls has completed class six-nine on the other hand few of the garment workers adolescent girls have passed class five and others are illiterate. In NNP baseline report 2004, we saw the level of education of the adolescent girls had no education-4.4%, primary-13.3%, secondary-63.1% and BINP report was no education -4.8%, primary -13.7%, and secondary-63.1%. But our study shows the education level of two different groups. According to garment workers, no education-18.2%, primary-41.8%, secondary -40.0% and all of the school going adolescents are in secondary level. Garment workers had lack of education because of their poor economic support.

Most of the schools going adolescent girl's fathers were businessmen almost 52.0%. Among others some were service holder almost 32.0% and other profession was negligible etc. But most of the garments worker's fathers were farmer almost 50.0% and daily labor 27.3% and maid 18.2% and other profession was negligible. Most of the parents of the garment workers were lived in the village. For this their main profession was farmer. Because of living in Dhaka city most of the students fathers profession were business and service oriented. Both of the groups most of the mothers were housewife because of our low female education rate.

On the other hand from analysis of weekly and daily food taking list we found that they took rice, fish, vegetables, dal and fruits regularly. But their dietary intake pattern did not reflect their food perception. In NNP baseline report 2004 we saw the perception about nutritive food which is needed for adolescent girls where positive perception was 60.6% and negative perception was 39.4%. According to BINP report positive perception was 66.8% and negative perception was 33.2%. Where our study shows among garment workers positive perception is 59.1% and negative perception is 30.9%. Among students positive perception about nutritive food is 68.0% and negative perception is 22.0%. The difference in perception between these two groups occurs due to the difference of education. (P value = 0.004)

Hygiene practice among them was almost same. In our study the percentage of using sanitary latrine in garment workers is 89.0% and 94.0% in students. In our study garment workers have low economic status but they have good hygiene practice. Now sanitation system is quite improved because of their consciousness of health and economical solvency. Though hygiene practice of both groups was same and we found both groups was in normal and underweight. But most of them were normal in weight.

If we associate age with BMI it is noticed that most of the girls were normal weighted for the both age groups and that were 65.7%; 13.3% of the girls aged 11-14 years and 12.9% aged 15-19 years were under weighted and only 5.2% of the girls aged 11-14 years and 2.9% aged 15-19 year were over weighted.

If we associate level of education with BMI we found that 2.4% of the illiterate girls were under

weighted, 7.1% were normal weighted and none was over weighted. 3.3% of primary level educated girls were under weighted, 15.7% were normal weighted and and only 1.4% were over weighted. 20.5% of secondary level educated girls were under weighted, 42.9% were normal weighted and only 5.7% were over weighted. On the other hand 1.0% of higher secondary level educated girls was overweighed. Thus we can conclude that most of the girls were normal weighted. (P value = 0.001)

Perception about the requirement of food during pregnancy and the types of nutritive food and restriction of spice food etc are found generally very poor and are not precise. Need nutritive food in pregnancy said 78.0% school going adolescent girls and 58.0% garment workers. (P value = 0.005). As perceived by majority adolescents, nutritive food means fish or vegetables and these are necessary more for pregnant mother. The difference occurs from their myth and superstitious believe. A significant gap exists between perception and actual practice of adolescents.

Inadequate resources to help adolescent girls what they learnt through schools and garments based health education sessions. Government should increase the promotion of the nutrition education.

Inadequate knowledge and practice of personal hygiene maintained among school and garment workers of adolescent girls. If they can gather knowledge about nutrition their food habit and practice will be improved.

Poor water and sanitation facility was present in the garment workers status. To remove this poor sanitation they should conscious about health and government should take more steps. Garments owner should careful about it.

There were superstitious about taking food during menstrual period and pregnancy. Lack of knowledge about nutritive food and proper mental and physical care. Female education rate should be increased, then superstitious will be removed. Government should more aware of this.

8. Conclusion

In conclusion, the information gathered and discussed from the needs assessment report gives a clear indication on the necessity and utmost importance of this subject to be developed in addressing the nutritional status of adolescent girls. In our study we can see that adolescent girls faces many problems like-bad nutritional status, lack of knowledge about nutritional food and poor food habit which results lack standard in BMI. As a result they suffer from malnutrition. So they face different types of physical problems but they are not aware of those problems. Though results show that both garments worker and school going adolescent girls are normal in weight they filled it by eating Carbohydrates. They eat very little food elements like protein, Fat, vitamin and minerals. As their hygiene practice is better so they need to make aware about nutritive food to rich the nutritional status in that way we can expect good health of adolescent girls. We found from the research that socio-demographic status among school going adolescent girls and garments worker vary. On the other hand as garments worker adolescent girls has less income in their food expenditure and situation of house is less in quality compare to the school going adolescent girls. We have also found that both of the garments worker and school going adolescent girls believe in superstition and avoid different types of food in different type of physical problems. Adolescent girls cannot be aware or get support socially as they are to prohibit taking many foods. So they suffer from malnutrition. At last we can say that perception among garments workers and school going adolescent girls in taking food varies. But both groups have lack of information about food. Providing right and proper information we can make aware them and can save them from malnutrition.

9. Recommendations

After completion of the research work we recommend the following steps:

1. From the literature it is evident that the adolescent of garments and school going adolescent girls have very little information about their nutritional status. So we need to aware them about nutritional status and should inform about food value.
2. In Tiffin of school going adolescent we may supply nutritive food;
3. Students food habit needs to change;
4. All of adolescent girls should be informed about nutritional status;
5. Garments worker adolescent girls should give rest in work hour;
6. Sufficient time should be allocated for taking food in school and garments;

References

Ahmed K. H. *Nutrition Survey of Rural Bangladesh. Institute of Nutrition and Food Science, (INFS) University of Dhaka, Bangladesh*; 1981-1982; 100-498.

Halida, H. A., Fahmida, K., Mahbub, E. And Rahman, H. *A study to identify the risk factors affecting nutritional status of adolescent girls in Bangladesh.* (BIRPERHT) 1998; 1-135.

Ahmed F, Khan MR, Islam M, Kabir I, Fuchs GJ. Anaemia and iron deficiency among adolescent schoolgirls in peri-urban Bangladesh. Eur J Clin Nutr 2000; 54: 678-83.

Ahmed F, Khan MR, Banu CP, Qazi MR, Akhtaruzzaman M. The coexistence of other micronutrient deficiencies in anaemic adolescent schoolgirls in rural Bangladesh. Eur J Clin Nutr 2008; 62: 365-72.

Ahmed F, Hasan N, Kabir Y. Vitamin A deficiency among adolescent female garment factory workers in Bangladesh. Eur J Clin Nutr 1997; 51: 698-702.

Ahmed F, Zareen M, Khan MR, Banu CP, Haq MN, Jackson AA. Dietary pattern, nutrient intake and growth of adolescent school girls in urban Bangladesh. Public Health Nutr 1998; 1: 83-92.

Ali SMK, Pramanik MMA. Conversion factors and Dietary Calculations. Dhaka, Bangladesh: Institute of Nutrition and Food Science, University of Dhaka, 1991.

Gopalan C, Rama-Shastri BV, Balasubramanium SC. Nutritive value of Indian Foods. Hyederabad, India: National Institute of Nutrition, Indian Council of Medical Research, 1993.

Bangladesh National Census Report (BNCR).Dhaka; 2001; 9:10-85.

Statistical Year Book of Bangladesh, Bangladesh Bureau of Statistics, (BBS); Dhaka; 1989.

WHO. Measuring changes in nutritional status: guidelines for assessing nutritional impact of supplementary feeding programs for vulnerable groups, Geneva: WHO, 1983.

Save the Children, Report on assessment of reproductive and sexual health needs of adolescents in Nasirnagar, Brahmanbaria, Bangladesh. Save the Children, USA Bangladesh field office, Dhaka: July, 2003.

Bangladesh Bureau of Statistics (BBS), Ministry of Planning Government Republic of Bangladesh. Statistical Pocketbook of Bangladesh, Statistics Division. Dhaka: BBS, 1998-1999.

Bangladesh Rural Advancement Committee (BRAC) Adolescent reproductive health: a challenge, Barked A. ET. Al: Dhaka, 2000

WHO. Improving adolescent health and development. The second decade, Geneva: WHO, 1998.

Associates for Community and Population Research (ACPR) .Baseline survey of reproductive and sexual health knowledge, attitude and practices of adolescents of Nasirnagar. Save the Children, USA; Bangladesh field office february-march2004.

National Nutrition Program (NNP). Baseline survey.Dhaka: NNP, 2004.

Save the Children. School Health and Nutrition Program. Save the Children USA, Health, Population and Nutrition Sector (HPN). Bangladesh field office, Baseline Survey Report, February -March 2004

Nutrition Survey of Rural Bangladesh, 1975-1976, Institute of Nutrition and Food Science, (INFS) University of Dhaka, Bangladesh;December,1997.

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