

Adolescence Guideline Regarding Healthy Nutritional Requirement for Preparatory School Students

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Abstract: Knowledge, practice and attitude of children and adolescence are important determinants of food choices. The purpose of the study was to assess knowledge, practice and attitude of students at two preparatory schools about healthy nutritional requirement. **Research design:** A descriptive research design was utilized in this study setting: The study was conducted at El Saida Esha School and ElEmam Mohammed Metwaly Elsharawey School in Benha city. The sample: Cluster sample was used. , It included 178 students. **Two instruments were used:** instrument I: A structured interview questionnaire to assess: socio characteristics of students' knowledge regarding healthy nutritional requirement, and reported practices. Instrument II: A likert scale to assess attitude of studied students about nutrition. **Result:** the study revealed that 57.3% of students had unsatisfactory practices and 57.9% had good knowledge about Nutritional requirements Also 27.5% had negative attitudes. **Conclusion:** more than half of students had good knowledge about healthy nutrition while less than half of them had reported satisfactory practices approximately three quarters of them had positive attitudes to healthy nutritional requirements. **Recommendations:** Continuous health education program for students at preparatory schools to improve their knowledge and practices about healthy nutritional requirements.

Key words: healthy nutritional requirements.

Introduction

Adolescence is an important stage of growth and development in the lifespan. Adolescent is a tender stage which is not only marked by rapid physical growth, but also accompanied by sexual and hormonal changes. This period is very crucial since these are the formative years in the life of an individual when major physical, psychological, hormonal and behavioural changes take place. Adolescent period may represent a window of opportunity to prepare an adolescent for a healthy adult life (Chandramauli, 2014).

According to WHO, children in the age group of 10- 19 years are referred to as Adolescence. Adolescence form 18% of the world's population the vast majority of adolescents (88%) live in developing countries. Adolescence is a time of rapid physical growth; during this period children gain up to 50% of their adult weight and 45% of skeletal mass and more than 20% of their adult height

.During this period of life, there are biological, psychological, and social changes along with cognitive and emotional changes. Also, the need for independence happen synchronously .Due to all of these transitions, adolescence is seen as a nutritional vulnerable time that requires special nutritional needs(Brenhouse,et al .,2011; Somerville,et al.,2011).

Good nutrition is an important part of leading a healthy lifestyle. Combined with physical activity, diet can help to reach and maintain a healthy weight, reduce the risk of chronic diseases (like heart disease and cancer), and promote overall health. Adolescents' nutritional problems may represent a heavy health burden. Furthermore, the deleterious effects of deficiencies in adolescents are ignored.

The most important investments that any society can make. A better understanding of adolescents' diets and

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eating behaviors is essential for the design and development of relevant education and other intervention programmers (WHO, 2011).

Schools play a critical role in promoting the health and safety of adolescence and helping them establish lifelong healthy practice. school have appositive effect on academic performance .it is easier and more effective to develop healthy practices during childhood or adolescence and continue in to adult hood , contributing to the leading cause of death ,disability , and social problems(cdc,2015).

The school nurse assists in health education curriculum development teams and may also provide programs for staff, families, and the community The school nurse assesses the school in initiating and developing the strategies to improve healthy eating knowledge, skills and behavior of school students and provides health information to individual students and groups of students through health education (Sharmam, 2016).

Significance of the study

Adolescents represent 22% of the Egyptian population. This means that nearly one in four Egyptians is an adolescent. They expected to grow from 13.8 million in 2000 to an estimated 16.5 million in 2020 (Central Agency of Public Mobilization And Statistics, 2011)Overall, global estimates that 46% of school age children are anemic. In Egypt, 28.4% of males adolescents aged 10 -14yrs were overweight and 9.9%were obese. While 27.4% of adolescents

Methods

Research design :

A descriptive research design was utilized in this study

Purpose

The study aimed to: Assess healthy nutritional requirement for Preparatory School students through :

- Assessing adolescence knowledge, practice and attitude about healthy national requirement .
- Developing instruction guideline for adolescence regarding healthy nutritional requirement.

Research questions

1. Do students in preparatory schools have good knowledge practices and attitudes regarding healthy nutritional requirement?
2. What is the relationship between children's knowledge practice and attitude?

Setting:

The study was conducted at 2 preparatory schools in Benha City the total number of Governmental Schools was 9. The names of the selected schools were El Saida Esha School and ElEmam mohammed Metwaly Elsharawe.

Sampling :

Cluster sample was chosen as 25% of classes in the first and second grade from previous mention setting schools the total classes in each class were (8) classes and (2) classes were selected randomly the total student in each class was taken, it include (125) student from El Emam Mohammed Metwaly Elsharawey School and (53) students from El saida Esha school.

Pilot study:

The pilot study was carried out on 18 student's .The aim of pilot study to assess the clarity, applicability and feasibility of tools. No modifications were done, so the sample of pilot study was included in the total sample.

Ethical consideration:

An oral permission was obtained from each student before conducting the interview them a brief discussion to the goal of the study adolescence were also

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Reassured that all gathered information would be treated confidentiality and used only for the aim of the study

Content validity:

Validity was done by three of faculty, nursing staff experts from the community health nursing specialties healthy nutritional requirement that consisted of 17 items about adolescence behavior towards nutritional habits.

Scoring system:

For knowledge part, Knowledge score for each question was 2 for complete answer, and 1 for Incomplete answers, and 0 for Do not know answer. Total scores of knowledge was 16 = 100%

All items of Knowledge scores were considered good, if the score of the total knowledge was >75% (>12 score), average if it was 50%-75 % (8-12 score) and poor if it was <50% (<8 score).

▪ For practice part, scoring system was:

- ❖ 1 for done and 0 for not done. Total score of practice was 25=100%. The total practices score were considered
- ❖ Satisfactory if the score of the total practices $\geq 60\%$ (≥ 15 score) and unsatisfactory if it was <60% (<15 score).

▪ Scoring system for attitude: Two was provided for strongly agree, one for agree, and 0 for disagree. Total score of attitude was 34 =100%. The total attitude score was considered positive if the score of the total practices $\geq 80\%$ (≥ 27 score), and considered negative if it was <80% (<27score).

Procedure

- 1- An official letter was sent from the Dean of the faculty of nursing in Benha city was sent to the Administration of Education in Kalyobya.
- 2- Directors of the two schools were received acknowledge about the purpose of the study method of data

collection to facilitate the researcher work

3- Also ,students were told about the purpose of the study and methods of data collection

4- Data was collected from students through personal interview .The interview was conducted days/week (Monday and Tuesday). Data was collected from 7am.

Results

Table (1): shows that 29,8% of studied adolescence from El Saida Eisha School and 70,2% from EL-Emam Mohammed Metwaly School, e, 69.7% of them were males and 30.3% of them were females, and 30.9% of studied students were less than 13years old, 47.2% From 13 to less than 14 years old and 21.9% of them were from 14 to 15 years old

Table (2): Describes that 46.6 % of students had family number was from 5 to 8 persons, 64.1% of them University education and 30.9 % of mothers education was also high qualified.

Figure (1): Reveals that 57.9% of students had good knowledge, and 28,7% had average knowledge, and 13.5% had poor knowledge .

Figure (2): Reveals that 57.3% of had unsatisfactory student's practices about healthy nutritional requirement, while 42.7 had satisfactory practices related to healthy nutritional requirement.

Figure (3): show that 72.5% of the sample had adequate income.

Table (3) revealed that there was appositve statistically significant correlation between total knowledge and total attitude score there were no statistical significant correlation between total knowledge and total practices score.

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Table (1): Distribution of studied students according to their social characteristics

Items	No	%
School name		
El Saida Eisha	53	29.8
EL-Emam Mohammed Metwaly	125	70.2
Class		
First	89	50.0
Second	89	50.0
Gender		
Male	124	69.7
Female	54	30.3
Age		
< 13	55	30.9
13 to < 14	84	47.2
14 to 15	39	21.9
Mean ± SD	12.9 ± 0.81	

Table (2): Frequency distribution of family studied adolescence regarding their family socio-demographic as reported by them (n=178).

Items	No	%
Family number		
Less than 5	76	42.7
From 5 to 8	83	46.6
More than 8	19	10.7
Monthly income		
Adequate	114	64.1
Inadequate	33	19.6
Adequate and save	29	16.3
Father education		
Don't read and write	12	6.7
Reads and writes	20	11.2
Secondary	46	25.8
Above average	39	21.9
University	61	34.3
Mother education		
Don't read and write	23	12.9
Reads and writes	32	18.0
Secondary	41	23.0
Above average	27	15.2
University	55	30.9

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Figure (1): Frequency distribution of studied students according to their level of knowledge regarding healthy nutritional requirement.

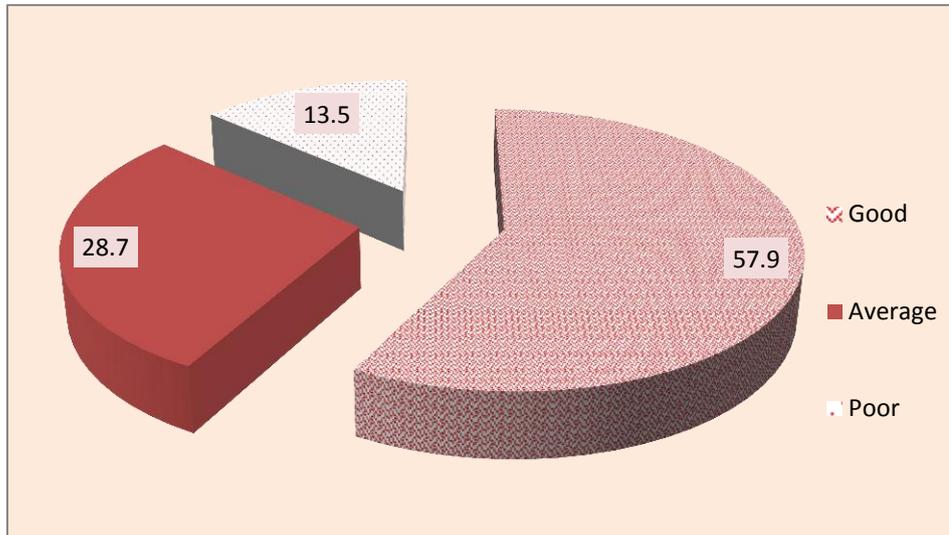


Figure (2): Frequency distribution of students regarding their total practices regarding healthy nutritional requirement

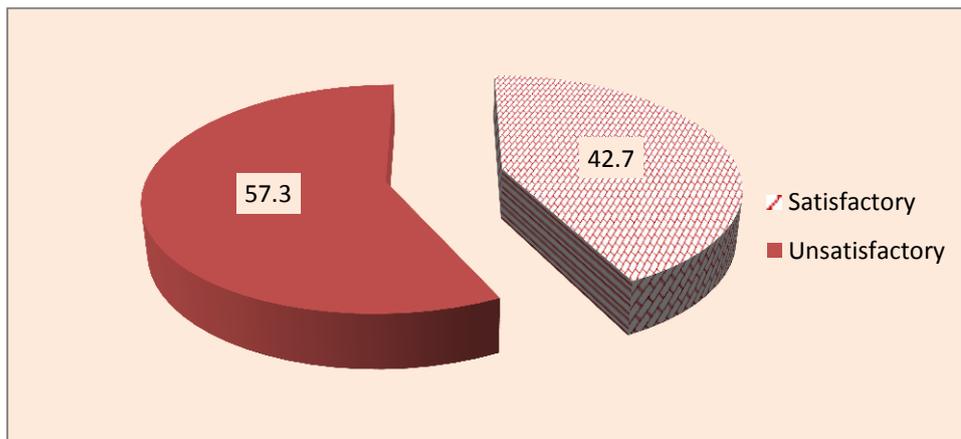
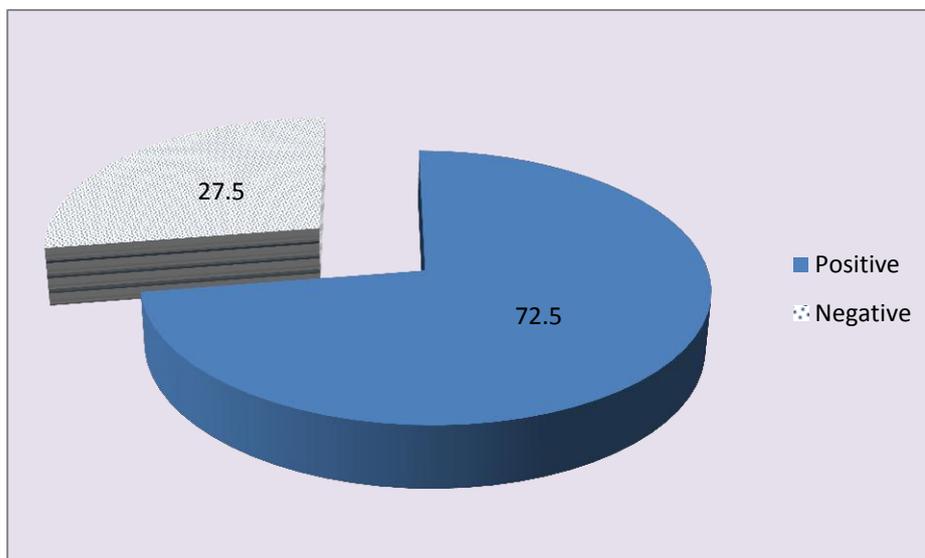


Figure (3): Frequency distribution of total attitude studied students regarding healthy nutritional requirement



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Table (3): Correlation between total knowledge, total practices and attitude

	Total knowledge	
	R	P-value
Total practices	0.14	0.56
Total attitude	0.25	0.04*

*Significant $p \leq 0.05$

Discussion

Regarding healthy nutritional requirement, the present study revealed that more than half of students had Good knowledge Figure (1). This finding agrees with Yinchu et al. (2017), who performed a study on "Food safety knowledge, attitude and self-reported practice of secondary school students in Beijing, China: A cross-sectional study" and reported that half of them had good knowledge about nutrition.

Reported Concerning studied sample total practices regarding healthy nutritional requirement, the present study revealed that more than half of adolescence students had unsatisfactory practices regarding healthy nutritional requirement and approximately two fifth of adolescence students had satisfactory practices Figure(2). This finding agrees with Marial (2012), who reported that that found 41.7% of students had a well-balanced diet practices.

Concerning studied sample attitude about healthy nutritional requirement, the present study revealed that more than two third of the students had positive attitude regarding healthy nutritional requirement while one quarter of them had negative attitude regarding healthy nutritional requirement. This finding was close to Ibrahim et al. (2010), who performed a study on "Body Image, Eating habits and practice exercises attitudes of female adolescent students at Assiut University and reported that nearly two third of students had positive attitude towards nutrition.

Concerning correlation between total studied adolescence practice and total knowledge, the results showed that there was a positive correlation between total knowledge and total attitude score and no statistically significant correlation between total knowledge and total practices score. These results are agree with Shaziman et al. (2017), who performed a study on "Assessing Nutritional Knowledge, Attitudes and Practices and Body Mass Index of Adolescent Residents of orphanage Institutions in Selangor and Malacca and reported that no significant correlation was found between nutrition knowledge and practice.

Conclusion

Based on the result of the present study and answering research question, the following can be concluded:

The majority of studied students had good knowledge regarding healthy nutritional requirement, while more than half of studied adolescence had unsatisfactory practices regarding healthy nutritional requirement. there was appositive significant relation between studied adolescence total knowledge and total attitude, while there was in significant relation between studied adolescence total knowledge and total practice score.

Recommendations

In the light of the result of the present study, the following Recommendations are suggested health education program

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should be planned and conducted at school to improve knowledge and practice of adolescence about healthy nutritional requirement. This research should be conducted on a larger sample size to ensure the generalizability of result.

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