Effectiveness of Teaching Intervention on Identification and Management of the Eating Disorder

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Abstract–

Background of the study -Eating disorder is one ofthe serious mental health problems associated with unusual eating patterns and behavior. It debilitating affects the individuals' physical health as well emotional health.

Objectives- the objective to organize this study was toevaluate the existing knowledge,assess post-test (obtained) knowledge about eating disorders (problems), assess the effectiveness of the structured teaching program, and find the associations between post-test that are obtained knowledge scores& certain Socio-demographic characteristics.

Methodology – 50 Subjects under the age of 18- 25 Years were selected as samples by probability random sampling technique.A validated self-structured knowledge questionnaire was developed to assess the knowledge. It had 2 sections where Section-I, assesses the Demographic characteristics of subjects, and Section –II includes a Knowledge questionnaire.

Result - In the present study majority of subjects, 90% (45)hadan Inadequate,and 10%(5) hada Moderate level of knowledge. After the structured teaching program,62% (31) subjects had adequate knowledge and 38% (19) hada moderate level of knowledge.The pretest mean knowledge score was 11.6 standard deviation was 6.48, and post-test mean knowledge score was 32 and the standard deviation was 4.66. The teaching program was found effective as the calculated t score16.65 was found greater than the table value (df 49) 1.68 at a 5% (0.05) level of significance. An association was found between education status, types of occupation, area of living, and source of information with post-test knowledge score as calculated chi-square (x^2) value were greater than table value at 5% (0.05) level of significance.

Conclusion - Most of the subjects had average knowledge regarding the identification and management of eating disorders in the pre-test whereas the mean percentage post-test scores and modified gain scores in all items were found high in the post-test.There was a significant difference between the existing knowledge score in the pre-test and obtained knowledge score in the post-test.The structured teaching program was an effective strategy for improving the knowledge among teenage girls.

Keywords – Eating disorder, Anorexia nervosa, Eating problem.

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Background of study

Eating disorder is one of the serious psychiatric disorders associated with unusual eating patterns and behavior. It debilitating affects individual's physical health as well as emotional status. There are no age-specific criteria for the occurrence of an eating disorderbut most commonly it may appear in adolescence period. A causative factor in teenagers are low self-esteem&a warped perceptionofbody image may play a role in eating disorder.According to the report of the National Association of Anorexia Nervosa & Associated Disorders.03-0.4 % of youth women, and 0.1 % of youth men generally have anorexia nervosa as well as 1.0 percent of youth women & 0.1 percent of youth men can meet diagnostic criteria designed by DSMfor bulimia nervosa.In our country,India, eating disorders are thought to be less and exceedingly unrecognized because of either lack of research or mental awareness around mental illness. Nevertheless, this is slowly increasing in India cause of the western construct known as **thin looks always beautiful**, and/or the societal pressure such as showing a good figure on social networking platforms.The general types of eating disorders are anorexia nervosa, bulimia nervosa,& binge-eating disorder.A large number of people who have Anorexia restrict their intake of foodstuffs because of their perception to fell themselves as overweight and maybe fear that eating will result in weight gain, Study findings also suggest that anorexia contributesto the highest mortality (death) rate comparedto any other types of psychiatric (mental) disorder.Bulimia is identified by frequent &recurrent incidents of eating colossal amounts of foodstuffs followed by purgative behaviorlike vomiting forcefully.**Binge Eating Disorder** has recurrent occasionsof binge eating but unlike anorexia disorder or bulimia eating disorder, it is not followed by any weight loss activities such as force vomiting, over-exercising, or fasting. In Western countries, eating disorders are well-understood, well-identified, and are thought to be elevatedin frequency. This is the cause of arange of societal factors, andthe advent of social media is generally highlighted. In India, nevertheless, eating disorders have no official figures, are all but unstudied, and those who have them may be suffering in silence.The study aims to assess the knowledge regarding the identification and management of eating disorders among the 18-25 Year of age group people.

Objectives of study

The primary objective of the study was to evaluatethe effectiveness of a structured teaching intervention regarding eating disorders.The secondary objective was to evaluatethecurrent (existing)knowledge regarding the eating disorder before teaching, assess obtained knowledge regarding eating disorders after teaching intervention, and find the associations between Obtained (post-test) knowledge and Socio-demographic variables.

Limitations of the study

The study was limited to the adolescent population aged between 18 and 25 years, Subjects who were willing to participate, and Subjects who know Hindi and English.

Materials &Method

This study was Evaluatryquantitative study, with one test group only pre-test &post research design selected for conducting this study. The sample collection was done by the Probability random sampling technique where subjects under the age of 18- 25 Yearswere selected as the sample.The sample Sizewas contributed by50 participants. A validated self-prepared knowledge questionnaire

was developed to assess the knowledge. The tool had 2 sections where Section-I examined socio-Demographiccharacteristics (factors) of participants and Section –II includes a Knowledge questionnaire consisting of the multiple-choice type of questions which is based on eating disorder types, characteristics of anorexia nervosa &bulimia nervosa, their adverse effects, treatment, and prevention of anorexia nervosa, and bulimia nervosa. Each right (correct) response was assigned a 01 mark, and a 0 mark for the incorrect (wrong) answer.

Result – The organization and analysis of data was made based on objectives and hypothesis. The analysis of data is arranged and depicted in the following broad headings.
- Section I: - Description of socio-demographical arrangement of participants in frequency and percentage.
- Section II: - Analysis of Knowledge through mean, mean percentage, and standard deviation.
- Section III: - Assessment of the effectiveness of structured (planned) teaching intervention on the Eating disorder.
- Section IV: - Association between the obtained Knowledge score and socio-demographic variables.
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Table 1 Description of socio-demographic variables and Association with obtained (post-test) knowledge score.

(N=50)

Socio-demographic distribution of subjects in frequency and percentage		Frequency	Percentage	Association between the obtained (post-test)knowledge score with socio-demographic variables				
Variables		Frequency	Percentage	Moderate	Adequate	Chi-square value	Critical value	Sign-ficance 0.05
Age	18 years -20 Years	12	24%	5	7	0.65	5.99	NS
	20Years-22 Years	22	44%	7	15			
	22Years-25 Years	16	32%	7	9			
Sex	Male	18	36%	10	8	3.68	3.84	Sign*
	Female	32	64%	9	23			
Religion	Hindu	37	74%	15	22	1.35	7.81	NS
	Muslim	8	16%	3	5			
	Christian	3	6%	1	2			
	Sikh	2	4%	0	2			
Education Qualification	Below Higher Secondary	2	4%	1	1	9.07	7.81	Sign*
	Higher Secondary	19	38%	12	7			
	Graduation	22	44%	5	17			

	Post-Graduation	7	14%	1	6			
Types of Occupation	Government job	9	18%	0	9	16.55	7.81	Sign*
	Private Job	11	22%	6	5			
	Agriculture	16	32%	11	5			
	Unemployed	14	28%	2	12			
Family Monthly income	Below Rs. 10,000	28	56%	14	14	5.16	7.81	NS
	Rs.10,001-20,000	8	16%	3	5			
	Rs. 20,001 - 30000	5	10%	1	1			
	Above Rs. 30000	9	18%	1	8			
Type of Family	Nuclear	24	48%	11	13	1.20	3.84	NS
	Joint	26	72%	8	18			
Place of living	Rural	41	82%	19	22	6.73	3.84	Sign*
	Urban	9	18%	0	9			
Source of knowledge	T. V. / Internet	12	24%	1	11	8.39	7.81	Sign*
	Newspaper/ Magazines.	13	26%	4	9			
	Health professional	8	16%	4	4			
	Friends/Relatives	17	34%	10	7			

** 0.5 level of significance

In the present study (Presented in table 01) majority of subjects,44% (22)belonged to 20-22 Yearsof age, 24%(12) belongs to 18-20 Years of age and 32% (16) subjects belonged 22-25 Years age group. Regarding gender, the majority of subjects 64% (32) were Female and 36% (18) were Male. Regarding religion 74% (37) were Hindu, 16%(8) were Muslim, 6% (3) were Christian and only 4% (2) were Sikh.Regarding Education qualifications 44% (22) were graduates 38% (19) studied upto Higher Secondary,14% (7)were Post-Graduate, and only 4% (2) were studied Below Higher Secondary.Regarding Types of Occupation 32%(16) were having Agriculture work,28%(14) were Unemployed,22% (11) were working in a Private firm, 18% (9) working in the Government sector. Regarding Family Monthly income 56% (28)subjects having income Below Rs. 10,000 Rs/ Month,18% (9) having income Above Rs. 30000/ month,16% (8) having income Rs.10,001-20,000 Rs per month and only 10% (5) have income betweenRs. 20,001 – 30000 Rs. Per month. Regarding Type of Family72%(26)are subject to living ina Joint family and48% (24) live in a Nuclear family. Regarding Place of living82%(41)of subjects livedin Rural areasand18%(9) of subjects lived inurban areas. Regarding the Source of knowledge, 34% (17) of subjects get information from Friends/Relatives, 26% (13) from Newspapers & Magazines, 24% (12) from T. V. / Internet, and 16%(8) from the Health professionals.

Table 2. Assessment of knowledge

Level	Pre-test		Post-test	
	Freq.	**%**	**Freq.**	**%**
Inadequate	45	90%	0	0
Moderate	5	10%	19	38%
Adequate	0	0.	31	62%

In the present study majority of subjects,90% (45) hadInadequate in the pre-test and 10 % (5) hada Moderate level of knowledge in the pretest. After the structured teaching program,62% (31) subjectswere having adequate knowledge, and 38% (19) hada moderate level of knowledge.

Table 03 Effectiveness of structured teaching program.

T-Test: Two Paired Samples							
Groups	*Mean*	*Std Dev*	*Std Err*	*t*	*df*	*t-crit*	*0.05*
Pre-Test	11.6	6.48	1.22	16.65	49	1.68	
Post test	32	4.66					Sign*
Difference	20.4	8.66					

The pretest mean knowledge score was 11.6 with a standard deviation was 6.48, post-test mean knowledge score was 32 with a standard deviation of 4.66. The teaching program was found effective as the calculated t score 16.65 was greater than the table value (df 49) 1.68.A significant association was found between the following sociodemographic variable and the post-test knowledge score.

1. Education status - calculated chi-square value x^2 9.07was greater than the critical value (df3) 7.81 at a 0.05 level of significance.
2. Type of occupation - calculated chi-square value x^2 16.55was greater than the critical value (df3) 7.81 at a 0.05 level of significance.
3. Area of living -calculated chi-square value x^2 6.73was greater than the critical value (df3) 3.84 at a 0.05 level of significance.
4. Source of knowledge - calculated chi-square value x^2 8.39was greater than the critical value (df3) 7.81 at a 0.05 level of significance.

Conclusion and Discussion– In thecurrent study, the majority of the participants had average knowledge regarding eating disorders in the pre-test, There was a significant difference between Existing knowledge (pre-test) and obtained (post-test) knowledge scores, The structured teaching program was an effective strategy for improving the knowledge. There was a significant association found between obtained (post-test) knowledge scoresand selected demographic variables. In our study majority of subjects, 90 percent (45) had Inadequate in pre-test and 10 percent (5) had a

Moderate level of knowledge in the pretest similar to the study done by M Usha Rani in Narayana Medical College Hospital, Mrs. Minu S.R, et al in a Rural & Urban Community, Kanpur, Uttar Pradesh, and Suraksha Subed among nursing students of Lalitpur, Nepal.The teaching program was found effective as the calculated t score 16.65 was greater than the table value (df 49) 1.68.A significant association was found between the following sociodemographic variable and post-test knowledge score similar to other studies A pre-experimental Study Among Adolescent Girls in Pre-University College, Bangalore. L Tamphasana Devi and Stella YD, and A study to assess the effectiveness of planned teaching Programme on 'Importance of healthy diet among adolescent girls done at selected college Dehradun.

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