

A Study To Assess The Prevalence Of Disordered Eating Behaviour And Efficacy Of Structured Teaching Programme On Knowledge Regarding Eating Disorders Among Adolescent Girls In The Selected School Of Panchkula.



Deeksha Sharma^{1*}, Tamanna Sharma², Dr. Ashok Bairwa³, Preeti⁴, Shipra Sharma⁵, Priyanka Rai⁶, Neha Kalyan⁷,

^{1*}Assistant professor, Chitakara school of Health & Sciences, Mail Id : deeksharma123@gmail.com , Orcid Id : 0009-0000-3567-0029

²Assistant Manager - Nursing quality Education & Training, Max super speciality hospital Dwarka New Delhi, Orcid Id : 0009-0008-0110-2531

³Assistant professor, Chitkara school of health & sciences, chitkara university, Mail Id : bairwaashokkumar0@gmail.com , Orcid Id : 0000-0002-6652-0178

⁴Lecturer, Rural Nursing Training Institute, Mail Id : preetisharma90132@gmail.com , Orcid Id : 0009-0003-2447-0701

⁵Assistant Professor, Kailash Institute of Nursing and paramedical Sciences, Mail Id : shipra-sharma@outlook.com , Orcid Id : 0009-0002-3248-5711

⁶Lecturer, Noida international University, Mail Id : priyankarai07091995@gmail.com , Orcid Id : 0009-0006-6490-932X

⁷Assistant professor, Swami Devi Dyal College of Nursing, Mail Id : nehakalyansood@gmail.com , Orcid Id : 0009-0007-7325-0325

Abstract

Eating disorders are characterized by significant and persistent disruption of eating behaviours, along with the accompanying distressing thoughts and emotions. These illnesses, which affect social, psychological, and physical functioning, can be quite harmful. In order to ascertain the prevalence of disordered eating behaviour and the efficacy of a structured teaching program on eating disorder knowledge among adolescent girls in the selected Panchkula school, a pre-experimental study was conducted. This study took into consideration a number of factors, including age, religion, family type, the educational backgrounds and occupations of the mother and father, the monthly income of the family, the weekly intake of fruits and vegetables, the weekly intake of junk food, and the number of meals consumed daily. There is no significant correlation between knowledge about eating disorders and religion, father's education, occupation, mother's education, occupation, family income, eating habits, weekly consumption of junk food, number of meals per day, and weekly consumption of fruits and vegetables, according to the calculated Chi square value, which is less than the table value at the 0.05 level of significance.

1. Introduction

Rapid transitions during adolescence can lead to a tremendous deal of stress, uncertainty, and worry for many people. Significant physical change occurs at this time, and low self-esteem, self-consciousness, and peer comparison are common side effects. Eating disorders are psychological illnesses characterized by abnormal eating patterns that may involve either excessive or insufficient food consumption to the detriment of an individual's physical and mental health. Furthermore, the negative health implications associated with comorbidities (as well as other mental disorders) that predominantly affect the genital, gastrointestinal, and cardiovascular systems make eating disorders one of the most significant public health concerns. Prevention of eating disorders

should not be directly associated with healthy lifestyle choices or acceptance of individuals of all sizes. Since eating disorders usually emerge in children and teens, schools can help prevent them. In order to raise awareness, reduce treatment hurdles, and improve the early detection of affected cases, institutions, healthcare professionals, and the general public may be greatly influenced by public knowledge of Understanding eating disorders may assist identify areas that could be the focus of future communication strategies, which could improve healthcare services and enable the implementation of effective public health interventions and policy initiatives.

II. Review of literature

Adolescent girls and young women are frequently impacted by eating disorders. They are associated with substantial physical and psychological morbidity and are at an increased risk of health problems. Eating disorders have the highest fatality rate among mental health diseases. According to studies, the development of eating disorders is not entirely understood, which makes research on these conditions quite interesting. Research aiming at improving our knowledge of eating disorders and prevention will play a critical role in reducing eating disorder morbidity and improving teens’ positive body image.

A 2022 analysis by Pursey K M et al. found that eating disorder-related behaviors had increased globally in correlation with low self-esteem. Similarly, high degrees of socialization through social networks were associated with an overall increase in eating disorders during adolescence. and it was effectively avoided. Structured education programs on the risk factors for anorexia nervosa and how it affects health status

help increase teenage girls' comprehension, according to a 2018 analysis by Swarnkar M et al.

III. Methodology

Research Approach: quantitative research approach

Research Design: pre - experimental research design

Target population: adolescent girls studying in 12th standard

Sample size: 120

Sampling technique: non-probability purposive sampling technique.

Research setting: selected school of Panchkula.

Socio Demographic variables: Age of the students, Religion, Type of family, Education of father, Occupation of father, Education of mother, Occupation of mother, Family income.

Tool: EAT-26 & Self Structured questionnaire

Research variables: knowledge regarding eating disorders

IV. Analysis and Interpretation

		N=120		
FACTOR	NORMAL EAT SCORE (<20)		AT RISK EAT SCORE (≥20)	
BMI	Frequency	Percentage	Frequency	Percentage
OBESE	2	1.66%	3	2.5%
OVERWEIGHT	2	1.66%	4	3.33%
NORMAL	45	37.5%	16	13.33%
UNDERWEIGHT	39	32.5%	9	7.5%

The data in above table depicts that according to BMI, out of 120 students 9 students, i.e. 7.5% had disordered eating behaviour that is, they were under the category of underweight and had a at risk eat score (≥20).

BEHAVIOUR PATTERN	NORMAL EAT SCORE (<20)		AT RISK EAT SCORE (≥20)	
	Frequency	Percentage	Frequency	Percentage
ABNORMAL	60	50%	28	23.33%
NORMAL	29	24.16%	3	2.5%

The data in above table depicts that according to behaviour pattern, out of 120 students, 28 students, that is 23.33%, had disordered eating behaviour that is were having abnormal eating behaviour and at-risk score (≥20)

S. No	<u>DEMOGRAPHIC CHARACTERISTICS</u>	<u>FREQUENCY (f)</u>	<u>PERCENTAGE (%)</u>
1.	Age in years		
	16	46	38.33%
	17	74	61.66%
2.	Religion		
	Hinduism	88	73.33%
	Christianity	4	3.33%
	Islamism	25	20.83%
	Others: Jainism	3	2.5%
3.	Type of family		
	Nuclear family	67	55.83%
	Joint family	53	44.16%
	Extended family	0	0%
4.	Father's educational qualification		
	Illiterate	33	27.5%
	High school	23	19.16%
	Higher secondary	38	31.66%
	Undergraduate	24	20%
	Postgraduate	2	1.66%
5.	Mother's educational qualification		
	Illiterate	3	2.5%
	High school	29	24.16%
	Higher secondary	18	15%
	Undergraduate	28	23.33%
	Postgraduate	42	35%

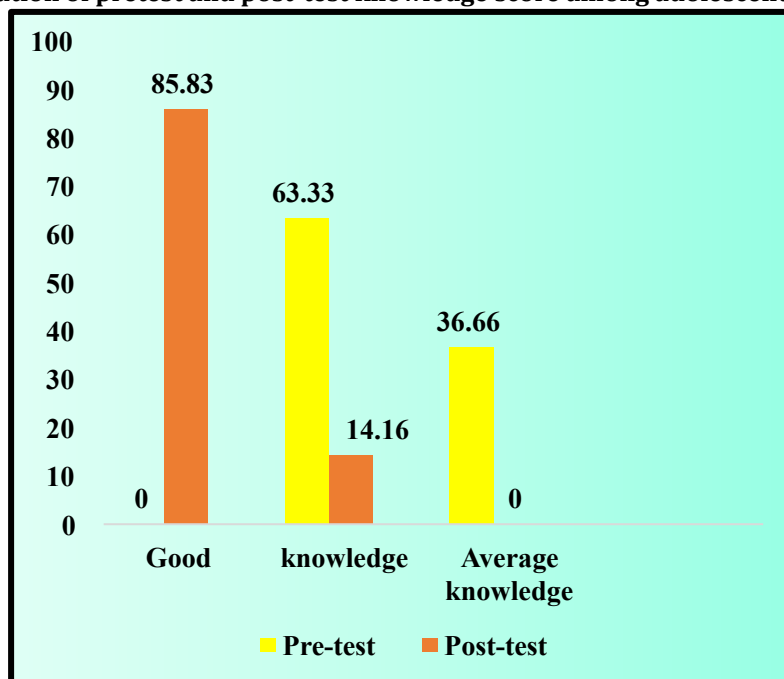
<u>S. No</u>	<u>DEMOGRAPHIC CHARACTERISTICS</u>	<u>FREQUENCY (f)</u>	<u>PERCENTAGE (%)</u>
6.	Father's occupation		
	Unemployed	1	0.83%
	Self employed	60	50%
	Private employee	49	40.83%
	Government employee	10	8.33%
7.	Mother's occupation		
	Housewife	102	85%
	Self employed	9	7.5%
	Private employee	5	4.16%
	Government employee	4	3.33%
8.	Monthly income of the family		
	>123,322	16	13.33%
	61,663-123,321	26	21.66%
	46,129-61,662	25	20.83%
	30,831-46,128	20	16.66%
	18,497-30,830	21	17.5%
	6,178-18,496	11	9.16%
	<6174	1	0.83%
9.	Habit of food pattern		
	Vegetarian	67	55.83%
	Non- Vegetarian	44	36.66%
	Vegan	9	7.5%
10.	Weekly consumption of junk food		

	No consumption	10	8.3%
	Less than 3 times a week	73	60.83%
	More than 3 times a week	37	30.83%
S. No	<u>DEMOGRAPHIC CHARACTERISTICS</u>	<u>FREQUENCY (f)</u>	<u>PERCENTAGE (%)</u>
11.	No. of meals pattern per day		
	1 meal per day	2	1.66%
	2 meals per day	18	15%
	3 meals per day	83	69.16%
	4 or more meals per day	17	14.16%
12.	Weekly consumption of fruits and vegetables		
	No consumption	2	1.66%
	Less than 3 times a week	35	29.16%
	More than 3 times a week	83	69.16%
13.	Do you have any previous knowledge about eating disorders		
	Yes	73	60.83%
	No	82	68.33%
	If yes mention the source of information		
	Internet	29	24.16%
	Newspaper and magazine	0	0%
	Family and friends	29	24.16%
	Others: Class	0	0%

According to data obtained, out of 120 adolescent girls, majority of the girls, i.e 61.66% were 17 years of age and 38.33% were of 16 years of age. With respect to religion, 73.33% adolescent girls were from Hinduism, 20.83% were from Islamism, 3.33% were from Christianity and 2.5% were from other religion. As per the data obtained, 55.83% of adolescent girls belonged to nuclear family, 44.16% belonged to joint families and none of them belonged to extended family. As per the data obtained, most of the subject father's educational qualification, i.e., 31.66% were higher secondary, 27% were illiterate, 20% were undergraduate, 19.16% and 1.66% were high school and postgraduate respectively. As per the data obtained, 35% of mother's educational qualification of students was postgraduate, 24.16% were high schools, 23.33% were undergraduate, 15% higher secondary and 2.5% were illiterate. Out of 120 students, 50% of student's fathers were self-employed, 40.83% were private employees, 8.33% were government employees and 0.83% were unemployed. As per the data obtained, majority i.e., 85% of student mothers were housewife, 7.5% were self-employed, 4.16% were private employee and 3.33% were government employees. As per the data obtained, 21.66% of students were having monthly income of the family between Rs 61,663-123,321, 20.83% were having

monthly family income between Rs46,129-61,662, 17.5% were having monthly family income between Rs18,497-30,830, 16.66% were having monthly family income between Rs 30,831-46,128, 13.33% had monthly family income more than Rs123,322, 9.16% were having monthly family income between Rs 6,178-18,496 and 0.83% were having monthly family income below Rs 6174. As per the data obtained, 55.83% of students were vegetaran, 36.66% were non vegetarian and 7.5% were vegan. As per the data obtained, 60.83% of students had weekly consumption of junk food less than 3 times a week, 30.83% had weekly consumption of junk foods more than 3 times a week and 8.3% had no weekly consumption of junk food. Out of 120 students, 69.16% of students had 3 meals per day, 15% had 2 meals per day, 14.16% had 4 or more meals per day and 1.665 had 1 meal per day. As per the data obtained, 69.16% of students were having weekly consumption of fruits and vegetables more than 3 times a week, 29.16% were having weekly consumption of fruits and vegetables less than 3 time a week and 1.66% had no weekly consumption of fruits and vegetables. Out of 120 students, majority of the adolescent girls, i.e, 68.33% did not have previous knowledge about eating disorders and 60.83% were having previous knowledge regarding eating disorders through internet, family and friends.

Percentage distribution of pretest and post-test knowledge score among adolescent girls



Above figure depicts the comparison of frequency and percentage distribution of pre-test and post-test knowledge scores of adolescent girls regarding eating disorders. In the pre-test score, majority of the

subjects i.e. 63.33% had average knowledge regarding eating disorders, 36.33% had poor knowledge and none of them had good knowledge regarding eating disorders. After administration of

structured teaching programme, majority of the subjects i.e. 85.83% of adolescent girls had good knowledge regarding eating disorder, 14.6% had average knowledge and none of them had poor knowledge regarding eating disorders in post-test.

References

- Rosen DS. Identification and management of eating disorders in children and adolescents. American Academy of Paediatrics Committee on Adolescence. Paediatrics. 2010;126(6):1240-53.
- Pearson, C. M., Combs, J. L., & Smith, G. T. A risk model for disordered eating in late elementary school boys. Psychology of Addictive Behaviours. 2010;24(4):696-704.
- Nagata J.M., Garber A.K., Tabler J.L., Murray S.B., Bibbins-Domingo K. Prevalence and correlates of disordered eating behaviours among young adults with overweight or obesity. J. Gen. Intern. Med. 2018; 33:1337-1343.
- Smink FR., van Hoeken D., Hoek H.W. Epidemiology of eating disorders: Incidence, prevalence and mortality rates. Curr. Psychiatry Rep. 2012; 14:406- 414.
- American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. 5th ed. American Psychiatric Association; Washington, DC, USA: 2013.
- Steinhausen H.C. Outcome of eating disorders. Child Adolesc. Psychiatr. Clin. N. Am. 2009; 18:225-242.
- American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. 5th ed. American Psychiatric Association; Washington, DC, USA:2013.
- Steinhausen H.C. Outcome of eating disorders. Child Adolesc. Psychiatr. Clin. N. Am. 2009; 18:225-242.
- Tholking M., Mellowspring A., & Girarg Eberle S., (2011). American Dietetic Association: Standards of Practice and Standards of Professional Performance for Registered Dietitians (Competent, Proficient, and Expert) in Disordered Eating and Eating Disorders (DE and ED). Journal of the American Dietetic Association;111(8):1241-1249.
- Kreipe RE, Hicks DG, Rosier RN, Puzas JE. Preliminary findings on the effects of sex hormones on bone metabolism in anorexia nervosa. J Adolesc Health. 1993;14:319-24.
- Forbes GB, Kreipe RE, Lipinski BA, Hodgman CH. Body composition changes during recovery from anorexia nervosa: comparison of two dietary regimes. Am J Clin Nutr. 1984; 40:1137-1145.
- Killen JDS, Hayward C, Litt I, et al. Is puberty a risk factor for eating disorders? Am J Dis Child. 1992;146:323-5.
- Comerci GD. Eating disorders in adolescents. Pediatr Rev. 1988;10:1-11
- Eating Disorders Review.2012;20:232-239.
- Jorm A.F. Mental health literacy: Empowering the community to take action for better mental health. Am. Psychol. 2012;67:231-243. [Assessed May 2023]
- Frieiro P et al."self-esteem and socialization in social network as determinants in adolescents." Health and social care in community.2022; vol. (30):4416-4424
- Temiz G, isil O."factors affecting healthy lifestyle behaviour in adolescents." International journal of caring sciences.2019; vol. (11): 1352-1353
- N. Micali, J treasure et al. "adolescents eating disorders behaviours and cognition." Br J psychiatry.2015; vol. (4):320-327
- Jenkins, P. E., Hoste, R. R., Doyle, A. C., Eddy, K., Le Grange, D et al. "Health related quality of life among adolescents with eating disorders." Journal of Psychosomatic Research.2014; vol. (1): 1-5. Pursey K M, Hart M et al. "The Needs of School Professionals for Eating Disorder Prevention in Australian Schools." Children.2022; vol. (9):1979
- Swarnkar M et al. "A pre-experimental study to evaluate the effectiveness of structured teaching programme on knowledge regarding risk factors of anorexia nervosa and its impact on health status ". International journal of paediatrics nursing.2018; vol. (4): 65-66.