Original Research Paper

Nursing

A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING ANOREXIA NERVOSA AND ITS PREVENTION AMONG ADOLESCENT GIRLS IN SELECTED SCHOOLS OF SRINAGAR.

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ABSTRACT
In contemporary society, females want to be thin. The elite classes and the so called jet setting citizens on the world both propagate and give in to the madness to be thin. As the mass media have come to rule of world with both full of super slim models, young girls end up in idolizing them. Adolescence is a period stuffed with lots of psychological problems. Higher number of girls is affected with common psychological problems like anxiety, sleeping disorder, depression, tension and eating disorders. Studies have shown that most common psychological disorder among adolescents is Anorexia nervosa. Anorexia nervosa is a disorder characterized by extreme concern with body weight, an intense fear of becoming fat, and maintenance of body weight below expected levels for height and age. There are mainly two types of Anorexia nervosa. One is restricting type and other one is binge-eating/purging type.

Aim: The aim of the study was to assess the effectiveness of structured teaching programme on knowledge regarding anorexia nervosa and its prevention among adolescent girls in selected schools of Srinagar.

Materials and methods: A pre- experimental study was conducted using one group pre- test, post -test design to assess the level of knowledge regarding anorexia nervosa and its prevention among adolescent girls in selected schools of Srinagar. The study was conducted in 2 selected schools of Srinagar (IMI girls wing Srinagar& SSM higher secondary Srinagar). The sample was selected by Stratified proportionate Simple random sampling technique. The sample size was 80. Structured questionnaire was used to assess the knowledge of adolescents girls.

Results: Findings of the study revealed that the post- test mean score was 23.69 with standard deviation 4.16 and the respondents knowledge was significantly higher than, the pre-test mean score of 13.30 with standard deviation 4.11 at P<0.05 level. It is evident that the mean post-test score was higher than the mean pre-test score. Hence the STP on Anorexia nervosa and its prevention was effective.

The study revealed that there is statistically significant association with variable such as occupation of mother(at p=0.02) and evidenced that there was statically association at p≤0.05 level and no association was found with demographic variables like age, residence, type of family, educational status of father, educational status of mother, occupation of father and dietary habits

KEYWORDS : structured teaching programme; anorexia nervosa and its prevention; adolescent girls; knowledge.

Introduction:

Adolescence is a period stuffed with lots of psychological problems. Youth health surveys show that psychological problems are more common in girls compared to boys. Higher number of girls is affected with common psychological problems like anxiety, sleeping disorder, depression, tension and eating disorders. Studies have shown that most common psychological disorder among adolescent girls is anorexia nervosa. Many girls who strive to lose weight state "I wish I were anorexic". They fail to recognize the wretchedness of the disease called Anorexia nervosa[1].

The term is of Greek origin: a (negation) and orexis (appetite), thus meaning a lack of desire to eat. Anorexia nervosa is a disorder characterized by extreme concern with body weight, an intense fear of becoming fat, and maintenance of body weight below expected levels for height and age. Individuals with anorexia nervosa typically express an intense fear of gaining weight, tend to be preoccupied with thoughts of food, and worry irrationally about fatness. There are mainly two types of anorexia nervosa. One is restricting type and other one is binge-eating/purging type. In restricting type, the person is not regularly engaged in binge-eating or purging behavior .In binge-eating/purging type the person is regularly engaged in binge-eating or purging behavior[2].

Need of the study:

"Eating is always a decision; nobody forces your hand to pick up food and put it into your mouth[3]."
(Albert Einstein)

Young children are assets to the nation. Healthy generation is needed for the upliftment of every nation. Particularly a developing country like India needs young healthy generation, so that the country can develop in all aspects. But our teenagers are being trapped by so called 'Barbie doll syndrome', where the teenagers are starving themselves daily to attain ideal figure. The danger behind this trend is that severe weight loss makes a person unable to think clearly or function in daily life. Society, today promote the ideals of a slim body more than ever before. Models are pretty and thin, they are often taken as role models of success. However they must be underweight to look perfect on televisions and magazines. In order to look good they practice severe dieting and end up in a condition known as anorexia nervosa.

Anorexia nervosa is an intriguing psychiatric disorder that is becoming a significant public health issue for adolescent girls around the world.

In a recent survey, the teenagers in America were asked what they feared the most. The results were indeed quite shocking. Fear of gaining weight topped the list, beating other fears like cancer, the fear of losing parents or even death[4].

Statement of the problem:

A study to assess the effectiveness of structured teaching programme on knowledge regarding anorexia nervosa and its prevention among adolescent girls in selected schools of Srinagar.

Objectives:

1. To assess the pre-test knowledge regarding anorexia nervosa and its prevention among adolescent girls in selected schools of Srinagar.
2. To assess the post- test knowledge regarding anorexia nervosa and its prevention among adolescent girls in selected schools of Srinagar after STP**.**
3. To compare pre-test and post-test knowledge scores regarding anorexia nervosa and its prevention among adolescent girls in selected schools of Srinagar.
4. To determine the association of pre- test knowledge scores of adolescent girls regarding anorexia nervosa and its prevention with selected demographic variables(age, residence, type of family, educational status of father, educational status of mother, occupation of father, occupation of mother, dietary habits).

Research hypothesis: All hypothesis will be tested at p≤ 0.05 level of significance.

H₁: There is significant difference between pre-test knowledge and post-test knowledge scores of adolescent girls regarding anorexia nervosa and its prevention at p≤ 0.05 level of significance.

H₂: There is significant association of the pre- test knowledge scores of adolescent girls regarding anorexia nervosa and its prevention with their selected demographic variables (age, residence, type of family, educational status of father, educational status of mother, occupation of father, occupation of mother, dietary habits) at p≤ 0.05 level of significance.

Conceptual framework: The conceptual framework for the present study has been derived from King`s Goal Attainment Theory developed by Imogene King which encompasses a conceptual framework involving three interrelated sets of systems (personal, interpersonal and social system)[5].

Materials and Methods:

The research design selected for this study was Pre Experimental One Group Pre Test Post Test Design. In the present study structured knowledge questionnaire was administered to adolescent girls of selected schools of Srinagar as a Pre Test measure & the Treatment/ Intervention was in the form of Structured Teaching Programme & the Post Test was taken after giving Intervention.

The research design used in this study was Pre- experimental in nature. The study was conducted at 2 selected Schools of District Srinagar, Kashmir. The sample of 80 adolescent girls on the basis of inclusion and exclusion criteria were selected by using Stratified proportionate Simple random sampling technique. The tool used for the study was structured knowledge questionnaire consists of section 1(Demographic Proforma consists of :age, residence, type of family, educational status of father, educational status of mother, occupation of father, occupation of mother ,dietary habits) and section 2 (consisting of items related to incidence/ introduction of anorexia nervosa., items regarding causes and symptoms of anorexia nervosa, items regarding complications of anorexia nervosa, items regarding prevention of anorexia nervosa).The content validity of structured questionnaire was ensured by submitting the tool to the experts who had specialization in various areas. A pilot study was conducted on 10% of total sample size at SSM higher secondary Srinagar. Reliability of tool was established by Karl Pearson's Correlation coefficient. The reliability of tool was calculated and it was 0.95.

Results and Findings

In this study 80 adolescent girls participated. The data and the findings were entered in a master data sheet followed by the analysis and interpretation using descriptive statistics (i.e. frequency, percentage, mean, median and standard deviation) and inferential statistics (i.e. t-test and ANOVA) according to the objectives of the study. The results obtained were presented in the following headings: -

Section 1: Findings related to demographic variables.
Table 1. Frequency and percentage distribution of adolescent girls according to demographic variables.

n=80

Variables	Category	Frequency(f)	Percentage
Age	Less than 15 years	40	50%
	More than 15 years	40	50%
Residence	Rural	32	40%
	Urban	48	60%
Type of Family	Nuclear	61	76.3%
	Joint	19	23.8%
Educational status of father	Illiterate	1	1.3%
	Middle pass	5	6.3%
	Secondary	22	27.5%
	Higher secondary	13	16.3%
	Graduate	33	41.3%
	P.G	6	7.5%
Educational status of mother	Illiterate	11	13.8%
	Middle pass	11	13.8%
	Secondary	16	20.0%
	Higher secondary	21	26.3%
	Graduate	18	22.5%
	P.G	3	3.8%
Occupation of father	Private employee	11	13.8%
	Govt. employee	39	48.8%
	Business/Self-employed	30	37.5%
Occupation of mother	House Wife	65	81.3%
	Private employee	3	3.8%
	Govt. employee	12	15.0%
Dietary habit	Veg	32	40%
	Non veg	48	60%

Section 2. Analysis and interpretation of knowledge of adolescent girls regarding Anorexia nervosa & its prevention.

Table 2. Mean, median, SD & range of pre-test & post-test knowledge scores of adolescent girls regarding Anorexia nervosa & its prevention.

n=80

| Knowledge score	Mean	Median	Standard deviation	Minimum	Maximum	Range
Pre score	13.30	13.00	4.11	4	22	18
Post core	23.69	24.00	4.16	14	31	17

Table 3. Comparison of pre- test & post- test mean knowledge scores of adolescent girls regarding anorexia nervosa & its prevention.

To test research hypothesis Null hypothesis was formulated as:

H0: There is no significant difference between pre-test & post-test knowledge scores of adolescent girls regarding anorexia nervosa & its prevention.

n=80

| Mean knowledge score	Mean score	Mean score(percentage)	Mean difference	P value
Pre –test score	13.30	39.1%	10.38	≤0.001
Post-test score	23.69	69.67%		
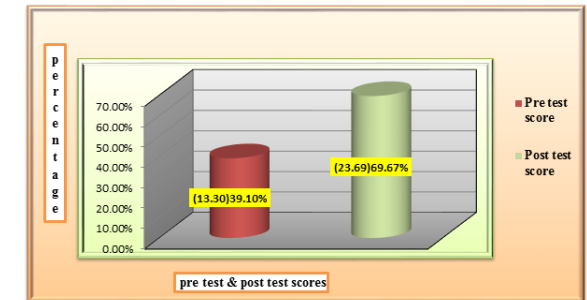
The data in table 3 & figure 1 showed that pre- test mean score percentage is 39.1% and post-test mean score percentage is 69.67% with mean difference of 10.38 and p value ≤ 0.001 which indicates that there is high significant difference between pre-test & post-test mean knowledge scores. So the Null hypothesis(H0- there is no significant difference between pre-test & post-test knowledge scores of adolescent girls regarding anorexia nervosa & its prevention) is rejected & Research hypothesis (H1-there is significant difference between pre-test knowledge and post-test knowledge scores of adolescent girls regarding anorexia nervosa and its prevention after administering structured teaching programme at p≤ 0.05 level of significance) is accepted.

Table 4:Comparison of pre-test & post -test level of knowledge scores of adolescent girls regarding anorexia nervosa & its prevention.

n=80

Level of Knowledge	Percentage score	Pre test		Post test	
		Frequency	%age	Frequency	Percentage
Inadequate	≤50%	66	82.5%	8	10%
Moderate	51-76%	14	17.5%	48	60%
Adequate	>76%	0	0%	24	30%
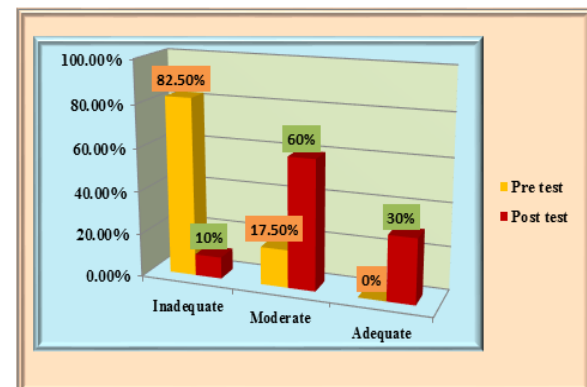
The data in table 4 & figure 2 showed that in pre-test 66(82.5%) adolescent girls were having inadequate, 14 (17.5%) having moderate & no one(0%) having adequate knowledge while in post-test 8 (10%) of adolescent girls were having inadequate knowledge,48(60%) having moderate & 24(30%) were having adequate knowledge regarding anorexia nervosa & its prevention.

Section 3: Analysis and interpretation of data to find out an association of pre –test knowledge scores of adolescent girls with their selected demographic variables.

Table 5: Association of pre –test knowledge scores of subjects with their selected demographic variables.

Here the researcher tests the Null hypothesis H0 that there is no significant association of pre-test knowledge scores of adolescent girls with their selected demographic variables.

n=80

Variables	Category	Mean/ S.D	Mean Difference	P.Value
Age	Less than 15 years	11.78±3.59	3.05	0.5
	More than 15 years	14.83±4.06		N.S
Residence	Rural	12.78±4.02	0.86	0.3
	Urban	13.65±4.174		N.S
Type of Family	Nuclear	13.66±4.151	1.49	0.4
	Joint	12.16±3.862		N.S
Educational status of father	Illiterate	11.00±0.00	2.6	0.66
	Middle pass	13.60±5.27	0.72	
	Secondary	14.32±3.18	2.40	N.S
	Higher secondary	11.92±4.09	1.38	
	Graduate	13.30±4.35	0.63	
	P.G	12.67±5.42	1.67	
Educational status of mother	Illiterate	13.27±3.58	0.91	0.88
	Middle pass	12.36±3.23	1.95	
	Secondary	14.31±4.01	1.36	
	Higher secondary	12.95±3.95	0.55	N.S
	Graduate	13.50±4.96	0.83	
	P.G	12.67±7.02	0.60	
Occupation of father	Private employee	13.36±4.34	0.18	0.85
	Govt. employee	13.54±4.41	0.57	N.S
	Business/Self-employed	12.97±3.71	0.39	
Occupation of mother	*House Wife*	*12.85±3.95*	*1.52*	*0.02*
	Private employee	*11.33±7.02*	*4.92*	*[*]S*
	Govt. employee	*16.25±3.13*	*3.4*	
Dietary habit	Veg	12.19±3.87	2.09	0.12
	Non veg	14.28±4.48		N.S

Note: N.S-Not significant [*] S- Significant at p < 0.05 level

The data presented in table 5 indicates that there was significant association of pre-test knowledge scores of adolescent girls with demographic variable as, occupation of mother (at p=0.02) and evidenced that there was statistically association at $p \leq 0.05$ level and no association was found with variables like age, residence, type of family, educational status of father, educational status of mother, occupation of father and dietary habits.

Hence the Researcher accepted the Null hypothesis(H_0 there is no significant association of pre-test knowledge scores of adolescent girls with their selected demographic variables)& rejects research hypothesis (H_2 there is significant association of the pre- test knowledge scores of adolescent girls regarding anorexia nervosa and its prevention with their selected demographic variables like age, residence, type of family, educational status of father, educational status of mother, occupation of father, occupation of mother, dietary habits) at $p \leq 0.05$ level of significance) .

Discussion:
In pre-test 66(82.5%) having inadequate, 14 (17.5%) moderate and no one (0%) having adequate knowledge regarding anorexia nervosa and its prevention. Pre-test mean score was 13.30, median was 13, and standard deviation was 4.11. This study reveals that majority of adolescent girls were having inadequate knowledge so need to be educated regarding anorexia nervosa and its prevention.

The present study was supported by a similar cross sectional study conducted by **Westenhoefer J -2006** in Germany among school students to assess their knowledge regarding anorexia nervosa. A self-administered questionnaire was used. The majority (78.2%) had no idea regarding anorexia nervosa. Only 20.3% have some knowledge regarding anorexia nervosa. The results of the study revealed inadequate knowledge on anorexia nervosa. So the Government and clinicians should combine efforts to provide accurate information on anorexia nervosa during school health programmes[6].

In post-test 24 (30%) of adolescent girls were having adequate knowledge,48 (60%) were having moderate knowledge & 8(10%) were having inadequate knowledge after structured teaching programme. In post-test mean score was 23.69, median was 24.00, standard deviation was 4.16 .

Similarly a study was conducted by **Praveena P.S 2013** to evaluate the effectiveness of planned teaching programme on knowledge of pre university students regarding anorexia- nervosa and its prevention at selected pre-university colleges, Bangalore. Purposive sampling technique was used. One group pre-test, post- test design with pre experimental approach was adopted. The data was collected from 50 respondents before and after administration of planned teaching programme. The pre - test median score was (20.1) and that of the post test was (40.5).Hence, the planned teaching programme was effective in improving the knowledge of pre-university students regarding anorexia nervosa[7].

The mean knowledge score 23.69 obtained by the adolescent girls in post-test was higher than mean knowledge score 13.30 in the pre-test and with the improvement score as 10.39. There was significant difference between pre-test and post-test knowledge score at p < 0.05 level. This indicates that structured teaching programme was highly effective in enhancing the knowledge of adolescent girls regarding anorexia nervosa and its prevention. Hence the research hypothesis H1 (there is significant difference between pre-test knowledge and post-test knowledge scores of adolescent girls regarding anorexia nervosa and its prevention after administering structured teaching programme at $p \leq 0.05$ level of significance) is accepted .

A similar study was conducted in Coimbatore by **Halmi KA 2009** to evaluate the effectiveness of structured teaching programme on anorexia nervosa. Fifty working women were involved in the study. The study results showed that post -test score (mean: 39.6±2.57) was higher than that of pre-test score (mean: 13.23±3.88) and t- value was 15.12. It was concluded that structured teaching programme was effective in enhancing the knowledge regarding anorexia nervosa[8].

The association of demographic variables with pre-test score of knowledge by using ANOVA revealed there is statistically significant association with variables such as occupation of mother (at p=0.02) and evidenced that there was statistically association at $p \leq 0.05$ level and no association was found with variables like age, residence, type of family, educational status of father, educational status of mother, occupation of father and dietary habits .Hence the research hypothesis H_2(there is a significant association of the pre- test knowledge scores of adolescent girls regarding anorexia nervosa and its prevention with their selected demographic variables age, residence, type of family, educational status of father, educational status of mother, occupation of father, occupation of mother, dietary habits at $p \leq 0.05$ level of significance) is rejected .

Similarly, a study was conducted on effectiveness of self - instructional module on the knowledge regarding anorexia nervosa among adolescent girls in selected Schools in Australia, by approaching one group pre- test, post- test design. The sample consisted 50 adolescent girls selected by convenient sampling and data was collected by using structured knowledge questionnaire .The result showed the significant difference suggesting that self - instructional module was effective in increasing the knowledge of adolescent girls (t=14.34).The mean post-test knowledge (x2=43.17) higher than the mean pre- test knowledge (x1=30.40).There was no association between the pre- test knowledge scores and the selected demographic variables like age, weight, place of residence, type of family and previous knowledge source ,way of perceiving body image[9].

Recommendations:
On the basis of the present study the following recommendations have been made for further study:
1. Similar study may be replicated on large sample to generalize the findings.
2. A comparative study may be conducted between urban and rural adolescent girls.

3. A study may be conducted on degree college students, health clinics and community organizations that have access to adults and want to have an impact on the health of the community.

4. A descriptive study can be conducted on knowledge regarding anorexia nervosa and its prevention among adolescent girls in selected schools.

5. A study can be conducted by including additional demographic variables height, weight, and religious factors related to dietary habits.

6. Similar study can be conducted by using a standardized tool.

CONCLUSION:

Based on the analysis of the findings, the following inferences were drawn. There was evident increase in the knowledge scores in all the areas included in the study after administration of STP. Thus it was proved that STP was effective teaching method for creating awareness regarding anorexia nervosa and its prevention among adolescent girls in selected schools of Srinagar.

References

1. Toby D Goldsmith. An introduction to anorexia nervosa.[homepage on internet] 2006 Oct 19 [cited 2014 Nov 15]. Available from URL:http://psychcentral- com / lib/2006/an-introduction-to.anorexia.nervosa.

2. Anorexia nervosa. [homepage on internet] [cited 2014 Dec 2]; Available from URL:http://en.wikipedia.org/wiki/anorexia nervosa

3. Albert Einstein, The quotations page.; Available from: URL:http//www.quotation spage.com/quote/40804.html

4. Anorexia nervosa-A synopsis.[homepage on internet] [cited 2014 Nov 4]; Available from URL:http://www.imars.com/anorexia-nervosa.htm.

5. Burns N, Groove FK. Understanding Nursing Research. 4th ed. Missouri: Elseiver's publication; 2007.

6. Westenhoefer J. Prevalence of eating disorders and weight control practices in Germany in 1990 and 1997. Int J East disorder 2006; 29 : 477 – 481.

7. Praveena Ps A study to assess the effectiveness of structured teaching programme on knowledge regarding anorexia nervosa and its management among adolescent girls in B.E.S pre- university college, Bengaluru. M.Sc.(N) dissertation ,RGUHS,Banglore:2013.

8. Halmi KA. Salient components of a comprehensive service for eating disorders. World Psychiatry. 2009/10;8(3):150-55.

9. www.ned.com.an/eating disorder in Australia.