

ORIGINAL RESEARCH**Assess the effectiveness of structured teaching programme on knowledge regarding mental retardation in children among primary school teachers****¹Bhupinder Kaur, ²Lovesampuranjot Kaur**¹Assistant Professor, ²Professor, Faculty of Nursing, Desh Bhagat University, Mandi Gobindgarh, Punjab, India**Correspondence:**

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The present study was undertaken by the investigator to assess the effectiveness of structured teaching programme on knowledge regarding mental retardation in children among primary school teachers in selected schools, district Fatehgarh sahib, Punjab. Quantitative research approach and experimental research design was used to accomplish the stated objectives. Data was collected with the help of self structured knowledge questionnaire. A pilot study was done on (1/10th sample)

Objectives (1) To Assess the level of knowledge of primary school teachers regarding mental retardation in children.(2)To Find out the difference between the mean pre-test and post test knowledge level of primary school teachers regarding identification and management of mental retardation in children 60 primary school teachers were selected for this study. Non probability purposive sampling technique was used for the study. Structured knowledge questionnaire was used to collect the data from. The data was analyzed by descriptive and inferential statistics and interpreted in terms of objectives and hypothesis of the study. The level of significance was set at $p \leq 0.05$ level. In pre-test, majority 41(82%) of primary school teachers had inadequate level of knowledge and 9(18%) of them had moderate level of knowledge and none of them had adequate level of knowledge regarding identification and management of mental retardation in children whereas in post-test, among 50 primary school teachers, 33(66%) of them had adequate level of knowledge and 17(34%) of them had moderate level of knowledge and none of them had adequate knowledge regarding identification and management of mental retardation in children. It was observed that the mean pre-test score was 18.19 ± 2.41 whereas the mean post-test score was 32.5 ± 1.83 . The mean score of enhancement was 14.31 ± 0.58 . The obtained 't' value was 13.42, which was higher than the table value 2.7 so it is highly significant at $P \leq 0.05$ level. This indicates that the STP was effective in improving the knowledge of primary school teachers regarding identification and management of mental retardation in children. The obtained chi square value for type of family, educational status, occupational status and source of information regarding identification and management of mental retardation was higher when compared to the table value at $P \leq 0.05$ level of significance.

Key words: Knowledge, Primary school teachers, Mentally retardation and children,

Introduction

A psychiatric emergency is a disturbance on thought, mood or behavior which causes sudden distress to the individual and requiring immediate management. The Psychiatric Emergencies are suicide attempts, violence excitement, stupor, panic, withdrawal symptoms of drug

dependence, delirium tremens, delirium, epilepsy or status epileptics, hyper ventilation, blindness, severe depression, mania, iatrogenic emergencies, extra pyramidal symptoms, dystopia, akathisia and lithium toxicity.¹

Periodically it's been observed that mentally challenged children and adults have behavioral changes, mood disturbances, violence and aggression, Children with mental retardation are more likely to exhibit behavior problems than children without disabilities. Mental retardation is not a disease or single entity, It refers to a developmental mental disability and that appears in children by birth or under the age of 18 years. In most of the cases, it persists throughout adulthood. It can be defined as a level of intellectual functioning which is well below average and results in significant limitations in the person's daily living skills. It exists when there is significantly sub average general intellectual functioning with concurrent deficits in adaptive behavior. Failure to achieve developmental milestones is suggestive of mental retardation. These limitations will cause a child to learn and develop more slowly than a typical child. They are likely to have trouble in the school; difficulties accepting criticism, limited self-control, bizarre and inappropriate behaviors such as aggression or self-injury. Some of the genetic syndromes associated with mental retardation tend to include abnormal behavior e.g., children with PraderWilli syndrome often engage in self-injurious or obsessive-compulsive behavior. In general, the more severe the retardation, the higher the incidence of behavior problems.² the demand for emergency psychiatric services has rapidly increased throughout the world since the 1960s, especially in urban areas. Care for patients in situations involving emergency psychiatry is complex. Care of patients requiring psychiatric intervention usually encompasses crisis stabilization of many serious and include acute or chronic mental disorders or symptoms similar to those conditions. Even though management of psychiatric emergencies are mainly emphasized on medical personnel efforts are made to educate the primary school teachers and care takers.^{3,4}

Need for study

Mental retardation (MR) is a generalized disorder appearing before adulthood, A family may suspect mental retardation if the child's motor skills, language skills, and self-help skills do not seem to be developing, or are developing at a far slower rate than the child's peers. Aggressive behavior, self injurious behavior, seizures obsessive compulsive behavior are some of the complications of this condition. Complications vary depending on the degree of impairment. Emergency department receives numerous cases with such conditions which are generally known as psychiatric emergencies, but in India, very less work has been done regarding teaching of primary school teachers towards management of mentally retarded children in the family.⁶

Studies of prevalence of mental retardation in India vary a great deal in methodology with regard to the definition of mental retardation and the criteria on which the diagnosis is based. The type of population surveyed, vary greatly from one survey to another most of the studies have been community surveys for psychiatric disorders in which mental retardation is considered as one disorder.⁶ The current frequency of psychiatric emergencies in international populations is unknown. The prevalence of psychiatric emergencies in hospitals is 16.9% in Spain, 13.5% in India, and 11.4% in Colombia and 9.6% in Wales. The prevalence rate of psychiatric emergencies has been estimated at anywhere from 10% to 60% among this population. Around 12.9%. 12% to 25% of emergency cases were seen by the emergency medical services were psychiatric emergency.⁷ According to WHO nearly 83 million of the world's population is estimated to be mentally challenged, with 41 million having long-term or permanent disability. It Ranks fourth in the list of leading causes of disability. The overall prevalence of mentally challenged children is between 1- 3%. It is more common in developing countries because of the higher incidence of injuries and anoxia during birth, and

early childhood brain infections. Population studies have shown that overall prevalence of mild to severe mentally challenged ranges from 2.5 to 5/1000 population.⁸ A survey was conducted by National Institute of mental health and neurosciences, Bangalore, among 10,000 people which covered eleven villages revealed that the prevalence of mental retardation as 13/1000 population. They stated that mentally retarded children may have functional impairment including deficient motor skills, hence the primary school teachers have to spend more time for caring these children caused more stress for their social, family and personal life. Hence primary school teachers have to be educated about management of mentally challenged children through which primary school teachers can improve their social and family life.¹³

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Teachers are often the first to notice mild developmental problems. Most identified mild MR is initially detected during school years. The Atlanta population-based study indicated that, the prevalence of mild or moderate MR was only 0.5% for children between the ages of 3-4 years of age, the prevalence was 1.2% among, school-aged children. Studies involving children typically report higher rates of mild intellectual disability with estimates varying between 3-29.1/1000 school children.¹⁴

Research approach & research design

For the present study Quantitative research approach and experimental research design was used to accomplish the stated objectives.

Research setting

The present research Study was conducted in Schools in distic Fathegarh sahib, Punjab.

Target population

The study was conducted on the primary school teacher distic Fathegarh sahib , Punjab.

Sample and sampling technique

The sample for the present study was 60 teachers were selected for the study by the purposive sampling technique with inclusion/ exclusion criteria and dependent and independent variable.

Dependent

Variable is a response, behavior or outcome that the researcher wants to predict. Changes in the dependent variable are presumed to be caused by the independent variable. It is otherwise

called as effect variable or a criterion measure.

In the present study it refers to knowledge gained regarding identification and management of mental retardation among primary school teachers.

Independent variable

An independent variable is that which is believed to cause or influence the dependent variable, in experimental research by the manipulated (treatment) variable.

In the present study the independent variable refers to structured teaching programme on identification and management of mental retardation for primary school teachers.

Inclusion criteria:

- Teacher who were available at the time of data collection.
- Teacher who were willing to participate in study.
- Teacher who were teaching to primary school children

Exclusion criteria

- Teacher who were not teaching to primary school children
- Teachers who were involve in pilot study

Description of tool

The tool consisted of two parts:

Part I- Socio demographic data It consists of demographic variables of primary school teachers such as age, sex, religion, residence, type of family, family monthly income, educational status, occupational status and source of information regarding MR.

Part II- Structured knowledge questionnaire to assess the knowledge of the primary school teachers regarding identification and management of mental retardation.

Socio-demographic profile of samples

Table-1: classification of sample by socio-demographic characteristics.

N=60

Characteristics	Category	Respondents	
		N	%
Age in Year	25-30 years	19	38
	31-35 years	13	26
	36-40 years	16	32
	41 years or above	2	4
Gender	Male	12	24
	Female	38	76
Religion	Hindu	29	58
	Muslim	8	16
	Christian	13	26
	Others	0	0
Type of family	Nuclear	41	82
	Joint	7	14
	Extended	2	4
Educational status	Undergraduate	36	72
	Postgraduate and above	14	28
	Less than Rs. 20000	4	8
	Rs. 20001-30000	8	16

Family monthly income	Rs. 30001-40000	31	62
	Rs. 40001 or above	7	14
Experience as teacher	Less than one year	9	18
	1-5 years	14	28
	6-10 years	17	34
	More than 10 years	10	20
Previous experience of handling MR	Yes	10	20
	No	40	80
Source of information	Mass media	11	22
	health Personnel	29	58
	Friends and relatives	8	16
	Nil	2	4

Table-1 shows that among 50 primary school teachers, 19(38%) of them were between 25-35 years of age group, 16(32%) of them were between 46-55 years of age, 13(26%) of them were between 36-45 years of age and rest of them 2(4%) were above 56 years of age.

According to the gender of primary school teachers, majority of them 38(76%) were females and rest of them 12(24%) were males.

With regard to the religion, 29(58%) of primary school teachers were Hindus, 13(26%) of them Christians and 8(16%) of them were Muslims.

In concern to type of family, among 50 primary school teachers, majority 41(82%) of them belonged to nuclear family, 7(14%) of them belonged to joint family and rest 2(4%) of them belonged to extended family.

It was recorded that, in educational status, of primary school teachers, 36(72%) of them were undergraduate and remaining 14(28%) of them were postgraduates.

It was observed that, family monthly income of primary school teachers, 31(62%) of them had Rs. 30001-40000/- family monthly income, 8(16%) of them had Rs. 20001-30000/- monthly income, 7(14%) of them had Rs. 40001 or above family monthly income and 4(8) of them had Less than Rs. 20000/- family monthly income.

The distribution of primary school teachers according to the experience as teacher, 17(34%) of them had 6-10 years of experience, 14(28%) of them had 1-5 years of experience, 10(20%) of them had More than 10 years of experience and 9(18%) of them had Less than one year of experience.

With regard to the previous experience of handling MR of primary school teachers, 40(80%) of them had no previous experience in handling MR children and remaining 10(20%) of them had previous experience in handling MR children.

The socio demographic history of source of information shows that among 50 primary school teachers, 29(58%) of them got information from health personals, 8(16%) of them accessed information from friends and relatives, 11(22%) of them got information from mass media and 2(4%) them did not get any information regarding identification and management of mental retardation

Part-II (A)

Overall and aspects wise knowledge scores on identification and management of mental retardation among primary school teachers

Table-2: Classification of pre-test knowledge scores on identification and management of mental retardation among primary school teachers.

N=50

Level of Knowledge	Score	No of Respondents (%)	
		No	%
Inadequate	< 50%	41	82.0
Moderate	51--80%	9	18.0
Adequate	>81%	0	0.0
Total		50	100

The above table shows the classification of primary school teachers on pre-test level of knowledge on identification and management of mental retardation. Among 50 primary school teachers, majority 41(82%) of them had inadequate level of knowledge and 9(18%) of them had moderate level of knowledge and none of them had adequate level of knowledge regarding identification and management of mental retardation.

Table-3: aspect wise mean pre-test knowledge scores of primary school teachers on identification and management of mental retardation.

N=50

Aspects wise knowledge	Max Statement	Max Score	Range	Mean	SD
General aspects of mental Retardation	14	14	3-9	7.43	3.17
Psychiatric emergencies in Children	26	26	5-15	10.76	2.79
Overall	40	40	8-24	18.19	2.41

The above table shows, aspect wise mean pre-test mean knowledge scores of primary school teachers on identification and management of mental retardation. In general aspects of mental retardation the mean knowledge score was 7.43 ± 3.17 . In the area of knowledge on identification and management of mental retardation, the mean knowledge score was 10.76 ± 2.79 . The total mean score in pre-test was 18.19 ± 2.41 .

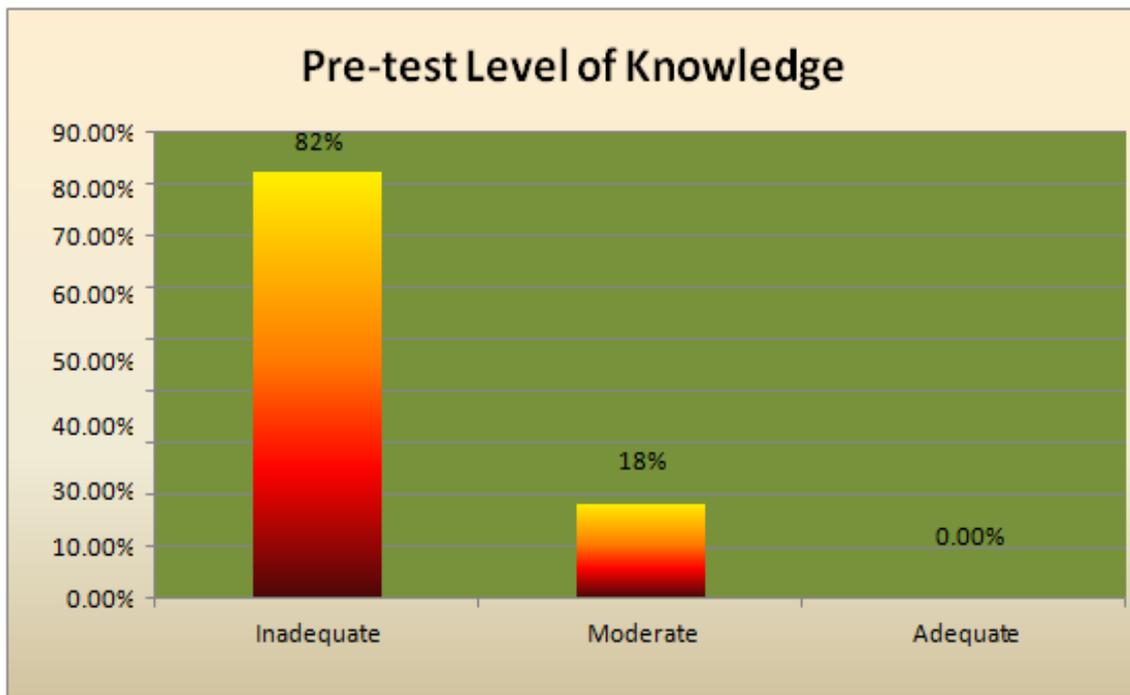
**Figure-: Classification of samples on pre-test level of knowledge**

Table-4: Classification of post-test level of knowledge on identification and management of mental retardation among primary school teachers. N=50

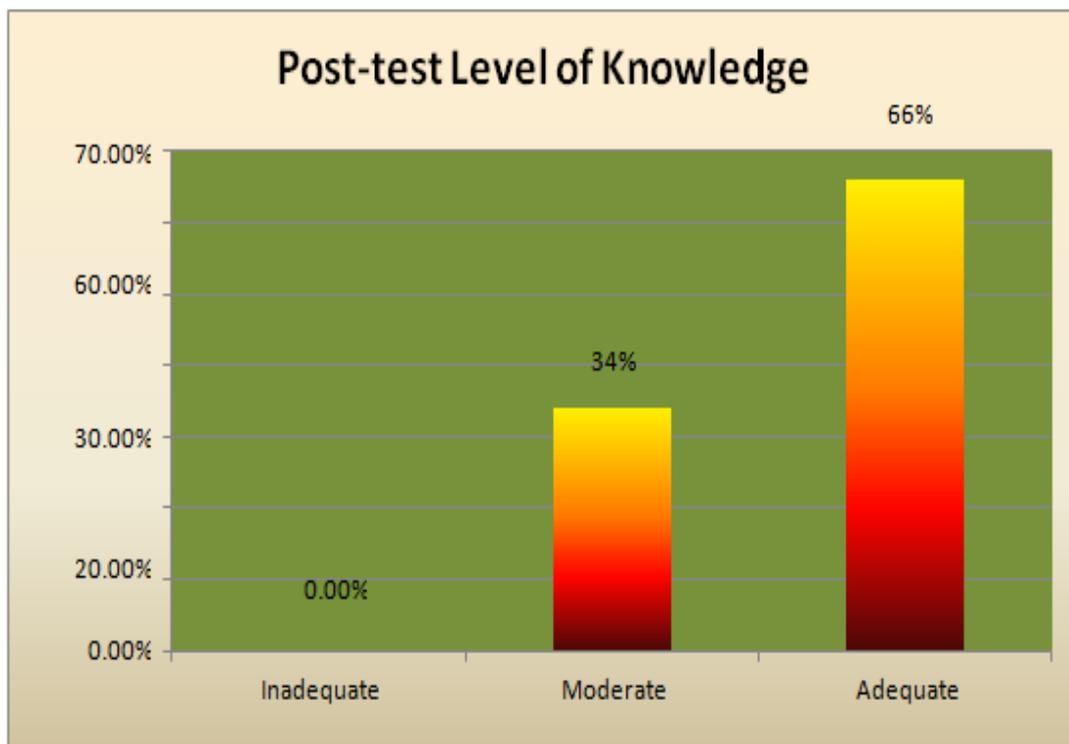
Level of Knowledge	Score	No of Respondents (%)	
		No	%
Inadequate	< 50%	0	0.00
Moderate	51--80%	17	34.0
Adequate	>81%	33	66.0
Total		50	100

The above Table-4 shows the classification of post-test level of knowledge on identification and management of mental retardation among primary school teachers. Among 50 primary school teachers, 33(66%) of them had adequate level of knowledge and 17(34%) of them had moderate level of knowledge and none of them had adequate knowledge regarding identification and management of mental retardation.

Table-5: aspect wise mean post-test knowledge scores of primary school teachers on identification and management of mental retardation. N=50

Aspects wise knowledge	Max Statement	Max Score	Range	Mean	SD
General information about mental retardation	14	14	8-13	11.61	1.75
Psychiatric emergencies in Children	26	26	11-24	20.89	2.13
Overall	40	40	19-37	32.5	1.83

The table-5 shows aspect wise mean post-test knowledge scores of primary school teachers on identification and management of mental retardation. In general information of mental retardation the mean knowledge score was 11.61 ± 1.75 . In the area of knowledge on identification and management of mental retardation, the mean knowledge score was 20.89 ± 2.13 . The total mean score in pre-test was 32.5 ± 1.83 .

**Figure-: Classification of samples on post-test level of knowledge**

Part-II (B)

Comparison of mean pre-test and post-test knowledge scores to evaluate the effectiveness of structure teaching programme.

Table-6: overall mean pre-test and post-test knowledge on identification and management of mental retardation among primary school teachers.

n=50

Aspect	Maximum Score	Knowledge of Respondents		Paired 't' test
		Mean	SD	
Pre-test	40	18.19	2.41	13.42*
Post-test	40	32.5	1.83	
Enhancement	40	14.31	0.58	

**Significant at $P < 0.01$ level, $df=49$, table-value 2.7

Table-6 depicts the difference of pre-test and post-test knowledge scores of primary school teachers regarding identification and management of mental retardation. In pre-test, the mean score was 18.19 ± 2.41 whereas the mean post-test score was 32.5 ± 1.83 . The obtained 't' value was 13.42, which was higher than the table value 2.7 so it is highly significant at $P \leq 0.05$ level.

Inference The above table shows that, the mean post-test knowledge scores were significantly higher than the mean pre-test knowledge scores at $P \leq 0.05$ level of significance. Hence the research hypothesis H_1 is accepted.

Table-7: Aspect wise mean pre-test and post-test knowledge scores on identification and management of mental retardation among primary school teachers.

N=50

Sl: No:	Aspect wise knowledge	Knowledge of respondents				Paired 't' test
		Pre-test		Post-test		
		Mean	SD	Mean	SD	
I	General information about mental retardation	7.43	3.17	11.61	1.75	8.9*
II	Psychiatric emergencies in children	10.76	2.79	20.89	2.13	11.27*
	Overall	18.19	2.41	32.5	1.83	17.43**

**Significant at $P < 0.05$ level, $df=49$, table-value 2.7

The above table-7 shows that, the aspect wise mean pre-test and post-test knowledge scores on identification and management of mental retardation among primary school teachers. Regarding knowledge on general information of mental retardation the mean scores in pre-test and post test were 7.43 ± 3.17 and 11.61 ± 1.75 respectively, obtained 't' value was 8.9. In area of identification and management of mental retardation mean scores in pre-test was 10.76 ± 2.79 , in post-test mean score was 20.89 ± 2.13 and obtained 't' value was 11.27. The overall 't' value was 17.43 which was above the table value 2.7 at $P \leq 0.05$ level of significance.

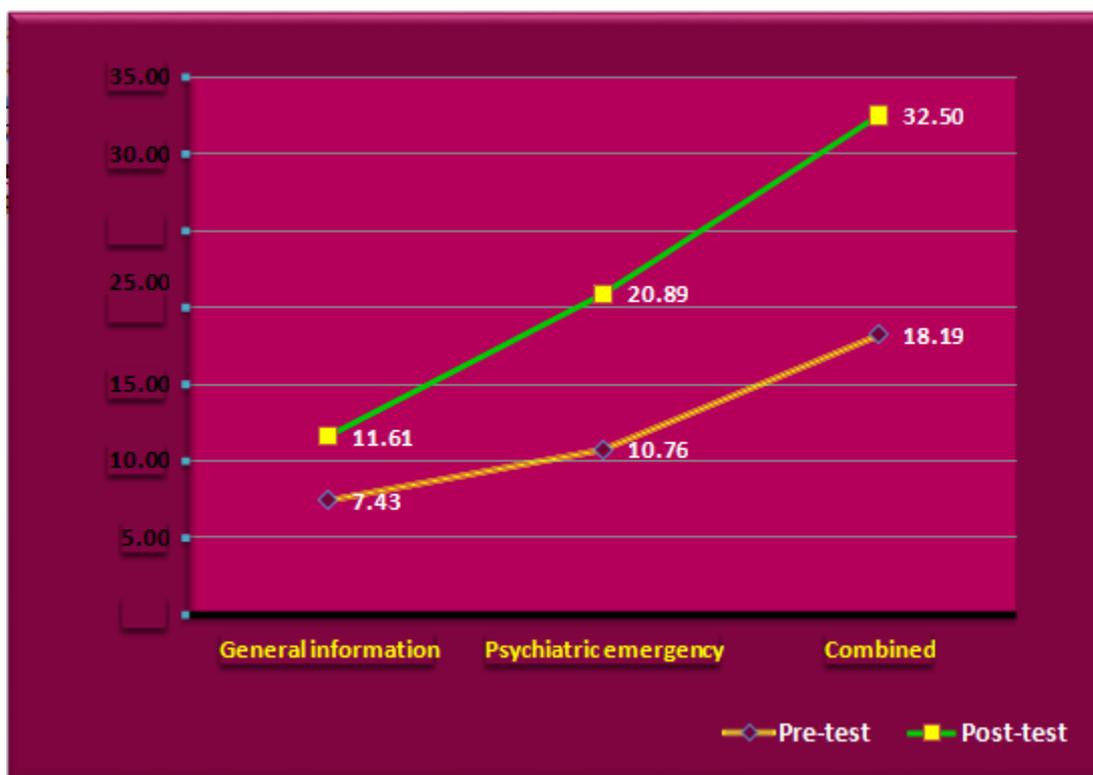


Figure-: Aspect wise mean pre-test and post-test knowledge scores on identification and management of mental retardation among primary school teachers

Summary

Mental retardation (MR) is a generalized disorder appearing before adulthood, A family may suspect mental retardation if the child's motor skills, language skills, and self-help skills do not seem to be developing, or are developing at a far slower rate than the child's peers. Aggressive behavior, self injurious behavior, seizures obsessive compulsive behavior are some of the complications of this condition. Complications vary depending on the degree of impairment. Emergency department receives numerous cases with such conditions which are generally known as psychiatric emergencies, but in India, very less work has been done regarding teaching of primary school teachers towards management of mentally retarded children in the family.

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