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# A study to assess the effectiveness of planned teaching programme on knowledge and attitude regarding anorexia nervosa among the adolescent girls in selected schools of Dehradun

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### Abstract
The aim of the study was determine the effectiveness of planned teaching programme on knowledge and attitude regarding anorexia nervosa among adolescent girls. A pre experimental one group pretest-posttest design was used for the study. Convenience non- probability sampling technique was used to select 100 adolescent girls. The data collection tool consists of three parts: demographic variables, self-structured questionnaire and eating attitude test-26. The result showed that there is no significant association between knowledge of adolescent girls regarding anorexia nervosa with selected socio-demographic variables. This study concludes that planned teaching programme was effective in increasing the knowledge and attitude regarding anorexia nervosa among the adolescent girls.

**Keywords:** Anorexia nervosa, adolescent girls, knowledge, attitude, school

## Introduction
The term anorexia was established in 1873 by Sir William Gull. The term anorexia is Greek origin: An "negation" and orexis "appetite". This means a lack of desire to eat people with anorexia have an extreme fear of weight gain and a distorted view of their body shape and size. As a result, they strive to maintain a very low body weight; some restrict their food intake by dieting, fasting. Anorexia is an emotional disorder that focused on food. But it is actually an attempt to deal with perfectionism and a desire to control things by strictly regulating food and weight people with anorexia often feel that their low self-esteem, anorexia is increasing common especially among young women in industrialized countries where cultural expectations encourage women to be thin and lean bodies. The anorexia nervosa causes are not known. The causative factors are may be genetics, family and learned behavior, culture, media and restrictive eating. The signs and symptom of anorexia nervosa are, the primary sign is severe weight loss. The physical signs include excessive weight loss, scanty or absent menstrual periods, thinning hair, dry skin, cold or swollen hand feet and others. The treatment of anorexia nervosa includes medical, psychological support, Cognitive therapy, along with anti-depressants, can be an effective treatment for eating disorders.

## Research methodology
In this study the investigator adopted pre experimental, one group pretest post -test design to this study. The samples were selected from Sri Varni Jain inter college and govt. girls inter college Dehradun. 100 adolescent girls who fulfilled the inclusion criteria were included in this study by using Non -probability convenient sampling technique. The tool consisted of three type section 1: demographic variable, section 2: self-structured questionnaire, section 3: eating attitude test-26. Content validity is the important concern for evaluating any instrument. To ensure the content validity, tool along with objectives and criteria checklist were given to 7 experts in the field of research, psychology and nursing. The reliability coefficient of questionnaire was r=0.882 (<0.05) which is significant, so the tool was found to be highly reliable for data collection. Pilot study was conducted for the period of one week on 10 adolescent girls in govt. girls inter college Dehradun, order to test the feasibility, relevance and practicability of the study. Results showed that study was feasible to carry out the study in the different setting. Main study was conducted at Sri Varni Jain inter college and govt. girls inter college Dehradun from 12 may 2019 to 31may 2019.

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## Results

Table 1 Illustrates frequency and percentages distribution of respondent according to demographic variables of samples. Data according to age of adolescent girls reviles that 65% of adolescent girls age is 13-15 year and 35% were 16-19 year. Adolescent girls 70% were in between 36 to 50 kg, 26% were ≤35kg and only 4% adolescent girls weight is >50 kg. Distribution of place of residence 83% subject belongs to urban area, 16% belongs to rural area and 1% from slum. According to types of family 49% of the subjects was living in joint family, 47% in nuclear family and remaining 4% of them live in extended family. Distribution according to monthly income of family 48% of the respondent monthly family income is less than Rs.5000, 21% having Rs.5001/- to Rs. 10000, 16% were having Rs.10001/- to Rs. 15000 and 15% respondent income more than Rs. 15000. According to father's occupation 41% adolescent girls father occupation was other than the above mentioned, 23% were private employee, 21% were unemployed and 15% were government employee. Distribution according to mother's occupation 79% adolescent girls mothers were house wife, 8% were private employee, 7% were government employee and 6% were other than the above mentioned. Distribution of subject by type of food pattern. They revealed that majority 86% respondents taking balanced diet and 7% each having fatty meals and junk food. Number of meals consumed by the adolescent girls per day that majority 62% of the respondent take 3 time per day, 22% will take 2 times per day, 13% were take 4 times per day and 3 students take 1 time per day. Previous source of information about anorexia nervosa 71% of the respondents don't know about anorexia nervosa, 16% know from friends, 7% from internet and 6% from mass media they got the information. Distribution of subject according to body mass index 92% of the respondent having healthy weight, 4% each adolescent girls were underweight and overweight.

Table 2 depicts the mean percentage obtained by the adolescent girls regarding "Anorexia nervosa". The data shows knowledge pre-test mean scores of respondents were found 10.64, mean percentage 35.46% with SD 3.51similarly in post-test 19.31, mean percentage 64.36% with SD 3.24. The attitude pre-test mean scores of respondents were found to be 18.58, mean percentage 23.82% with SD 7.48 similarly in post-test 15.97, mean percentage 20.47% with SD 3.37.
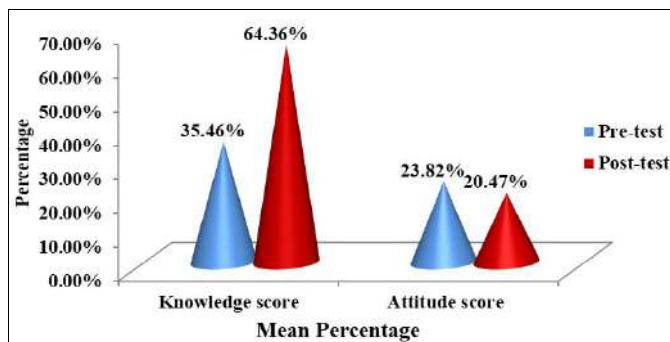


**Fig 1:** Mean% of the knowledge & attitude score regarding "Anorexia nervosa".

Table 3 depicts that 52% of the adolescent had inadequate knowledge; 48% had moderate knowledge in pre-test. The post-test knowledge level shows that 65% adolescents having moderate knowledge and 35% having adequate knowledge towards "Anorexia nervosa".
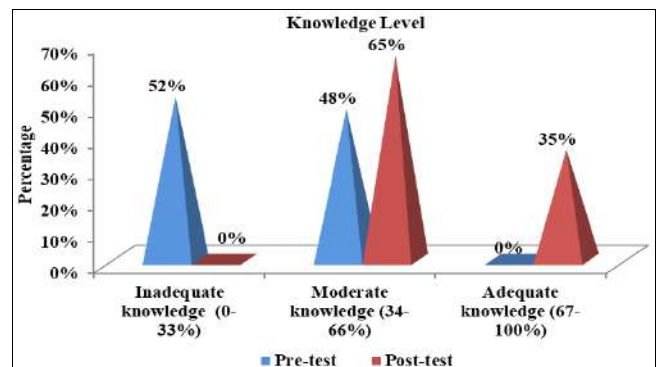


**Fig 2:** Knowledge level of the adolescent girls regarding "Anorexia nervosa"

Table 3 depicts that 67% of the adolescent girls have favorable attitude; 33% have unfavorable attitude in pre-test. The post-test attitude level shows that 86% adolescent girls having favorable attitude and 14% having unfavorable attitude towards "eating habit"
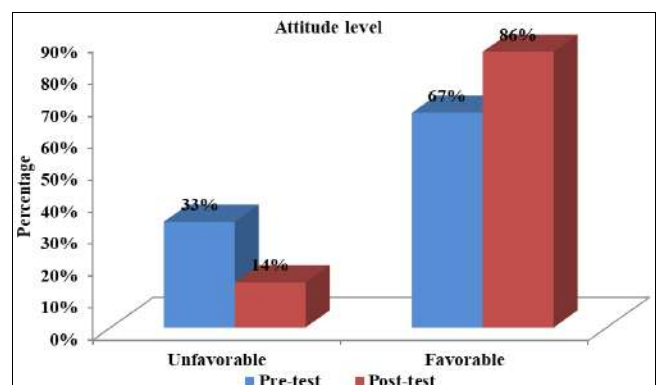


**Fig 3:** Attitude level of the adolescent girls regarding "eating habit"

Table 4 shows the difference between pre-test and post-test knowledge and attitude score of adolescent girls regarding anorexia nervosa. It was observed that 28.9% of mean difference in knowledge score and 3.35% in attitude score. Hence, the research hypothesis $H_1$ is accepted and null hypothesis is rejected.
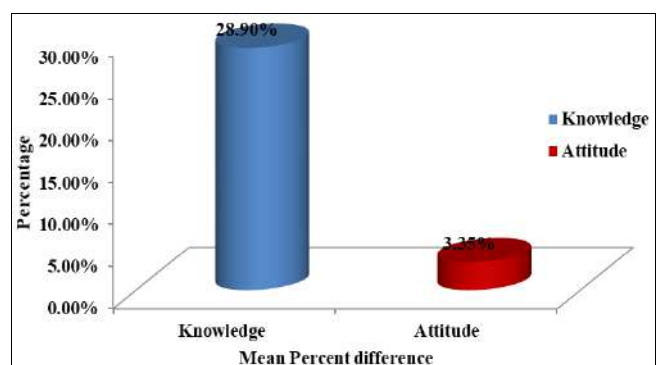


**Fig 4:** Difference between pre-test & post-test knowledge and attitude score

**Table 1:** Effectiveness of PTP on knowledge and attitude regarding anorexia nervosa among the adolescent girls (N=100)

| Categories | Group | Mean ± SD | Mean difference | 't 'value |
|---|---|---|---|---|
| Knowledge | Pre-test | 10.64 ± 3.51 | 8.67 | 31.414 df=99 P=0.000 |
| | Post-test | 19.31 ± 3.24 | | |
| Attitude | Pre-test | 18.58 ± 7.48 | 2.61 | 5.232 df=99 P=0.000 |
| | Post-test | 15.97 ± 3.37 | | |

*-Significant at 0.05 level

**Table 2:** Association between knowledge of adolescent girls with selected socio demographic variables (N= 100)

| Variable | Inadequate | Moderate | Df | Chi-square value | P value | Inference |
|---|---|---|---|---|---|---|
| **Age in years** | | | | | | |
| 13 – 15 | 36 | 29 | 1 | 0.852 | 0.356 | NS |
| 16 – 19 | 16 | 19 | | | | |
| Total | 52 | 48 | | | | |
| **Weight in Kg** | | | | | | |
| ≤35 | 13 | 13 | 2 | 0.069 | 0.966 | NS |
| 36 – 50 | 37 | 33 | | | | |
| >50 | 2 | 2 | | | | |
| Total | 52 | 48 | | | | |
| **Place of residence** | | | | | | |
| Rural | 10 | 6 | 2 | 1.855 | 0.396 | NS |
| Urban | 42 | 41 | | | | |
| Slum | 0 | 1 | | | | |
| Total | 52 | 48 | | | | |
| **Type of family** | | | | | | |
| Nuclear family | 27 | 20 | 2 | 1.068 | 0.586 | NS |
| Joint family | 23 | 26 | | | | |
| Extended family | 2 | 2 | | | | |
| Total | 52 | 48 | | | | |
| **Monthly income of the family** | | | | | | |
| < 5000 | 28 | 20 | 3 | 4.077 | 0.253 | NS |
| 5001 – 10000 | 10 | 11 | | | | |
| 10001 – 15000 | 5 | 11 | | | | |
| >15000 | 9 | 6 | | | | |
| Total | 52 | 48 | | | | |
| **Father's occupation** | | | | | | |
| Unemployment | 8 | 13 | 3 | 5.805 | 0.121 | NS |
| Private employee | 11 | 12 | | | | |
| Government employee | 6 | 9 | | | | |
| Others | 27 | 14 | | | | |
| Total | 52 | 48 | | | | |
| **Mother's occupation** | | | | | | |
| House wife | 42 | 37 | 3 | 1.468 | 0.690 | NS |
| Private employee | 3 | 5 | | | | |
| Government employee | 4 | 2 | | | | |
| Others | 3 | 4 | | | | |
| Total | 52 | 48 | | | | |
| **Type of food pattern** | | | | | | |
| Fatty meals | 3 | 4 | 2 | 1.317 | 0.518 | NS |
| Junk food | 5 | 2 | | | | |
| Balance diet | 44 | 42 | | | | |
| Total | 52 | 48 | | | | |
| **Number of meals pattern per day** | | | | | | |
| <1 time/day | 1 | 2 | 3 | 1.308 | 0.727 | NS |
| 2 times/day | 10 | 12 | | | | |
| 3 times/day | 33 | 29 | | | | |
| 4 times/day | 8 | 5 | | | | |
| Total | 52 | 48 | | | | |
| **Previous source of information about anorexia nervosa** | | | | | | |
| Mass media | 3 | 3 | 3 | 8.308 | 0.040 | S |
| Friends | 4 | 12 | | | | |
| Internet | 2 | 5 | | | | |
| No information | 43 | 28 | | | | |
| Total | 52 | 48 | | | | |
| **BMI** | | | | | | |
| Underweight | 1 | 3 | 2 | 2.017 | 0.365 | NS |
| Healthy weight | 48 | 44 | | | | |
| Over weight | 3 | 1 | | | | |
| Total | 52 | 48 | | | | |

*Significant at 0.05 level. S = Significant, NS = Not – Significant

**Table 3:** Association between attitude score of adolescent girls with selected socio demographic variables N= 100

| Variable | Favorable | Unfavorable | Df | Chi-square value | P value | Inference |
|---|---|---|---|---|---|---|
| **Age in years** | | | | | | |
| 13 – 15 | 41 | 24 | | | | |
| 16 – 19 | 26 | 9 | 1 | 1.293 | 0.256 | NS |
| Total | 67 | 33 | | | | |
| **Weight in Kg** | | | | | | |
| ≤35 | 16 | 10 | | | | |
| 36 – 50 | 48 | 22 | | | | |
| >50 | 3 | 1 | 2 | 0.545 | 0.762 | NS |
| Total | 67 | 33 | | | | |
| **Place of residence** | | | | | | |
| Rural | 10 | 6 | | | | |
| Urban | 56 | 27 | | | | |
| Slum | 1 | 0 | 2 | 0.647 | 0.723 | NS |
| Total | 67 | 33 | | | | |
| **Type of family** | | | | | | |
| Nuclear family | 32 | 15 | | | | |
| Joint family | 31 | 18 | | | | |
| Extended family | 4 | 0 | 2 | 2.304 | 0.316 | NS |
| Total | 67 | 33 | | | | |
| **Monthly income of the family** | | | | | | |
| < 5000 | 32 | 16 | | | | |
| 5001 – 10000 | 16 | 5 | | | | |
| 10001 – 15000 | 7 | 9 | 3 | 5.863 | 0.118 | NS |
| >15000 | 12 | 3 | | | | |
| Total | 67 | 33 | | | | |
| **Father's occupation** | | | | | | |
| Unemployment | 13 | 8 | | | | |
| Private employee | 17 | 6 | | | | |
| Government employee | 8 | 7 | 3 | 2.269 | 0.518 | NS |
| Others | 29 | 12 | | | | |
| Total | 67 | 33 | | | | |
| **Mother's occupation** | | | | | | |
| House wife | 52 | 27 | | | | |
| Private employee | 7 | 1 | | | | |
| Government employee | 4 | 2 | 3 | 1.878 | 0.598 | NS |
| Others | 4 | 3 | | | | |
| Total | 67 | 33 | | | | |
| **Type of food pattern** | | | | | | |
| Fatty meals | 3 | 4 | | | | |
| Junk food | 7 | 0 | | | | |
| Balance diet | 57 | 29 | 2 | 5.313 | 0.070 | NS |
| Total | 67 | 33 | | | | |
| **Number of meals pattern per day** | | | | | | |
| <1 time/day | 1 | 2 | | | | |
| 2 times/day | 14 | 8 | | | | |
| 3 times/day | 44 | 18 | 3 | 2.267 | 0.519 | NS |
| 4 times/day | 8 | 5 | | | | |
| Total | 67 | 33 | | | | |
| **Previous source of information about anorexia nervosa** | | | | | | |
| Mass media | 4 | 2 | | | | |
| Friends | 12 | 4 | | | | |
| Internet | 5 | 2 | 3 | 0.683 | 0.877 | NS |
| No information | 46 | 25 | | | | |
| Total | 67 | 33 | | | | |
| **BMI** | | | | | | |
| Underweight | 1 | 3 | | | | |
| Healthy weight | 48 | 44 | | | | |
| Over weight | 3 | 1 | 2 | 2.513 | 0.285 | NS |
| Total | 52 | 48 | | | | |

*Significant at 0.05 level. S = Significant, NS = Not – Significant

## Nursing implications

**Nursing practice:** Health promotion has been identified as fundamental accepts for nursing practice. Adolescent girls can recognize the knowledge and attitude regarding anorexia nervosa. so that earliest they can take steps to prevent this condition from developing as "prevention is better than cure", Educational material should be distributed in the form of pamphlets, handouts too the schools so that

the recent changes can be evaluated and prior knowledge can be corrected.

**Nursing education:** The present study would help the adolescent girls to understand the various aspects regarding anorexia nervosa and its preventive approaches. The present study helps the psychiatric health nursing to plan for the health educational programme. The effective education will have good impact and positive attitude towards anorexia nervosa.

**Nursing administration:** Nursing administration play an important role to ensure the entire dimension of health and complete wellbeing. Nurses are challenged to play the role of administrators as well as practitioners, The administrator should plan a separate budget for schools' awareness programme related to anorexia nervosa for adolescent girls.

**Nursing research:** The importance of research in nursing is to build the body of knowledge. The findings of the present study as the basis for students and professionals, to conduct further studies.

**Conclusion**

Education is the process of facilitating learning, or the acquisition of knowledge, skills, value, beliefs and habits. Good education is constructive in nature which constructs the future forever. The present study was designed to assess the effectiveness of planned teaching programme on knowledge and attitude regarding anorexia nervosa among the adolescent girls in selected school of Dehradun. The study results revealed that the planned teaching programme was effective in the terms of gain knowledge and attitude regarding anorexia nervosa.

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