



**“A STUDY TO ASSESS EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING COMPULSIVE HOARDING DISORDER AMONG UNDERGRADUATE STUDENTS FROM SELECTED COLLEGES AT NAVI MUMBAI.”**

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**ABSTRACT**

**Introduction:** One of the biggest proposed additions for DSM-5 is a disorder characterized by the acquisition of and failure to get rid of possessions that clutter the home, creating significant problems. Although final decision about inclusion is yet to be made, “hoarding disorder” is likely to survive as one of the newest mental conditions. A title was to assess effectiveness of structured teaching programme on knowledge regarding compulsive hoarding disorder among undergraduate students from selected colleges at Navi Mumbai. **Objectives of the study:** 1. To assess level of knowledge on compulsive hoarding disorder among undergraduate students of selected colleges at Navi Mumbai. 2. To assess effectiveness of structured teaching programme on knowledge regarding compulsive hoarding disorder by comparing the pretest and posttest knowledge score among undergraduate students. 3. To find out association between pre interventional knowledge score with selected socio demographic variables. **Material & Method:** A pre experimental one group pre-test and post-test design was adopted to assess the effectiveness of structured teaching program on compulsive hoarding disorder. Sample size of 100 undergraduate students were collected from selected colleges using non probability convenient sampling technique. Data collection tool: Questionnaire was developed by the investigator after review of literature on similar topics and after consulting the experts. Questionnaire was developed to observe or measure the variables under study. Description of the tool: A self-administered structured questionnaire was prepared to determine the knowledge regarding compulsive hoarding disorder which consisted two sections: A self-administered structured knowledge questionnaire was validated by the experts. Reliability of the tool was checked. Reliability score was 0.761 which suggests tool was reliable. **Results and conclusion:** Major findings show that in pretest the mean knowledge score was 6.69 whereas in posttest the mean score was 12.96 with mean 6.27 with knowledge gain of 31.35%. Findings related to level of knowledge regarding compulsive hoarding disorder reveals that in pretest majority 62% were having average knowledge level, 31% were having poor knowledge and only 7% were having good knowledge level but none of the participants were having excellent knowledge level. Whereas in posttest, 74% were having good knowledge level, 15% were having average knowledge level and 11% were having excellent knowledge and none of the sample had poor knowledge. Findings related to effectiveness of structured teaching program shows that there is significant difference between mean pre-test and post-test knowledge score ( $t=47.889$ ,  $p<0.05$ ). This indicates structured teaching programme is effective in increasing undergraduate students’ knowledge regarding compulsive hoarding disorder. Finding related to association between knowledge and selected demographic variables shows that the calculated p value for all the variables such as age, gender, educational qualification, previous knowledge. **Conclusion:** The finding of study reveals that structured teaching programme is effective in improving the knowledge of undergraduate students regarding compulsive hoarding disorder.

**Keywords:** Hoarding disorder, undergraduate students, structure teaching program, self-structured knowledge questionnaire

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## **INTRODUCTION**

**NEED OF THE STUDY:** - Compulsive hoarding is a disorder characterized by difficulty discarding items that appear to most people to have little or no value. This leads to an accumulation of clutter such that living and workspaces cannot be used for their intended purposes. The clutter can result in serious threats to the health and safety of the sufferer and those who live nearby.<sup>10</sup>

Often people with compulsive hoarding also acquire too many items - either free or purchased. Hoarding is a serious public health hazard that poses significant health and safety risks for individuals, families, and communities. Research indicates that compulsive hoarding is a growing social and environmental problem across the United States, affecting as many as 2-5% of the population. Hoarders often live chaotically in their own private clutter until it spreads so far that it evolves into medical emergencies or can only be contained by the law.<sup>11</sup>

It is a common psychiatric condition that's affect an estimated 700,000 to 1.4 million Americans, but few receive adequate treatment.<sup>9</sup> Compulsive hoarding affects approximately 2-5% of the adult population.<sup>12</sup> Retrospective studies of adults who hoard report that for the majority of participants (70%) hoarding behaviors began before the age of 20, with an estimated median age ranging from 11–15 years of age.<sup>13</sup> Recent studies showing that 65% of compulsive hoarders are either single or unemployed and up to 55% experienced family conflict resulting from their condition. Based on estimates from a study of US college students the prevalence of compulsive hoarding is roughly 2 - 4%.<sup>14</sup>

Data extrapolated from the number of those with OCD presenting with compulsive hoarding, supplies a figure of less than 1 in 200 or 0.5%. OCD has a lifetime prevalence of 1 - 2% of the population and around 25% to 30% of patients with OCD are clinical compulsive hoarders. Recent demographics concluded that those who have higher level education may be more likely to hoard things.<sup>15</sup>

A study was conducted among college students to assess hoarding behavior. The study examined hoarding disorder in 563 unselected college students in US. The study identified four domains of hoarding behaviors as measured by the 26-item Saving Inventory Revised, Difficulty Discarding, Acquisition Problems, Clutter, and Interference/Distress. The result showed that the students showed significant correlations with social anxiety, depressive symptoms, and worry. The study also concludes that, hoarding behaviors showed a surprisingly strong relationship with anxiety sensitivity, similar in magnitude to the relationship between hoarding and OCD symptoms.<sup>16</sup>

Recent studies from India have examined the phenomenology of OCD in children using the children's version of the Yale-Brown Obsessive-Compulsive Scale (CY-BOCS). In a study of 58 children and adolescents, all aged 16 years and below, contamination obsessions were (62%), followed by obsessions related to aggression (57%), somatic (12%), and hoarding (7%).<sup>17</sup>

A comparative study was conducted to find the health effect of compulsive hoarding disorder such as substantial disability and functional impairment. This present study compared compulsive hoarders and non- hoarding OCD patients across a variety of quality of living (QOL) domains. Subjects were 171 consecutive adult patients (34 compulsive hoarders, 137 non-hoarding patients with DSM-IV OCD) treated openly between 1998 and 2004 in the UCLA OCD Partial Hospitalization Program (OCD PHP) in US. The result showed both groups had low overall QOL scores across multiple domains. An epidemiological study from India showed the prevalence of 0.6%. This rate is considerably lower compared to the 2-3% rate reported in the European and North American studies. However, similar low rate ranging from 0.5-0.9% was observed in a study from Taiwan. It is not clear why lifetime prevalence rate of OCD is lower in some countries although the rates are not very low compared to the conservative estimate of 1% rate of OCD. However, further research is needed into the epidemiological aspects of OCD in India since the data available is limited.<sup>18</sup>

According to the available literature the investigator has realized that the health risks associated with compulsive

hoarding disorder and studies also suggests that researches in hoarding disorder in India is limited and it's been concluded that further studies should be done. It's been seen that hoarding disorder is becoming a new millennium disorder in developing world and the people are not aware of the ill effects that may cause due to hoarding. Researches had indicated that people who are highly educated are more prone to have compulsive hoarding disorder. Now in the developing world people are so well educated and they never get mugged up and hence the investigator felt the need to impart the knowledge regarding various aspects of compulsive hoarding and its management among PG students in selected degree colleges in Navi Mumbai.

## **MATERIAL AND METHOD**

**Research Approach:** Quantitative research approach.

**Research Design:** Pre experimental one group pre-test post-test design was chosen for the study.

## **RESEARCH VARIABLE UNDER STUDY**

**Independent Variable:** In this present study independent variable is structured teaching program on hoarding disorder among

**Dependent Variable:** In the present study knowledge of undergraduate students regarding hoarding disorder is dependent variable.

**Demographic Variables:** In this study demographic variables to age, gender, parents education and previous knowledge on hoarding disorder.

## **RESEARCH SETTING**

The present study settings were selected as per the needs and criteria. The settings were the undergraduate colleges of Navi Mumbai. These colleges are selected randomly. From each school prior permission is taken from the principal of the college. After that the data collection was done.

## **POPULATION**

**Target population:** It is the entire aggregation of researcher's interest. The target population was undergraduate students in selected colleges of Navi Mumbai.

## **SAMPLE**

**Accessible Population:** - It is the aggregate of cases which is officially selected for harmony and within benchmark so that researcher accesses it as subject in the study. In this study undergraduate students between 18-25 years of age in selected colleges of Navi Mumbai was the accessible population.

## **SAMPLE SELECTION CRITERIA**

### a) Inclusion Criteria

- The students those who are studying undergraduate program in science branch
- The students who are able to read and write English language

### b) Exclusion Criteria

- Student who are absent during data collection procedure
- The Undergraduate students had attended any educational programme before on compulsive hoarding disorder.

**Sample Size:** - A sample size consists of a part of the population taken for the study. sample size was according to

calculation. In this study the sample size was 100 undergraduate students in selected colleges of Navi Mumbai.

### **SAMPLING TECHNIQUE**

It is the activity of selecting samples against target population whose attributes are similar to that of population. Investigator adopted Non-probability convenient sampling technique for this study.

### **DATA COLLECTION TOOL**

Development of questionnaire: Questionnaire was developed by the investigator after review of literature on similar topics and after consulting the experts. Questionnaire was developed to observe or measure the variables under study. Description of the tool:

A self-administered structured questionnaire was prepared to determine the knowledge regarding compulsive hoarding disorder which consisted two sections:

**Section I:** It consists of four items related to demographic profile which includes demographic data - Age, gender, parent's education and previous knowledge on hoarding disorder.

**Section II:** It included questions as follows

Regarding structured knowledge questionnaire on compulsive hoarding disorder. The tool includes 20 questions from structured teaching program, and questions were included from areas like definition of hoarding disorder, its incidence and prevalence, causes, types, symptoms and management of hoarding disorder. The correct answer scored with one mark and maximum score was 20. The total was divided in to 4 categories, less than 5 marks as poor, 6-10 marks as average, 11-15 marks as good and 16-20 as excellent.

### **VALIDITY**

Tool was tested for content validity as it ensures the extent to which measuring instrument provide enough consideration of the study topic A self-administered structured knowledge questionnaire was validated by nineteen experts. The opinion and suggestions from experts were incorporated in the tool.

**Ethical Consideration** - Permission will be obtained from the research committee of the Bharati Vidyapeeth Deemed University College of Nursing, Navi Mumbai and authorities of selected Undergraduate colleges of Navi Mumbai. Informed consent will be obtained from subject who is selected for the study.

### **RELIABILITY**

Reliability of the tool was checked in selected college of Navi Mumbai on 25<sup>th</sup> August 2021. Sample taken for reliability is 10 samples. Split half method was used to calculate reliability. In split half method we divide items of a research tool in to two equal parts through grouping. The grouping was done as first half and second half item groups. Data tabulated in excel sheet and analysis done by Karl Pearson's correlation coefficient formula. The test result was 0.761 which suggests tool was reliable.

### **PROCEDURE OF DATA COLLECTION**

- Permission obtained from principal of both selected colleges in prior to data collection.
- Data collected on web-based method, in co-ordination with class teachers.
- Consent form, Pre-Test & Post Test data collected via Google forms and link for online Structure Teaching Programme was shared with students through teachers.
- Structure teaching programme was conducted online (Zoom). Pre-Test followed by STP (Online)conducted

on same day. Post-test for each college was conducted on 8th day after pre-test.

- Due to COVID-19 pandemic data collection & structured teaching programme was conducted by web-based method

**Plan For Data Analysis** - Based on the objectives of the study the percentage, Mean and Standard deviation was obtained to assess knowledge. Paired t-test was applied to assess effectiveness of structured teaching programme. Pearson's Chi-Square test was obtained to find out association between the pre-test knowledge score and selected demographic variables.

#### **PLAN FOR DATA DISSEMINATION**

The data dissemination is planned by publishing in reputed national and international journals.

Scientific paper and poster presentation is also planned to communicate the research findings.

#### **RESULT AND DISCUSSION**

#### **SECTION – I FREQUENCY AND PERCENTAGE DISTRIBUTION OF SELECTED DEMOGRAPHIC CHARACTERISTICS.**

**TableNo – 1.1**

**Distribution of under graduate students based on age**

(n=100)

<b>Age in years</b>	<b>Frequency(f)</b>	<b>Percentage(%)</b>
18-19year	10	10%
20-21year	55	55%
22-23year	27	27%
24andabove	08	08%
<b>Total</b>	<b>100</b>	<b>100%</b>

The analysis of above demographic data depicts that, there was total 100 undergraduate students. Table no.1.1 reveals that majority 55% participants were belong to the age group 20-21 years and 27% of participants were belongs to the age group of 22-23 years were as 8% participants from age group of 24 years and above and only 10% of participants were from age group of 18-19 years.

**Table: 1.2 Distribution of Undergraduate students based on gender**

(n=100)

Gender	Frequency(f)	Percentage(%)
Male	64	64%
Female	36	36%
<b>Total</b>	<b>100</b>	<b>100%</b>

Table no.1.2 shows that majority 64% were male students and 36% were female undergraduate students.

**Table No:1.3 Distribution of samples based on parent's education**

(n=100)

Parents education	Frequency(f)	Percentage(%)
Illiterate	0	00%
Primary	07	07%
Secondary	39	39%
Graduate	30	30%
Other	24	24%
<b>Total</b>	<b>100</b>	<b>100%</b>

Table no1.3 shows that distribution of samples based on parent's education, majority 39% of the parents were having secondary education were as 30% of parents were having graduate education and 24% of parents were having other education and 07% of parents having primary education.

**Table No:1.4 Distribution of samples based on previous knowledge**

(n=100)

Previous knowledge	Frequency(f)	Percentage(%)
Yes	08	08%
No	92	92%
<b>Total</b>	<b>100</b>	<b>100%</b>

Table no.1.4 shows that majority 92% participants were not having previous knowledge on selected topic and only 8% were having previous knowledge regarding Hoarding Disorder.

## SECTION – II FREQUENCY AND PERCENTAGE DISTRIBUTION OF PRE- TEST AND POSTTEST KNOWLEDGE SCORE.

Figure no.1.1

(n=100)

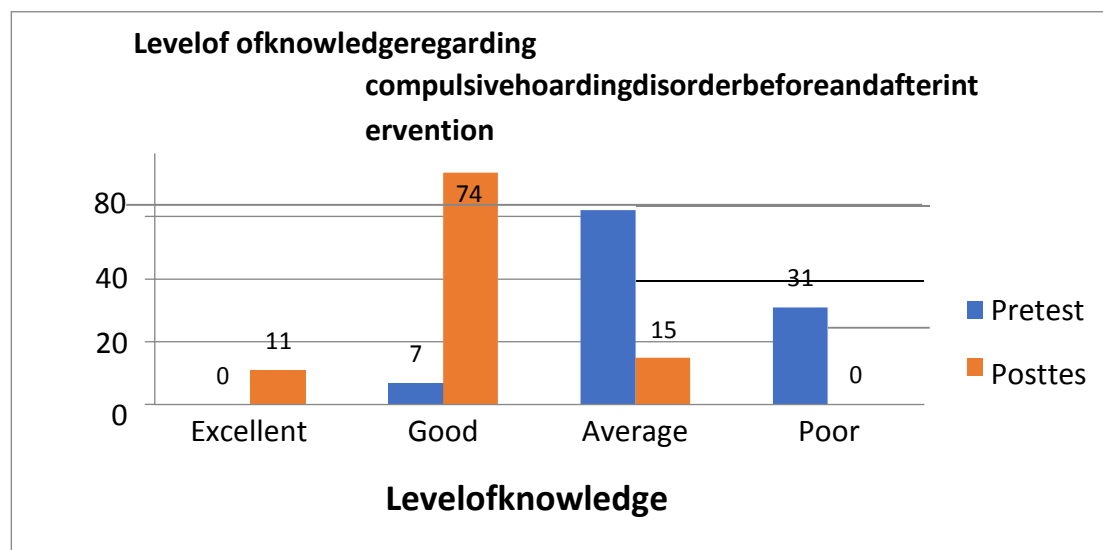
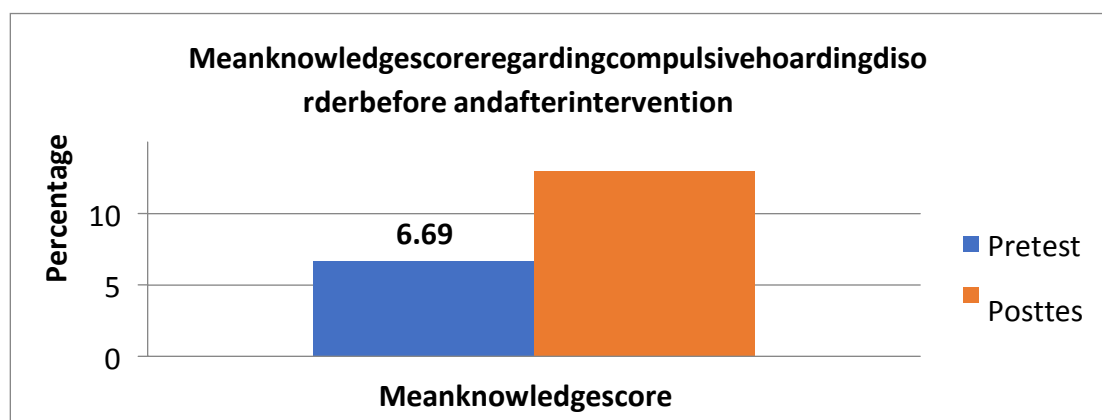


Figure No.1.1 reveals that in pre-test majority 62% were having average knowledge level, 31% were having poor knowledge and only 7% were having good knowledge level but none of the participants were having excellent knowledge level. Whereas in post-test, 74% were having good knowledge level, 15% were having average knowledge level and 11% were having excellent knowledge and none of the sample had poor knowledge.

Figure no.1.2

(n=100)



The above figure shows that in pre-test the mean knowledge score was 6.69 with mean percentage 33.45 and SD 1.19. Whereas in post-test the mean score was 12.96 with mean percentage 64.96 and SD 1.78. Mean difference between pretest and posttest knowledge score is 6.27 with knowledge gain of 31.35%.

**SECTION – III TO COMPARE THE KNOWLEDGE BEFORE AND AFTER STRUCTURED TEACHING PROGRAMME REGARDING COMPULSIVE HOARDING DISORDER**

**Table No.3.1**

(n=100)

Knowledge score	N	Mean±SD	Paired 't' test value	Df	P value	Sig. at 5% level
Pretest	100	6.69 ±1.796	47.889	99	0.0001	Significant
Posttest		12.96 ±1.786				

Table No. 3.1 shows that mean post-test knowledge score 12.96 (64.8%) with standard deviation 1.786 is greater than the mean pre-test knowledge score 6.69 (33.45%) with standard deviation 1.796. The calculated paired t test score is 47.889. The calculated p value 0.0001 is less than p value (0.05) this indicates that there is significant difference between the mean pre-test and post-test knowledge score at 0.05 level of significance. Hence conclude that the structured teaching programme is effective in increasing the knowledge regarding compulsive hoarding disorder among undergraduate students and we reject the null hypothesis H<sub>0</sub>

**SECTION – IV: ASSOCIATION BETWEEN PRE-TEST KNOWLEDGE SCORE WITH SELECTED SOCIO DEMOGRAPHIC VARIABLES.**

**Table No.4.1**

(n=100)

Socio- demographic variables	Knowledge level				Chi- square test	p-value	Significance at 5%
	Good	Average	Poor	Grand total			
<b>Age group</b>							
18-19 year	0	10	0	10	25.296	0.0001	S
20-21 year	1	31	23	55			
22-23 year	6	13	8	27			
24 and above	0	8	0	8			
<b>Total</b>	<b>7</b>	<b>62</b>	<b>31</b>	<b>100</b>			
<b>Gender</b>							
Male	7	35	22	64	6.124	0.047	S



Female	0	27	9	36			
<b>Total</b>	<b>7</b>	<b>62</b>	<b>31</b>	<b>100</b>			
<b>Parents education</b>							
Primary	0	4	3	7			
Secondary	0	23	16	39			
Graduate	0	18	12	30			
Other	7	17	0	24	<b>32.378</b>	<b>0.001</b>	<b>S</b>
<b>Total</b>	<b>7</b>	<b>62</b>	<b>31</b>	<b>100</b>			
<b>Previous knowledge</b>							
Yes	5	3	0	8			
No	2	59	31	92	<b>41.801</b>	<b>0.001</b>	<b>S</b>
<b>Total</b>	<b>7</b>	<b>62</b>	<b>31</b>	<b>100</b>			

The above table shows that the calculated p value for all the variables such as age, gender, parent’s education and previous knowledge is less than the 0.05. Hence, we conclude that, there is a significant association between knowledge score of undergraduate students and their selected demographic variables at 0.05% level of significance. We reject the null hypothesis H02 considering the findings.

### RECOMMENDATIONS

- A comparative study may be done to compare nurses led interventions for compulsive hoarding disorder
- Qualitative study like phenomenological studies can be done to explore more about disease pattern and experience of hoarding patients.
- A survey on large population can be done to identify the prevalence and contributing factor for hoarding disorder in India.
- Larger samples can be taken in the study for the purpose of generalization.
- A Documentary can be prepared as a teaching aid for nurses, health workers and care givers and can be kept in various setting for regular use.
- An experimental study can be conducted to check the effectiveness of various educational interventions on knowledge and stigmatizing attitude associated with hoarding disorder.

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