



## **A Study to Evaluate the Effectiveness of Planned Teaching Programme on Knowledge and Attitude Regarding Prevention of Mental Retardation Among Young Adult in a Selected Nursing College at Udaipur**

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### **ABSTRACT**

Mental retardation is present in around 2 to 3 percent of the population. It can be defined as a cognitive ability that is markedly below average level and a decreased ability to adapt to one's environment. The beginning of the condition happens during the formative time frame, i.e., incubation through age 18 years. The present study aims to evaluate the effectiveness of planned teaching programs on knowledge and attitude regarding the prevention of mental retardation among 100 young adult in a selected nursing college at Udaipur. The quantitative research approach and pre-experimental one group pre test post test research design was adopted for this study. The non-probability convenience sampling technique was used for data collection. Data collection tool comprised of 9 demographic variables, 20 structured knowledge questionnaire for knowledge and 20 statements for attitude rating scale. Data was analyzed through descriptive and inferential statistics. The study revealed that the knowledge score in the pretest was 68% had inadequate knowledge, 29% had moderate knowledge, and 3% had adequate knowledge regarding the prevention of mental retardation. Whereas in the posttest 70% had adequate knowledge, 30% had moderate knowledge and none of had inadequate knowledge regarding prevention of mental retardation after administer planned teaching program. The attitude score in pretest 50% had good attitude, 30% had excellent attitude and 20% had poor attitude regarding prevention of mental retardation. Whereas in the posttest 84% had excellent attitude, 16% had good attitude and none of had poor attitude regarding prevention of mental retardation. The mean score in the pretest knowledge score mean and SD was  $8.16 \pm 3.37$  and posttest knowledge score mean and SD was  $25.23 \pm 4.04$  with mean difference of 17.07. The mean pretest and posttest was compared and tested using paired t test (t value=32.6 df=99 and p value=0.05) was highly significant at p value <0.05 level of significance. in the pretest attitude score mean and SD was  $32.86 \pm 4.44$  and posttest attitude score mean and SD was  $75.89 \pm 5.11$  with mean difference of 43.03. The mean pretest and posttest was compared and tested using paired t test (t value=60.02 df=99 and p value=0.05) was highly significant at p value <0.05 level of significance. The study findings showed that planned teaching program was effective in improving the attitude of young

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adults regarding the prevention of mental retardation. The correlation coefficient between posttest knowledge and attitude score,  $r=0.370$  is found to be significant at 0.05% significance level. There was a significant association between the level of knowledge and demographic variables such as type of family ( $\chi^2=4.132$ ), previous information ( $\chi^2=18.487$ ), and source of information ( $\chi^2=31.558$ ), and no significant association with variables such as age, religion, occupation of father and mother, family monthly income, place of domicile. There was no significant association between the attitude and demographic variables.

## **KEYWORDS**

Effectiveness; Planned Teaching Programme; Knowledge; Attitude; Mental Retardation; Young Adult.



## INTRODUCTION

Health is a state of complete physical, social, and mental, well-being not merely the absence of disease or infirmity. There is no well-being without mental health. But mental disorders results in minor to major physical ill health. So good physical and mental health is important for successful growth and development at all stages of life of an individual and the society. 'Retarded' comes from the Latin word "Retardare"- to make slow, delay, keep back, or hinder. The term was recorded in 1426, as a fact of action making slower in movement or time. The first record of retarded in relation to mentally slow was in 1895. The term retarded was used to replace the terms like idiot, moron, and imbecile because it was not derogatory.

Mental retardation is defined as sub-average general intelligence, manifesting during the early developmental period. According to the American Association of Mental deficiency in 1983, mental retardation refers to a significant sub-average general intellectual functioning resulting in or associated with concurrent impairments in adaptive behavior and manifested during the developmental period.

Traditionally the causes of mental retardation are described in preconception, Prenatal, natal, and postnatal contexts. The main preconception factors include advanced maternal age which causes chromosomal anomalies such as fetal deprivation, hypoxia are common in offspring of older mothers. Birth trauma is more frequent in older primi para which is one of the predisposing factors for mental retardation. Consanguinity of parents is associated with a high occurrence of genetically transmitted mental handicaps.

Prenatal factors are also contributing the risk of getting mental retardation includes aminoacidopathies, carbohydrate disorders, chromosomal disorders etc: Maternal factors and natal factors include, use of teratogens in first trimester of pregnancy, intra uterine infections like TORCH, placental insufficiency, ante partum hemorrhage, radiation during pregnancy, birth injuries, hypoxic , ischemic encephalopathy's, intracerebral hemorrhage etc...

## NEED FOR STUDY

Mentally challenged is global social problem. Due to various changes in the world this problem is also increasing day by day, which become a major concern in research studies. Mental retardation is a frequently occurring disorder with a major impact on the life of the affected person, the family and society.



The American Association of Mental Retardation promotes a view of mental retardation as a functional interaction between the individual and environment instead of a static description of a person's limitations. Within this conceptual framework a person is assigned as requiring discontinuous, restricted, broad, or unavoidable environmental support with respect to a specific set of adaptive function domain like communication, self care, home living etc...

Mental retardation affects approximately 1-3% of the population in developed countries. Nearly 83 million of the world's population is assessed to be mentally retarded, with 41 million having long-term or permanent disabilities. It is the 4<sup>th</sup> leading disability in the list of disability. At least 2% of Indians population is said to be suffering from some kind of mental disability.

According to WHO approximately 156 million people of the world population have mentally challenged. It prevalence of continents in Africa- 20310,0000, Australia 5,25000, Asia -97710,000, Europe 15390,000, Latin America 13800,000 and North America 86100010. Some studies reveal that about 3% of the world's population is estimated to be mentally retarded. In India, 5/1000 children are actually physically or mentally retarded, which is more normal in boys than in girls. In severe and profound mental retardation mortality is high because of associated physical illness. Information regarding the prevalence of mental problems in India needs to be updated to generated establish a database for mental health patterns and the status of mental health in the country.

From the above said facts it can conclude on young adult an important role in the prevention of mental retardation. This awareness made the researcher to find out the level of knowledge among young adult. This study can lead the involvement of policy makers to include few chapters on this subject in their curriculum of undergraduate.

## **PROBLEM STATEMENT**

“A study to evaluate the effectiveness of planned teaching program on knowledge and attitude regarding prevention of mental retardation among young adult in a selected nursing college at Udaipur”

## **OBJECTIVES**

- To assess the level of knowledge regarding prevention of mental retardation among young adults



- To determine the level of attitude towards prevention of mental retardation among young adults
- To assess the effectiveness of planned teaching program on knowledge and attitude regarding prevention of mental retardation among young adults
- To correlate the level of knowledge and attitude regarding prevention of mental retardation among young adults
- To find out the association between level of knowledge and selected demographic variables among young adults
- To find out the association between attitude and selected demographic variables among young adults

## **HYPOTHESIS**

**H<sub>1</sub>:** There is significant relationship between level of knowledge and attitude regarding prevention of mental retardation among young adults

**H<sub>2</sub>:** There is significant relationship between level of knowledge and selected demographic variables regarding prevention of mental retardation among young adult

**H<sub>3</sub>:** There is significant relationship between attitude and selected demographic variables among young adults.

## **MATERIALS AND METHOD**

**Research Approach:** A quantitative research approach will be used in the study.

**Research Design:** Pre-experimental, one group pretest posttest research design will used to getting information from the sample.

**Sample:** In the present study the sample comprises of 100 young adult.

**Sampling Technique:** In present study the samples were selected through a non-probability convenient sampling technique.

**Setting:** In present study the setting was selected nursing college in Udaipur city.

**Population:** In the present study, the target population comprises of all the young adult studying in the selected nursing college at Udaipur city.

**Description of tool:** Structured questionnaire to assess the knowledge of yoga meditation. It consisted of two parts:



**Section A:** 9 Demographic data, it includes age, religion, occupation of father, occupation of mother, monthly family income, type of family, place of domicile, previous information regarding mental retardation.

**Section B:** 20 structured questionnaires, in these self-structured multiple choice questions was considered appropriate for assessing knowledge score. The maximum total score of the knowledge questionnaire was 20 (for each correct response 1 mark will be given and 0 mark for incorrect answer).

**Section C:** 20 items to assess the attitude of young adults regarding prevention of mental retardation using 5 point rating scale such as “strongly disagree”, “disagree”, “uncertain”, “agree”, “strongly agree”. It consists of positive statements with the maximum score of 5 points for strongly agree and minimum score of 1 point for strongly disagree. The maximum score is 100.

### **Ethical consideration**

- Approval from ethical committee of Venkateshwar College of Nursing Udaipur.
- Prior to data collection, written permission was obtained from the concerned authority of nursing college, at Udaipur.
- Anonymity and confidentiality of subjects was maintained.
- Informed consent was obtained from the subjects.

### **Plan for data analysis**

The data analysis will be done according to study objectives by using descriptive and inferential statistics. The plan of data analysis would be as follows:

- Frequency, percentage, mean and standard deviation will be calculated.
- Correlation Coefficient will be used to test relation between knowledge and attitude score
- Paired t test will be used to test the hypothesis.
- Chi-square test will be used for association with demographic variables.

## **RESULTS AND DISCUSSION**

The data's obtained are divided into certain sections for easy and accurate interpretation of data. The data finding has been organized under the following sections:

**Section A:** Analysis of demographic characteristics of the participants.

**Section B:** Assessment of the level of knowledge and attitude regarding prevention of mental retardation



**Section C:** Assess the effectiveness of planned teaching program on knowledge and attitude regarding prevention of mental retardation among young adults

**Section D:** Relationships between knowledge and attitude of young adults regarding the prevention of mental retardation

**Section E:** Association of knowledge score and attitude score with demographic variables.

**Section A: Analysis of demographic characteristics of the participants.**

**Age:** It was seen that among 100 participants 58 (58%) belonged to the age group of 19-20 yrs, 35 (35%) belonged to the age group of 21-22yrs, and 07 (7%) belonged to the age group of 23-24 years.

**Religion:** It was seen that among 100 participants 74 (74%) belonged to Hindu religion, 19 (19%) belonged to Christian, 7 (7%) belonged to Muslim religion.

**Occupation of father:** It was seen that fathers of 25 (25%) respondents were Govt. employee, 33 (33%) were private employee, 26 (26%) were self employed, 4 (4%) were Unemployed, 9 (9%) were retired and fathers of 3 (3%) got expired.

**Occupation of mother:** It was seen that mothers of 16 (16%) respondents were Govt. employee, 20 (320%) were private employee, 13 (13%) were self employed, 46 (46%) were home maker, 4 (4%) were retired and mother of 1(1%) got expired

**Monthly Family Income:** It was seen that family monthly income of 5 (5%) was between Rs 5000-10000, 31 (31%) between Rs. 100001-15000, 40 (40%) between Rs.15001-20000, and 24 (24%) with more than 20001.

**Place of Domicile:** It was seen that 83 (83%) were from urban area, and 17 (17%) were from rural area.

**Type of Family:** It was seen that among 100 respondents 72 (72%) were from nuclear family, 28 (28%) from joint family.

**Previous Information Received Regarding Mental Retardation:** It was observed that among 100 respondents 77 (77%) were having previous information regarding mental retardation, and rest 23 (23%) were without any information.

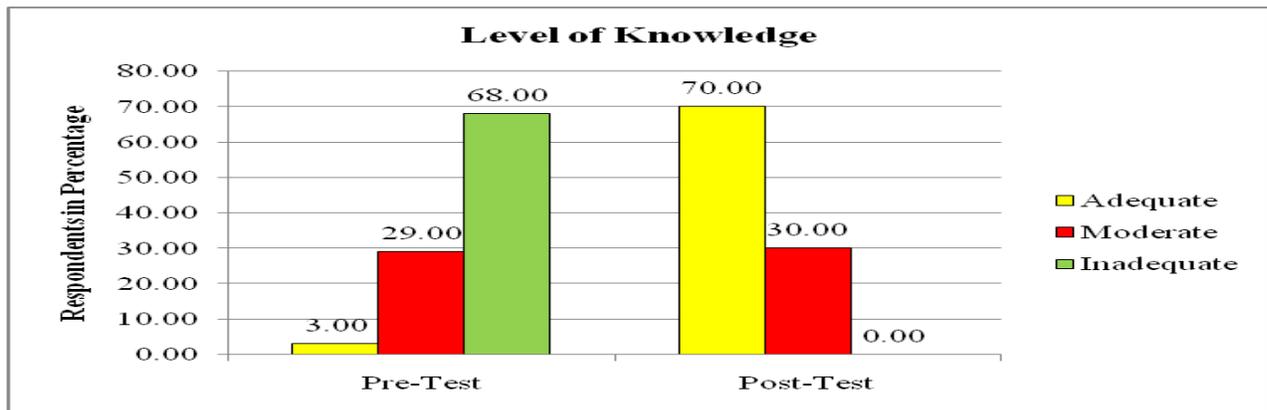
**Source of information:** It was observed that among 100 respondents 28 (28%) got formation from friends, 14(14%) from relatives, 15 (15%) from health personal, 2 (2%) from print media, 18 (18%) from electronic media.



**Section B: Assessment of the level of knowledge and attitude regarding prevention of mental retardation**

*Assessment of the level of knowledge regarding prevention of mental retardation*

The result revealed that in the pretest 68% had inadequate knowledge, 29% had moderate knowledge and 3% had adequate knowledge regarding prevention of mental retardation. Whereas in the posttest 70% had adequate knowledge, 30% had moderate knowledge and none of had inadequate knowledge regarding prevention of mental retardation after administer planned teaching

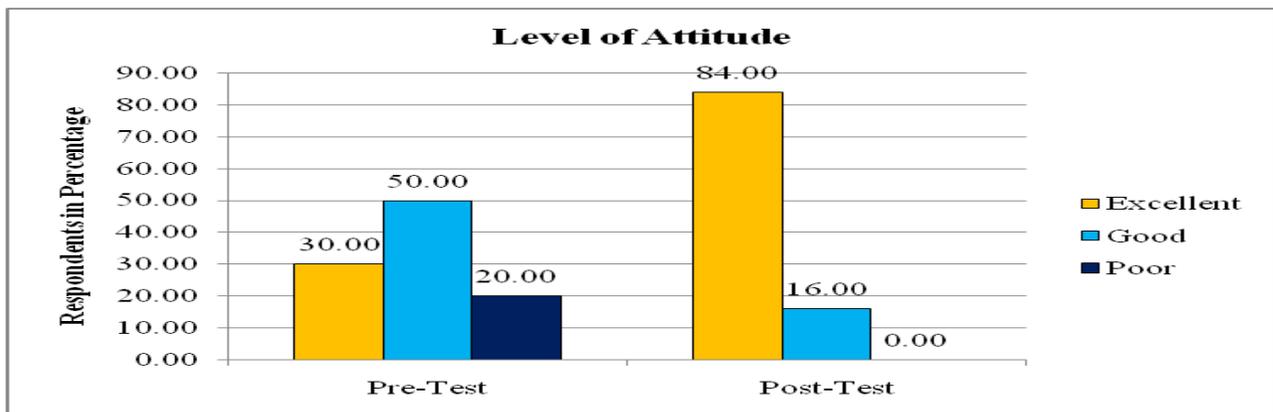


program.

**Figure 1** Comparison of pretest & posttest knowledge score N= 100

*Assessment of level of attitude regarding prevention of mental retardation*

The result revealed that in the pretest 50% had good attitude, 30% had excellent attitude and 20% had poor attitude regarding prevention of mental retardation. Whereas in the posttest 84% had excellent attitude, 16% had good attitude and none of had poor attitude regarding prevention of mental retardation after administer planned teaching program.



**Figure 2** Comparison of pretest & posttest attitude score



### Section C: Assess the effectiveness of planned teaching program on the knowledge and attitude regarding prevention of mental retardation among young adults

**Table 1** Effectiveness of PTP by calculating Mean, SD, Mean Difference and 't' Value of pretest and posttest knowledge score N=100

Test	Mean	SD	Mean Difference	df	t- value	Inference
Pretest	8.16	3.37	17.07	99	32.6	1.98* (0.05 Level)
Posttest	25.23	4.04				

Significant\*

The table 1 revealed that in the pretest knowledge score mean and SD was  $8.16 \pm 3.37$  and posttest knowledge score mean and SD was  $25.23 \pm 4.04$  with mean difference of 17.07. The mean pretest and posttest was compared and tested using paired t test (t value=32.6 df=99 and p value=0.05) was highly significant at p value <0.05 level of significance. The study findings showed that planned teaching program was effective in improving the knowledge of young adults regarding the prevention of mental retardation.

**Table 2** Effectiveness of PTP by calculating Mean, SD, Mean Difference and 't' Value of pretest and posttest attitude score N=100

Test	Mean	SD	Mean Difference	df	t- value	Inference
Pretest	32.86	4.44	43.03	99	60.02	1.98* (0.05 Level)
Posttest	75.89	5.11				

Significant\*

The table 2 revealed that in the pretest attitude score mean and SD was  $32.86 \pm 4.44$  and posttest attitude score mean and SD was  $75.89 \pm 5.11$  with mean difference of 43.03. The mean pretest and posttest was compared and tested using paired t test (t value=60.02 df=99 and p value=0.05) was highly significant at p value <0.05 level of significance. The study findings showed that planned teaching program was effective in improving the attitude of young adults regarding the prevention of mental retardation.

### Section D: Relationships between the knowledge and attitude of young adults regarding the prevention of mental retardation

**H<sub>1</sub>:** There is significant relationship between the level of knowledge and attitude regarding prevention of mental retardation among young adults

The correlation coefficient between posttest knowledge and attitude score,  $r=0.370$  is found to be significant at 0.05% significance level. Hence **H<sub>1</sub>** accepted and proved that there was a positive correlation between knowledge and attitude.

### Section E: Association of the knowledge score and attitude score with demographic variables.



### *Association of the knowledge score with demographic variables*

**H<sub>2</sub>**: There is significant relationship between the level of knowledge and selected demographic variables regarding prevention of mental retardation among young adult

There was a significant association between the level of knowledge and demographic variables such as type of family ( $\chi^2=4.132$ ), previous information ( $\chi^2=18.487$ ), and source of information ( $\chi^2=31.558$ ), and no significant association with variables such as age, religion, occupation of father and mother, family monthly income, place of domicile. Hence **H<sub>2</sub>** accepted and proved that there was a significant association between the knowledge score with demographic variables.

### *Association of the attitude score with demographic variables*

**H<sub>3</sub>**: There is significant relationship between the attitude and selected demographic variables among young adults.

There was no significant association between the attitude and demographic variables. Hence **H<sub>2</sub>** rejected that there was no significant association between the attitude score with demographic variables.

## **CONCLUSION**

From the above findings conclusion can be drawn the knowledge score in pretest 68% had inadequate knowledge, 29% had moderate knowledge and 3% had adequate knowledge regarding prevention of mental retardation. Whereas in the posttest 70% had adequate knowledge, 30% had moderate knowledge and none of had inadequate knowledge regarding prevention of mental retardation after administer planned teaching program. The attitude score in pretest 50% had good attitude, 30% had excellent attitude and 20% had poor attitude regarding prevention of mental retardation. Whereas in the posttest 84% had excellent attitude, 16% had good attitude and none of had poor attitude regarding prevention of mental retardation regarding prevention of mental retardation after administer planned teaching program. The study suggests that it is essential for the young adults to have knowledge and alternatives about prevention of mental retardation.



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