

Original article**A STUDY OF AWARENESS OF NUTRITION & ANAEMIA
AMONG COLLEGE GOING STUDENTS OF MAHILA
COLLEGE OF BHAVNAGAR****Harshad Patel¹, Harsha Solanki², Vibha Gosalia², Falguni Vora³, M. P. Singh⁴****Financial Support:** None declared**Conflict of interest:** None declared**Copy right:** The Journal retains the copyrights of this article. However, reproduction of this article in the part or total in any form is permissible with due acknowledgement of the source.**How to cite this article:**

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Email:harshadneetapsm@yahoo.co.in**Date of Submission:** 07-04-13**Date of Acceptance:** 15-05-13**Date of Publication:** 30-06-13**ABSTRACT****Background:** The lives of young population are characterized by limited education, lack of knowledge pertaining to health aspects & also limited influence on decisions affecting their lives. Thus, awareness is one major factor for development of this group of population.**Aim & Objectives:** 1) To study awareness regarding nutrition & anaemia amongst young college going students. 2) To assess the impact of health awareness programme on knowledge of nutrition & anaemia.**Materials & Method:** Present cross-sectional study was conducted among representative group of 68 young girls from Mrs. N.C.Gandhi & Mrs. B.V.Gandhi Mahila Arts & Commerce College, Bhavnagar city. Pre test was carried out before beginning the programme followed by post test to assess the impact of health awareness programme. Health Awareness programme was carried out by Department of PSM, Government Medical College of Bhavnagar on 24th January 2012 on Nutrition & anaemia.**Results:** The knowledge of girls regarding health aspects improved significantly after intervention. There was a considerable increase in the awareness levels of girls with regard to knowledge of nutrition & anaemia.**Conclusion:** The informative & educable intervention definitely has a positive effect on awareness levels which would eventually encourage expansion of knowledge & positive health habits.**Key Words:** College going students, Nutrition, Anaemia, Health Education**INTRODUCTION**

Young population ranges from 10-24 years of age which includes adolescents & youth both. Adolescence refers more broadly to the phase of human development encompassing the transition from childhood to adulthood. In terms of age, it is the period of life that is extended from 10-19 years referred as adolescence; 15-24 years age termed as youth.¹ Young age period is very crucial since these are formative years in life of an individual when major physical, psychological & behavior changes take place along with pubertal development. This is also the period of

preparation for undertaking greater responsibilities including decision for study, to earn livelihood & healthy responsible parenthood. Future of the society depends on these young people as they form a great human resource for the society. Nutritional & health need of the young people are also more because of more requirements for growth spurt & increase in physical activity. Young people need more of all nutrient particularly calcium, iodine & iron. The need for more iron during this period is due to growth spurt & the onset of menstruation. Inadequate iron storage during younger age & before conception

leads to iron deficiency anemia during pregnancy which aggravates the risk of death due to anemia during pregnancy.²

India has the largest population of adolescents which includes young girls in the world being home to 243 million individuals aged 10-19 years, constitutes 20 per cent of the world's 1.2 billion adolescents.³

Within the family, compared to boys, the girls' health, nutrition, education & development are more neglected which has adverse effect on reproductive health. Young girls face more problems than boys, largely due to socio-cultural factors. There are limited choices available for the future & girls are caught in the cycle of early marriage, pregnancy & childbearing. Education regarding the nutrition & other health aspect during study period will help the young college girls for their future life.

In spite of many efforts from different governmental & non governmental agencies focusing on different health aspects, this young population, especially the girls, is deprived of the basic health care & awareness.

With the above background, the present study was formulated in order to see the awareness of young college going girls in relation to health & to assess the effect of educational intervention on their knowledge levels in Mahila college of Bhavnagar City.

MATERIAL & METHODS

Present cross-sectional study was conducted among group of 68 college students (who falls in young age group) from Mrs. N.C.Gandhi & Mrs. B.V.Gandhi Mahila Arts & Commerce College, Bhavnagar city. The awareness programme was conducted by the department of Preventive &

Social Medicine, Government Medical College on 24th January 2012. Before beginning the programme, the adolescents were briefed about the purpose of the study & then who were ready to participate in the study gave written informed consent. PRE-TEST questionnaires were distributed among adolescents & the time given for the same was 30 minutes. At the end of programme POST-TEST questionnaires were filled up again by the adolescents to assess impact of health education.

The intervention consists of various lectures delivered by assistant professors for one hour on each topic such as general aspect of nutrition, components of nutrition & various nutritional deficiency disorders common in India with special emphasis on iron deficiency anaemia with audio visual aids, flipcharts & demonstrations. The detailed lecture on iron deficiency anaemia was delivered by assistant professor who included sources of iron, symptoms of iron deficiency, its prevention & treatment for one hour. Posters regarding balance diet, component of food, nutritional disorders common in India, sources of iron, deficiency symptoms of it, effects of iodine deficiency etc. were exhibited by interns. For assessment regarding their knowledge Semi structured questionnaire were prepared consisting nutrition & anaemia. The data were analyzed using Microsoft excel & Epi info software & presented in the form of tables.

RESULTS

The background of a person helps in revealing possession of certain knowledge & qualities. In the present study, maximum college going students (80.9%) were belonging to 18-20 years of age group. 83.8% adolescents were studying in B.A.

Table 1: Awareness regarding Nutrition among study participants

Variables	Pre test No. (%)	Post test No. (%)	X ² value (p-value)
What is nutritious diet?			
Correct answer	09(13.2)	43(63.2)	35.99 (<0.05)*
Incorrect answer	59 (86.8)	25(36.8)	
Component of food			
Correct answer	64(94.1)	62(91.2)	0.11# (0.74)
Incorrect answer	04 (05.9)	06(8.8)	
What are the deficiencies or disease can occur due to lack of nutritious diet?			
Correct answer	23(33.8)	57(83.8)	35.09 (<0.05)*
Incorrect answer	45(66.2)	11(16.2)	
Total	68	68	

*Significant at the level 95% CI; #Yates corrected value

Table 2: Awareness regarding Anaemia among study participants

Variables	Pre test No. (%)	Post test No. (%)	X ² value (p-value)
Aware of Anaemia?			
Yes	30 (44.1)	61 (89.7)	31.92 (<0.05)*
No	38 (55.9)	07 (10.3)	
Aware of symptoms of Anaemia?			
Yes	49 (72.1)	63(92.6)	8.55#0.003*
No	19 (27.9)	05(7.4)	
Aware of preventive measures to be taken for anaemia?			
Yes	18(26.5)	60(88.2)	53.03(<0.05)*
No	50(73.5)	08(11.8)	
Are you aware of the treatment of Anaemia?			
Yes	05(7.3)	60 (88.2)	85.93#(<0.05)*
No	63 (92.6)	08(11.8)	
TOTAL	68	68	

*Significant at the level 95% CI; #Yates corrected value

The priority for future was health for most of the adolescents followed by education & carrier. Most of the young college girls were aware about the legal age of marriage for both boys & girls.

Nutritious diet is Balanced diet which contains all nutrients required for growth & development of body. Only 13.2% young college girls were aware about this before health education but after health education the response regarding the same has been significantly improved (63.2%) which is statistically proved (p=0.00). Maximum young college girls were known about the components of food (55.9%). Only 33.8% young college girls knew that lack of nutritious diet results in malnutrition, anaemia & vitamin deficiencies. But after health education 83.8% young college girls became aware about this fact. The result was statistically significant (p=0.00).

Only 44.1% young college girls were aware about anaemia, but after education the response for the same has been significantly improved i.e. 89.7%, which is statistically significant (p=0.00). Correct response regarding symptoms of anaemia was given by 38.2% before health education but after health education maximum (51.2%) young college girls became aware about the fact. Most of the young college girls were not known about the preventive measures of anaemia (73.5%) & treatment of anaemia (92.6%). After health education response regarding the both has been significantly improved (p=0.00).

DISCUSSION

Human beings can alter their lives by changing their attitudes. Educational interventions can help change the attitudes of people for their

betterment. Since young age is a period of rapid personal, physical & intellectual development & the effects of poverty, illiteracy as well as lack of nutritional & health care are further magnified by gender discrimination, girls of this age group need to be addressed as special target category by development programmes.

For young girls in India, poor nutrition, early childbearing & reproductive health complications compound the difficulties of physical development. Most girls are not adequately aware of their increased nutritional needs for growth (especially increasing their food intake to meet calorie demands of pubertal growth); resulting in girls that are underweight & of short stature. Their current nutritional status will decide the well being of the present as well as the future generations.⁴ In the present study knowledge regarding nutritious diet & disorders due to its deficiency was poor i.e.13.2% & 33.8% respectively which improved significantly after health education to 63.2% & 83.8%. The results are in concurrence with the study by Saibaba et al. (2002) which revealed that use of educational aids through intervention have a positive effect on the nutritional knowledge of girls which may ultimately improve their nutritional status.⁵

A study by Passi & Malhotra (2002) found that with the onset of menarche at puberty & in the absence of adequate dietary intake, young girls become highly susceptible to anemia. In every nation, the welfare of the entire community depends on the health & welfare of youth. The youth & child welfare agencies should acknowledge the fact that the personality of human being is built up in the formative years of the child.⁶

In our study, when explored about anaemia more than 50% were not aware about anaemia, 73.5% & 92.6% young college girls were not having knowledge about its preventive & treatment measures. However after health education response for the same improved significantly i.e. 89.7% became aware about anaemia, 92.6% young college girls then knew about iron deficiency symptoms, 88.2% became aware for its preventive measures & 88.2% gained knowledge on its treatment part. Also in a study done in Haryana (SFWACF 1998) involving intervention to young girls it was seen that knowledge & awareness of the girls regarding anaemia & iron rich foods increased invariably.⁷

Young age is the period wherein girls need special care particularly in shaping their health & well being. They need to be well informed about each and every aspect of health & other related areas including nutrition. Health awareness is one of the major indicators which reveal a person's knowledge about health problems. It was observed that awareness regarding nutrition increased to certain extent after post testing.

CONCLUSION

It can be concluded from the above study that educational intervention, if given in right manner, can bring out positive changes in its true sense & can modify or change the lives of people. This holds true more for the younger population as they are the future men & women who would promote growth & development of our nation.

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