



A Study to Assess the Effectiveness of the Planned Teaching Programme on Knowledge Regarding Anorexia Nervosa among Adolescent Girls from Selected Colleges of Udaipur Rajasthan

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ABSTRACT

Anorexia nervosa is a dietary problem described by a savage journey for slenderness. The best method to prevent anorexia is to foster healthy dieting habits and a solid self-perception from the beginning. The present study aims to assess the effectiveness of the planned teaching programme on knowledge regarding anorexia nervosa among adolescent girls in the selected college of Udaipur Rajasthan. The quantitative research approach and pre-experimental one-group pre-test post-research design was adopted for this study. The non-probability purposive sampling technique was used for data collection. Data were collected from the adolescent girls to assess the level of knowledge among the adolescent girls by using the structured knowledge questionnaire before and after the planned teaching programme. The collected data were tabulated and analyzed by descriptive and inferential statistics. Results: The planned teaching program was effective for adolescent girls according to the level of knowledge before and after administering planned teaching program, in which 80% of the samples had shown an inadequate knowledge in the pre-test. In contrast, 96% of the samples had adequate knowledge in the post-test. The pre-test mean and SD were 14.4 ± 3.30 and post-test mean and SD were 22.7 ± 2.38 . The overall calculated t value of 16.22 at $p < 0.05$ in the knowledge aspect was higher than the table value of 1.98 at a 0.05 level of significance. It shows the planned teaching program was effective in improving knowledge.

KEYWORDS

Effectiveness; Knowledge; Planned teaching programme; Adolescence Girls; Anorexia Nervosa



INTRODUCTION

Adolescence refers to the period “from puberty to maturity”. During which physical, profound, and mental changes happen in them. Youngsters are the eventual fate of each and every general public and furthermore an extraordinary asset for the country. During which???? physical, profound, and mental changes happen in them. Youngsters are the fate of each and every general public and furthermore an incredible asset for the country. During the progress from adolescence to adulthood, lay out examples of conduct and pursue way-of-life decisions that influence their current and future well-being. Youths and youthful grown-ups are unfavorably impacted by serious prosperity and security issues, for instance, thin magnificence upkeep and viciousness and sexual way of behaving, etc...¹ Food is the prime necessity of life. The food we eat is processed and acclimatized in the body and used for its maintenance and growth, during adolescence, physiological age is a better guide to nutritional needs than chronological age. Energy needs to increase to meet greater metabolic demands of growth; a healthy diet is a diet that arrived with the intent of improving or maintaining optimal health. The diet includes all the nutrients in appropriate amounts from all nutritional categories including an adequate amount of water².

NEED OF THE STUDY

Anorexia nervosa is a dietary problem described fundamentally by an adjusted view of self-perception, bringing about critical weight reduction, and is affected by bio-psychosocial factors. In India, anorexia nervosa is progressively perceived as a reason for horribleness and mortality among teenagers. The detailed lifetime predominance of anorexia nervosa is 0.5-2%, with a pinnacle period beginning around 13-18 years³.

An incidence has risen in the USA and Europe to things like one among females of the 15-19 age groups, now; the phenomenon of ED has assumed a global spread that includes affluent cast Asian countries, in South America, especially Argentina, and children. It has spread to china too⁴. The most commonly occurs in teenage girls, especially in the pre-pubertal age group. The ratio of girls is approximately 10-20:1, about 2% to 3% of young women have a clinically vital variant of the disorder. There has been a consistent increase in the incidence of an over the past ten years⁵. A review of 24 epidemiological studies reported a prevalence of pure anorexia nervosa of 0.5% of young women in western cultures. Reviewing selective studies of case registers found that the



annual incident ranged from 14.1 cases/100,000 girls and women aged 10-24 to 43 cases/100,000 girls and women aged 16-24⁶.

Dieting is a major risk factor of eating disorders. The prevalence of eating disorders in a culture parallels the prevalence of dieting behavior. In non-western cultures, a low prevalence of both eating disorders and dieting exists, although adolescence of all races who belong to higher white women in higher socioeconomic classes diet more and are more concerned about their weight than other subgroups of women⁷.

PROBLEM STATEMENT

“A study to assess the effectiveness of the planned teaching programme on knowledge regarding anorexia nervosa among the adolescent girls in the selected college of Udaipur Rajasthan”

OBJECTIVES

- To assess the pre-test level of knowledge regarding anorexia nervosa among adolescent girls.
- To evaluate the effectiveness of the planned teaching programme on the knowledge regarding anorexia nervosa among adolescent girls.
- To determine the association between pre-test knowledge score with the selected demographic variables.

HYPOTHESIS

H₁: There will be a significant difference between the mean pre-test and post-test level of knowledge score among adolescent girls regarding anorexia nervosa.

H₂: There will be a significant association between the pre-test knowledge scores of adolescents with the selected demographic variables at a 0.05 level of significance.

MATERIALS AND METHODS

Research Approach: A quantitative research approach was used in the study.

Research Design: Pre-experimental, one group pre-test post–research design used.

Sample: In the present study, the sample comprises 120 Nursing Students aged between 17-19 years.



Sampling Technique: In the present study, the samples were selected through a non-probability purposive sampling technique.

Setting: In the present study, the setting was selected nursing colleges in Udaipur city.

Population: In the present study, the target population was B. Sc. Nursing students aged between 17-19 years studying in the selected nursing colleges at Udaipur city.

Description of tool: Structured questionnaire to assess the knowledge. It consisted of two parts:

Section A: 8 Demographic data, includes the age in years, religion, types of family, monthly income of the family, area of residence, food habits, no. of meals pattern per day, previous knowledge regarding anorexia nervosa.

Section B: 30 structured questionnaires, was considered appropriate for assessing knowledge score. The selected aspects are- Definition & incidence rate of Anorexia nervosa; Causes of Anorexia nervosa; Pathophysiology of Anorexia nervosa; Manifestations of Anorexia nervosa; Treatment for Anorexia nervosa; Complications of anorexia nervosa; Preventive measures of Anorexia nervosa. The maximum total score of the knowledge questionnaire was 30 (for each correct response 1 mark will be given and 0 mark for an incorrect answer).

Ethical consideration

- Approval from the ethical committee of Venkateshwar College of Nursing Udaipur.
- Before data collection, written permission was obtained from the concerned authority of the nursing college, at Udaipur.
- Anonymity and confidentiality of subjects were maintained.
- Informed consent was obtained from the subjects.

Plan for data analysis

The data analysis will be done according to the study objectives by using descriptive and inferential statistics. The plan of data analysis would be as follows:

- Frequency, percentage, mean, and standard deviation will be calculated.
- A paired t-test will be used to test the hypothesis.
- The chi-square test will be used for association with demographic variables.

RESULTS AND DISCUSSION

The data obtained are divided into sections for easy and accurate interpretation of data. The data finding has organized under the following section:

Section A: Description of the demographic variables of adolescent girls.



Section B: Description of the samples according to pre-test & post-test level of knowledge among adolescent girls

Section C: Comparative analysis of pre-test & post-test level of knowledge among adolescent girls

Section D: Associate between pre-test knowledge level and selected demographic variables.

Section A: Description of the demographic variables of adolescent girls:

The demographic data consists of 8 items seeking information about age in years, religion, types of family, monthly income of the family, area of residence, food habits, no. of meals pattern per day, and previous knowledge regarding anorexia nervosa.

Table 1 Description of the demographic variables of adolescence girls

N = 120

S. N.	Demographic variables	Frequency (n)	Percentage (%)
1.	Age in years		
	17	42	35
	18	46	38.3
	19	32	26.7
2.	Religion		
	Hindu	64	53.3
	Christian	16	13.3
	Muslim	12	10
	Others	28	23.3
3.	Type of family		
	Nuclear	44	36.7
	Joint	40	33.3
	Extended	36	30
4.	Area of residence		
	Rural	58	48.3
	Urban	50	41.7
	Slum	12	10
5.	Monthly income of the family		
	<10000	32	26.7
	10001-15000	41	34.1
	>15000	47	39.2
6.	Food Habits		
	Vegetarian	58	48.3
	Non-Vegetarian	18	15
	Mixed	44	36.7
7.	No. of meals per day		
	1 time	12	10
	2 times	56	46.7
	3 & more times	52	43.3
8.	Previous knowledge regarding Anorexia Nervosa		
	Through mass media	50	41.7
	Through friends	18	15
	Family members	16	13.3
	No information	36	30



Age in years: Table 1 revealed that regarding the age group majority of respondents 46 (38.3%) were 18 yrs, 42 (35%) were 17 years and 32 (26.7%) were 19 years of age group.

Religion: Table 1 depicted that the majority of the samples 64 (53.3%) were Hindus, 28 (23.3%) were other religions, 16 (13.3%) were Christians and 12 (10%) of them were Muslims.

Types of Family: Table 1 revealed that regarding the types of family majority of respondents 44 (36.7%) were from the nuclear family, 40 (33.3%) were joint family, and 36 (30%) belonged to the extended family.

Area of residence: Table 1 showed that the majority of samples 58 (48.3%) reside in a rural area, 50 (41.7%) reside in an urban area & only 12 (10%) reside in a slum area.

Monthly income of Family: Table 1 depicted that regarding the family income majority of the adolescent girls 47 (39.2%) belongs to the income level >15000 per month, 41 (34.1%) belongs below 10001-15000 per month, 32 (26.7%) were receiving <10,000 per month.

Food Habits: Table 1 revealed regarding the habit of food patterns of adolescent girls majority of 58 (48.3%) were vegetarian, 44 (36.7%) of them belonged to mixed food habits and only 18(15%) were vegetarian.

No. of meals pattern per day: Table 1 showed that the adolescent girl's majority of 56 (46.7%) of them took 2-time meals per day, 52 (43.3%) of them took 3-times meals per day and only 12 (10%) of them took 1-time meal per day.

Previous information regarding anorexia nervosa: Table 1 revealed that the previous information regarding anorexia nervosa shows majority 50 (41.7%) of them have received information about anorexia nervosa through mass media, 16 (13.3%) had received information from family members, 18 (15%) had received information from friends, and 16 (13.3%) of them have no information regarding anorexia nervosa.

Section B: Description of the samples according to pre-test & post-test level of knowledge among adolescent girls: N=120

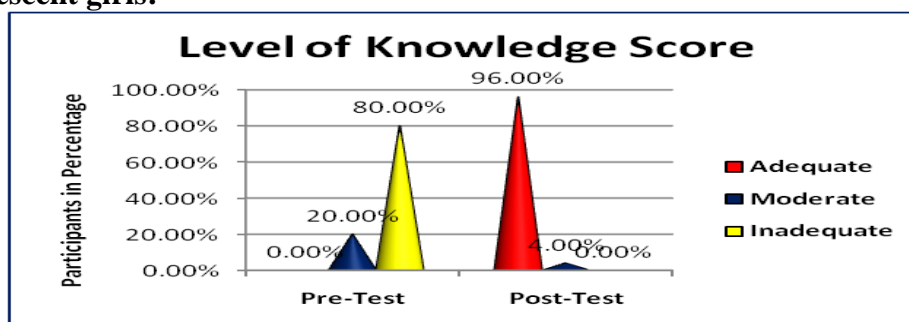


Figure 1 Description of the samples according to pre-test & post-test level of knowledge among adolescent girls



Figure 1 showed that the majority of participants i.e. 80 (80%) of adolescent girls had inadequate knowledge regarding anorexia nervosa, 20 (20%) of adolescent girls had moderate knowledge about anorexia and none of them had adequate knowledge about anorexia nervosa in the pre-test. In the post-test majority of participants i.e. 96 (96%) of adolescent girls had adequate knowledge about anorexia nervosa, 4 (4%) of them had moderate knowledge about anorexia nervosa, and none of had inadequate knowledge regarding anorexia.

Section C: Comparative analysis of pre-test & post-test level of knowledge among adolescent girls:

Table 2 Comparative analysis of pre-test & post-test level of knowledge among adolescent girls N=120

Test	Mean	SD	Mean Difference	Df	t- value	Inference
Pre-test	14.4	3.20	8.3	119	16.22	1.98*
Post-test	22.7	2.38				(0.05 Level) Significant*

H₁: There will be a significant difference between the mean pre-test and post-test knowledge of adolescent girls regarding anorexia nervosa.

Table 2 revealed that the pre-test mean and SD was 14.4±3.30 and the post-test mean and SD was 22.7±2.38. The overall calculated^{*} value of 16.22 at p<0.05 in the knowledge aspect was higher than the table value of 1.98 at a 0.05 level of significance. Hence, the **H₁** was accepted.

Section D: Associate between pre-test knowledge level and selected demographic variables:

Table 3 Associate between pre-test knowledge level and selected demographic variables N = 120

Demographic variables			Total	Chi-Square test	df	Tabulated Value (0.05)	Inference
	Above Median	Below Median					
1. AGE IN YEARS							
17 years	19	23	42	0.82	2	4.30	NS
18 years	25	21	46				
19 years	17	15	32				
Total	61	59	120				
2. RELIGION							
Hindu	34	30	64	1.69	3	3.18	NS
Christian	8	8	16				
Muslim	4	8	12				
Others	15	13	28				
Total	61	59	120				
3. TYPES OF FAMILY							
Nuclear	21	23	44	0.80	2	4.30	NS
Joint	17	23	40				
Extended	19	17	36				
Total	61	59	120				



4. AREA OF RESIDENCE							
Rural	25	33	58	2.68	2	4.30	NS
Urban	29	21	50				
Slum	7	5	12				
Total	61	59	120				
5. MONTHLY INCOME OF THE FAMILY							
<10000	17	15	32	2.33	2	4.30	NS
10001-15000	24	17	41				
>15000	20	27	47				
Total	61	59	120				
6. FOOD HABITS							
Vegetarian	34	24	58	5.85	2	4.30	S
Non-Vegetarian	11	7	18				
Mixed	16	28	44				
Total	61	59	120				
7. NO. OF MEALS PER DAY							
1 time	6	6	12	5.29	2	4.30	S
2 times	34	22	56				
3 & more times	21	31	52				
Total	61	59	120				
8. PREVIOUS KNOWLEDGE REGARDING ANOREXIA NERVOSA							
Through mass media	37	13	50	14.49	3	3.18	S
Through friends	6	12	18				
Family members	9	7	16				
No information	9	27	36				
Total	61	59	120				

S = Significant / NS = Non Significant

H₂: There will be a significant association between the pre-test knowledge scores of adolescents with the selected demographic variables at a 0.05 level of significance.

Table 3 showed that the demographic variable such as food habits ($\chi^2=5.85$), no. of meals pattern per day ($\chi^2=5.29$), previous knowledge regarding anorexia nervosa ($\chi^2=14.49$) is higher than the tabular value which indicates that there is a significant association at $p>0.05$ level and other demographic variables such as age in years ($\chi^2=0.82$), religion ($\chi^2=1.69$), types of the family ($\chi^2=0.80$), monthly income of the family ($\chi^2=2.68$), area of residence ($\chi^2=2.33$) is non-significant at $P<0.05$. Hence, research hypothesis **H₂** was accepted.

CONCLUSION

The present study aims to assess the effectiveness of the planned teaching programme on knowledge regarding anorexia nervosa among adolescent girls in the selected college of Udaipur Rajasthan. The quantitative research approach and pre-experimental one-group pre-test post-research design was adopted for this study. The non-probability purposive sampling technique was used for data collection. Data were collected from the adolescent girls to assess the level of



their knowledge among the adolescent girls by using a structured questionnaire before and after the planned teaching programme. The collected data were tabulated and analyzed by descriptive and inferential statistics. The study findings showed that the planned teaching program was effective in improving the knowledge of nursing students regarding anorexia nervosa. There was a significant difference between the pre-test knowledge score and post-test knowledge score after the administration of the planned teaching program regarding the knowledge of anorexia nervosa at the 0.05 level of significance. There was a significant association between the pre-test level of knowledge and demographic variables.



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