A Study to Assess the Effectiveness of Structured Teaching Program on Knowledge Regarding Hoarding Disease and its Prevention among Adolescents in Selected Nursing College at Gonda

Dr. Aspin R.[1], Jeya Vanitha .A[2]

[1]PhD, SCPM College of Nursing and Paramedical Sciences, Gonda

[2]Professor, SCPM College of Nursing and Paramedical Sciences, Gonda

Abstract: *This study was done to assess the effectiveness of structured teaching programs on knowledge regarding hoarding disease and its prevention among adolescents in selected nursing colleges at Gonda. A person with hoarding disorder experiences distresses at the thought of getting rid of the items. Excessive accumulation of items, regardless of actual value, occurs. Although HD is not uncommon in India, this disorder is rarely reported in specialty settings in India, which suggests that awareness and detection should be improved. A study says the prevalence of HD was 1.02%. The aim of the study is to make the adolescent students understand this disorder in order to identify and treat the patient with HD disorder. The conceptual framework was done based on a Conceptual Framework based on general system theory as postulated by Von Ludwig Bertalanffy (1968). In order to accomplish the objectives of the study, a pre-experimental one-group pretest-posttest study design was adopted. In this study, the sample consists of 60 adolescents who fulfilled the inclusion criteria for the study. The non-probability convenient sampling technique was used for this study. A structured socio-demographic data, and Questionnaire to assess the knowledge regarding hoarding disorder and its prevention were selected on the basis of the objectives of the study. The collected data were tabulated according to various parameters and the complete analysis was done with descriptive and inferential statistics. The finding of the study says there is a huge improvement in the knowledge of adolescents on hoarding disorder and its prevention, in number it shows that in pre-test there were only 3(5%) samples had adequate knowledge, it became 39(65%) samples after post-test. It implies that the structured teaching program was effective.*

Keywords: hoarding disease, prevention, adolescents.

1. Introduction

Hoarding disorder is a persistent difficulty discarding or parting with possessions because of a perceived need to save them. A person with hoarding disorder experiences distress at the thought of getting rid of the items. Excessive accumulation of items, regardless of actual value, occurs. Hoarding disorder (HD) is a newly listed disease in the new category of Obsessive-Compulsive and Related Disorders in the DSM-5. Patients with HD find it difficult to discard possessions regardless of their actual value and to organize those things. As a result, the possessions overflow the living space and hinder living functions. [1]

Hoarding often creates such cramped living conditions that homes may be filled to capacity, with only narrow pathways winding through stacks of clutter. Countertops, sinks, stoves, desks, stairways and virtually all other surfaces are usually piled with stuff. And when there's no more room inside, the clutter may spread to the garage, vehicles, yard and other storage facilities. [2]

Hoarding ranges from mild to severe. In some cases, hoarding may not have much impact on life, while in other cases it seriously affects individual functioning on a daily basis. Though the hoarding symptom had been regarded as a subtype of obsessive-compulsive disorder (OCD) to date, recent studies have revealed many differences in clinical characteristics, including onset, course, degree of insight, and treatment responses, between hoarding and other subtypes. [3]

Moreover, several neuroimaging studies have found specific changes of brain structure and function in OCD patients with hoarding symptoms compared to patients with non-hoarding OCD. Meanwhile, strategies for treatment of HD have not been standardized. At present, psychological treatment using cognitive behavioral therapy techniques has a certain effect. In this review, we outline the pathophysiology and treatment of HD. People with hoarding disorder may not see it as a problem, making treatment challenging. But intensive treatment can help people with hoarding disorder understand how their beliefs and behaviors can be changed so that they can live safer, more enjoyable lives. [4]

2. Need for study

Hoarding disorder (HD) is often accompanied by comorbidities, most commonly major depressive disorder, followed by anxiety disorders, and ADHD. In a study with a sample of 217 hoarding disorder participants, approximately 18% had comorbid obsessive-compulsive disorder (OCD), which occurred more frequently in males. Furthermore, males with hoarding disorder may also be more likely to have comorbid social anxiety disorder than males with OCD. [1]

Adolescence is the phase of life between childhood and adulthood, from ages 10 to 20. It is a unique stage of human

development and an important time for laying the foundations of good health. Adolescents experience rapid physical, cognitive and psychosocial growth. This affects how they feel, think, make decisions, and interact with the world around them. During this phase, adolescents establish patterns of behaviour – for instance, related to diet, physical activity, substance use, and sexual activity – that can protect their health and the health of others around them, or put their health at risk now and in the future.[5] Therefore it is important to teach them about all types of disorders including hoarding disorder also.

A study says the prevalence of HD was 1.02% (95%CI 0.8-1.3). Those with HD were more likely to be older and live alone. In the binary logistic regression analysis, after controlling for significant sociodemographic variables, subjects with HD had higher odds of reporting chronic illness, depression, anxiety disorder, alcohol abuse, and tobacco dependence. Subjects with HD had significantly higher disability scores than unaffected individuals.[6]Although HD is not uncommon in India, this disorder is rarely reported in specialty settings in India, which suggests that awareness and detection should be improved, considering the co-occurring negative correlates and disability among affected individuals.[7]The American psychiatric association said that the worldwide prevalence rate of HD was approximately 2.6%. 8. The aim of the study is to make the adolescents students to understand this disorder in order to identify and treat the patient with HD disorder.

Objectives of the study
1) To assess the pre-test knowledge on hoarding disease and its prevention among adolescents.
2) To provide the structured teaching program to the adolescents from selected nursing college at Gonda.
3) To assess the post-test knowledge on hoarding disease and its prevention among adolescents.
4) To find the significant difference between pre-test and post-test knowledge on hoarding disease and its prevention among adolescents.
5) To find the significant association between selected sociodemographic variables and the knowledge levels of the adolescents.

Hypothesis
H_1: There will be a significant difference between pre-test and post-test knowledge on hoarding disease and its prevention among adolescents.
H_2: There will be a significant association between selected sociodemographic variables and the knowledge levels of the adolescents.

Assumptions
1) The adolescents may not have the knowledge about hoarding disorder.
2) The STP will improve the knowledge of adolescents.

Operational Definition

Structured Teaching Program: In this study it refers that the scientifically prepared teaching program on hoarding disorder and its prevention to teach the adolescents from selected nursing college from Gonda in order to improve their knowledge in includes the introduction, sign and symptoms, diagnosis, prevention and treatment of hoarding disorder.

Hoarding Disease: In this study it refers that it is where someone acquires an excessive number of items and stores them in a chaotic manner, usually resulting in unmanageable amounts of clutter.

Adolescents: In this study it refers that the students aged between 18 to 20 years from selected nursing college at Gonda.

3. Methodology

The conceptual framework was done based on **Conceptual Framework based on general system theory as postulated by Von Ludwig Bertalanffy (1968)**. This study was done to assess the effectiveness of structured teaching program on knowledge regarding hoarding disease and its prevention among adolescents in selected nursing college at Gonda. In order to accomplish the objectives of the study, a pre-experimental one group pretest posttest study design was adopted. In this study, the sample consists of 60adolescents who fulfilled the inclusion criteria for the study. The non-probability convenient sampling technique was used for this study. A structured socio demographic data, and Questionnaire to assess the knowledge regarding hoarding disorder and its prevention were selected on the basis of the objectives of the study. Pilot study was conducted to understand the feasibility and reliability of the study, after that the main study was conducted from 01-06-2021 to 25-08-2021 at SCPM college of nursing and paramedical sciences, Gonda. The collected data were tabulated according to various parameters and the complete analysis was done with descriptive and inferential statistics.

4. Results

Table 1: Frequency and percentage distribution of samples according to the sociodemographic variables, n=60

S.No.	Variables		Experimental Group	
			Frequency	Percentage
1	Gender			
	a)	Male	30	50
	b)	Female	30	50
2	Age in years			
	a)	18 to 19	33	55

		b) 19 to 20	27	45
3		Type of family		
		b) Nuclear	41	68.3
		c) Joint	19	31.7
4		Area of residency		
		a) Urban	16	26.7
		b) Rural	44	73.3
5		Number of siblings		
		a) No siblings	11	18.3
		b) one	32	53.3
		c) More than one	17	28.3
6		Occupation of mother		
		a) Housewife	18	30
		b) Govt employee	9	15
		c) Private sector	20	33.3
		d) Business	13	21.7
7		Occupation of father		
		a) jobless	8	13.3
		b) Govt employee	15	25
		c) Private sector	26	43.3
		d) Business	11	18.3
8		Education of mother		
		a) Illiterate	12	20
		b) Primary school	15	25
		c) High school	13	21.7
		d) Graduate	11	18.3
		e) Postgraduate and above	9	15
9		Education of father		
		a) Illiterate	8	13.3
		b) Primary school	17	28.3
		c) High school	14	23.3
		d) Graduate	11	18.3
		e) Postgraduate and above	10	16.7

The above table 1 implies that the maximum 30(50%) samples' gender was male, 33(55%) samples' age in years was 18 to 19, 41(68.3%) samples' type of family was nuclear, 44(73.3%) samples' area of residency was rural, 32(53.3%) samples' number of siblings was one, 20(33.3%) samples' occupation of mother was private sector, 26(43.3%) samples' occupation of father was private sector, 15(25%) samples' education of mother was primary school, and 17(28.3%) samples' education of father was primary school.

Table 2: Assessment of mean, standard deviation, mean percentage and mean difference of pretest and posttest, n=60

Knowledge aspects		Introduction	Causes	Signs and symptoms	Complications	Diagnosis and Treatment	Overall
No of items		6	4	12	3	5	30
Max. Score	Pre-test	6	4	12	3	5	28
Mean		2.02	1.28	4.12	1.03	2.07	10.52
SD		1.642	1.195	2.877	1.041	1.506	6.949
Mean %		33.7	32.0	34.3	34.3	41.4	37.6
Max. Score	Post-test	6	4	12	3	5	30
Mean		4.57	3.05	8.97	2.37	3.83	22.78
SD		1.691	1.213	3.097	0.974	1.291	7.36
Mean %		76.2	76.3	74.8	79.0	76.6	75.9
Mean difference		42.5	44.3	40.5	44.7	35.2	38.3

The above table 2 explains that in pre-test the maximum 41.4 mean percentage was found in knowledge on "diagnosis and treatment" and in post-test maximum 79 mean percentage was found in knowledge on "complications" of the disease. The maximum 44.7 mean difference was found in knowledge on "complications" of disease. The overall mean difference was 38.3, It shows that the structured teaching program was effective.

Table 3: Assessment of pretest and posttest knowledge level, n=60

Knowledge level	Pretest		Posttest	
	Frequency	Percentage	Frequency	Percentage
Inadequate	47	78.3	8	13.3
Moderate	10	16.7	13	21.7
Adequate	3	5.0	39	65.0

The above table 3 implies that, in pre-test there were only 3(5%) samples had adequate knowledge, it became 39(65%) samples after post-test. It shows that the structured teaching program was effective.

Table 4: Assess the effectiveness of structured teaching program on knowledge regarding hoarding, n=60

Aspects	Standard Error Mean	Mean	SD	df	Students' paired t-test
Introduction	.308	2.550	2.382	59	0.000; P=0.05; S
Causes	.212	1.767	1.640	59	0.000; P=0.05; S
signs and symptoms	.544	4.850	4.214	59	0.000; P=0.05; S
Complications	.187	1.333	1.446	59	0.000; P=0.05; S
Diagnosis and Treatment	.260	1.767	2.012	59	0.000; P=0.05; S
Overall	1.305	12.267	10.111	59	0.000; P=0.05; S

S=Significant; SD= Standard deviation

The above table 4 shows that there was a significant difference between the pre-test and post-test knowledge scores as the calculated t vales is higher than the table value at the degree of freedom 59 ($p<0.05$). Therefore, the H_1 was accepted.

Table 5: Assessment of significant association between knowledge level and the socio demographic variables, n=60

	Socio-demographic Variables		<median	>=median	Total	Df	Chi-Square	Inference
1	Gender	Male	18	12	30	1	1.669	p>0.05 NS
		Female	13	17	30			
2	Age in years	18 to 19	18	15	33	1	0.243	p>0.05 NS
		19 to 20	13	14	27			
3	Type of family	Nuclear	21	20	41	1	0.01	p>0.05 NS
		Joint	10	9	19			
4	Area of residency	Urban	9	7	16	1	0.184	p>0.05 NS
		Rural	22	22	44			
5	Number of siblings	No siblings	7	4	11	2	1.783	p>0.05 NS
		one	14	18	32			
		More than one	10	7	17			
6	Occupation of mother	Housewife	7	11	18	3	1.828	p>0.05 NS
		Govt employee	5	4	9			
		Private sector	11	9	20			
		Business	8	5	13			
7	Occupation of father	jobless	5	3	8	3	0.592	p>0.05 NS
		Govt employee	7	8	15			
		Private sector	13	13	26			
		Business	6	5	11			
8	Education of mother	Illiterate	6	6	12	4	1.429	p>0.05 NS
		Primary school	6	9	15			
		High school	8	5	13			
		Graduate	6	5	11			
		Postgraduate and above	5	4	9			
9	Education of father	Illiterate	3	5	8	4	2.069	p>0.05 NS
		Primary school	10	7	17			
		High school	6	8	14			
		Graduate	7	4	11			
		Postgraduate and above	5	5	10			

The above table 5 implies that there was no significant association between knowledge level and the selected socio demographic variables as the chi-square value is lower than the table value at 0.05 level of significant. Therefore, H_2 was rejected.

5. Discussion & Summary

The finding of the study says there is a huge improvement in the knowledge of adolescents on hoarding disorder and its prevention, in number it shows that in pre-test there were only 3(5%) samples had adequate knowledge, it became 39(65%) samples after post-test. It implies that the structured teaching program was effective. The study for the assessment of knowledge regarding hoarding disorder is almost not published yet. There are so many studies say about the meaning of hoarding disorder and the prevalence of hoarding disorder. May be the prevalence is uncommon in India as per the studies, but it is the worst condition if anybody affected by it. It is one of the subtypes of

obsessive-compulsive disorder and it will affect the day-to-day activities of the individual, therefore it needs to be treated. For that the knowledge and awareness is highly needed among population. Here the researcher chose the adolescence to get the knowledge as they are the sharp minded and observe the things immediately, if may be helpful in the condition when they cross this type of disorder. This study may be one among other to motivate others to do study in this topic in coming days.

References

[1] Kalogeraki L, Michopoulos I. Hoarding Disorder in DSM-5: Clinical description and cognitive approach. Psychiatriki. 2017 April; 28(2): 131-41.
[2] German hospital. Hoarding disorder. German hospital. 2018 February 3.
[3] APA. Hoarding Disorder. American psychiatric association. 2013.
[4] Tomohiro N, Shigenobu K. Pathophysiology and Treatment of Hoarding Disorder. Researcher. 2019 November.
[5] Steketee G, Kelley A. Encyclopedia of Mental Health. 2nd ed.; 2016.
[6] WHO. Adolescent health. World health organization. 2019.
[7] Jaisoorya TS, Abel T, Manoj L. Prevalence of hoarding disorder among primary care patients. Braz J Psychiatry. 2021 March; 43(2): 168-73.
[8] APA. Help With Hoarding Disorder. American psychiatric association. 2017 December 12