

# **A Study To Assess The Effectiveness Of Self-Instructional Module (SIM) On Knowledge Regarding Attention Deficit Hyperactivity Disorder (ADHD) In Primary School Children Among Primary School Teachers In Selected Primary School At Udaipur, Rajasthan**

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## **ABSTRACT**

*A Quasi experimental study to assess effectiveness of self-instructional module (SIM) on knowledge regarding attention deficit hyperactivity disorder (ADHD) in primary school children among primary school teachers. The sample consisting of 120 primary school teachers was selected by using purposive sampling technique. The tool comprised of structured self-administered questionnaire. The pretest was conducted and the self instructional module was administered. The post test was conducted after one week. The data obtained were analyzed by using descriptive and inferential statistics. The mean score of post-test knowledge 26.38 (87.93%) was apparently higher than the mean score of pre-test knowledge 10.09 (33.63%), suggesting that the self instructional module was effective in increasing the knowledge of the Primary School Teachers regarding ADHD. The mean difference 15.48 between pre-test and post-test knowledge score of the Primary School Teachers was found to be significant.*

**Key words:** *Attention Deficit Hyper Activity, Primary School Teachers, One Group Pretest Post-test Quasi Experimental Study.*

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## **INTRODUCTION**

Children are our most valuable resource because every child we encounter is a divine appointment. They are the hands by which we take hold of heaven, and they are the best hope for the future. Whatever they grow up to be they are still children and the one most important of all things we can give to them is unconditional love [1].

Attention Deficit Hyperactivity Disorder (ADHD) is otherwise called as minimal brain dysfunction syndrome or Strauss

syndrome. It is a childhood behavior onset before age 7 year. Estimates of ADHD children and adolescentary from 1.7 percent to 17.8 percent; however, most estimates lie between 5 to 10 percent. A recent study considered data from scientific studies around the world and estimated that the global prevalence of ADHD is 5.3 percent [2]. Boys are significantly more likely to be diagnosed with ADHD than girls—at least 4 out of every 5 cases are diagnosed in boys. The incidence in different communities is thought to vary, although the variation in

the reported incidence (*i.e.* from 1.7 percentages to 17.8 percent) is also because different methods are used to diagnose ADHD. Babies who are born prematurely or weigh too little at birth, are at triple the risk of developing ADHD as compared to babies who are born after a gestation period of 39 to 41 weeks and are healthy at birth. In 2015, it was estimated that 4-5 million individuals, mainly children were diagnosed with ADHD of who, 75 percent –85percent were treated with psycho stimulants [3].

ADHD is one of the most frequently occurring psychiatric disorders in children. ADHD is characterized by symptoms such as impulsivity, hyper activity and or inattention. While these symptoms are experienced by all people from time to time, they are severe and persistent in those with ADHD, and interfere with an individual's normal functioning. Individuals who suffer from ADHD often have difficulty functioning in social, academic and occupational environments. Caring for children with the condition can be disruptive to family life and often causes considerable stress for parents, siblings and others who live with children who have ADHD [4].

ADHD is a condition that becomes apparent in some children in the preschool years. If parents, teachers, and other professionals discover a child's disability early and provide the right kind of help, it can give the child a chance to develop skills needed to lead a successful and productive life. It begins from birth or first diagnosis. It involves specialized therapy services for the child, as well as support for the whole family through information, assistance, and emotional support. Early childhood intervention has several goals. Firstly, it is provided to support families to support their children's development. Secondly, it is to promote children's

development in key areas such as learning, communication, or mobility. Thirdly, it is to promote children's confidence to cope with the condition, and finally it is to prevent the development of greater future problems [5].

A teacher can help the child cope with these deficits and meet the challenges school creates. She can provide the most effective support: equipping the child with learning strategies for the classroom and communicating with parents about how the child learns best. With support at home and teaching strategies at work in the classroom, there is no reason why kids with ADHD can't flourish in school [5].

Activities for preschooler need to be provided constantly to keep the child occupied and out of trouble. As the child enters to school academic performance become a major issue because there is an inability to focus on topics or to attend the tasks at the hand. Academic performance declines and other problems such as reading delays or language disabilities develop. As the peers continue to achieve academically, the child with ADHD increasingly falls behind and a low self image emerges. Without interventions continuous academic failures increase the risk for school dropout and antisocial behavior. As it is very important to find out the disorder as early as possible, teachers should be able to identify children with ADHD [6].

#### **OBJECTIVES OF THE STUDY**

- 1) To assess the knowledge level of primary school teachers regarding Attention deficit hyperactivity disorder (ADHD).
- 2) To find out the effectiveness of self-instructional module (SIM) among primary school teachers regarding Attention deficit hyperactivity disorder (ADHD).

3) To find out the association between knowledge of primary school teachers regarding Attention deficit hyperactivity disorder (ADHD) with selected socio-demographic variables.

**HYPOTHESIS**

**H<sub>1</sub>:** There is a significant difference between pre test and post test knowledge score among primary school teachers regarding ADHD.

**H<sub>2</sub>:** There is a significant association between knowledge of primary school teachers regarding ADHD and selected socio-demographic variables.

**MATERIALS AND METHODS**

**Population:** Primary School Teachers.

**Sample:** Primary School Teachers working in selected Primary schools at Udaipur

**Sample Size:** 120 Primary School Teachers.

**Setting:** Gurunanak Public School, T.N.Residential School, Paul Henny Children School and Gyan Shikhar Public School, Udaipur, Rajasthan, India.

The conceptual framework for the study was developed on the bases of Widen berg model Theory.

**RESEARCH DESIGN**

The research design selected for the present study was a one group Pre-Test Post-Test Research Design.

**Table 1: Quasi Experimental One Group Pre and Post-Test Research Design**

<b>PRE-TEST (Dependent variable)</b>	<b>TREATMENT (Independent variable)</b>	<b>POST-TEST (Dependent variable)</b>
<b>O1</b>	<b>X</b>	<b>O2</b>
Knowledge of Primary School Teachers	Self Instructional Module on ADHD	Knowledge of Primary School Teachers

The interpretations of the symbol are as below:

O1 - Administration of pre-test knowledge questionnaire

O2- Administration of post-test knowledge questionnaire

X - Intervention, treatment (independent variable) i.e. Self Instructional module.

**ETHICAL CONSIDERATION**

After obtaining permission from research committee of Geetanjali College of Nursing, prior permission was obtained from Gurunanak Public School, T.N. Residential School, Paul Henny Children School and Gyan Shikhar Public School, Udaipur and consent was taken from each respondent who had participated in the study [5].

**DESCRIPTION OF THE TOOL**

The structured knowledge questionnaire consisted of two parts *i.e.* Part – I and II.

**Part-I:** consisted of 5 items on socio-demographic data such as Age in years, Gender, Educational status, Teaching experience and Source of information.

**Part-II:** consisted of 30 knowledge items. Each item was multiple choices in nature with 4 choices.

**SCORING**

The knowledge of Primary school teachers regarding the outcomes of ADHD was scored as follows, one mark for each correct answer and zero marks for incorrect answer. The maximum score was 30, to interpret level of knowledge the score was distributed as follows;

Interpretation of knowledge:

Level	Range
Inadequate Knowledge	<50 %
Moderate Knowledge	51-75 %
Adequate Knowledge	>75 %

An answer key was prepared for scoring answer to the structured knowledge questionnaire.

**DATA COLLECTION AND DATA ANALYSIS**

**RESULTS**

**Table 2: Frequency and Percentage Distribution of Respondents to Their Level of Knowledge Score (N=120)**

Level of Knowledge	Score	Respondents			
		Pre test		Post test	
		Frequency	Percent	Frequency	Percent
a) Inadequate knowledge	<50 %	120	100	0	0.0
b) Moderate knowledge	51-75 %	0	0.0	8	6.7
c) Adequate knowledge	>75 %	0	0.0	112	93.3
<b>Total</b>		<b>120</b>	<b>100</b>	<b>120</b>	<b>100</b>

Table 2 shows The result showed that, in pre-test 100% of the respondents had inadequate knowledge and in post-test 93.3% of the respondents had adequate knowledge and 6.7% of the respondents

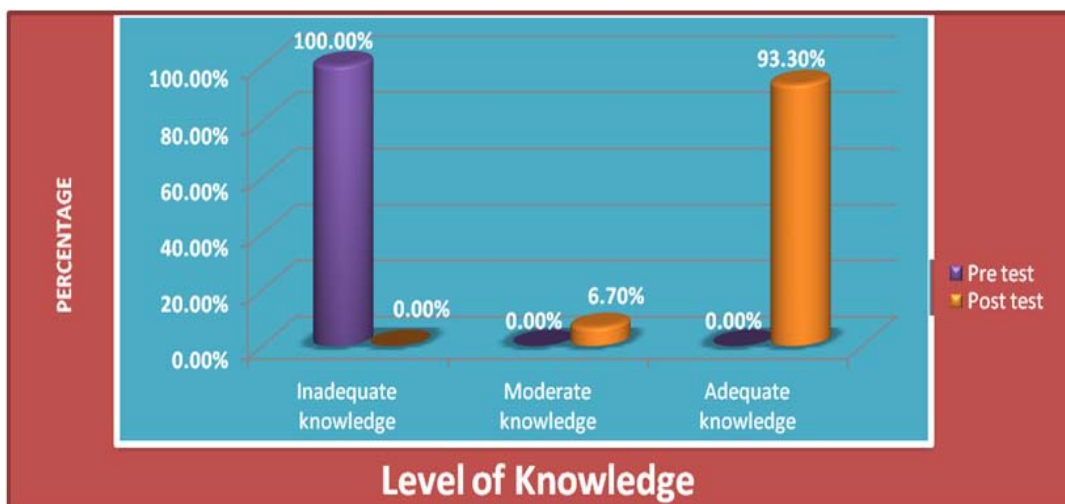
The data was presented under the following sections

**Section-I:** Description of socio-demographic variables of the respondents.

**Section-II:** Distribution of Respondents according pre-test and post-test level of knowledge score.

**Section-III:** Effectiveness of Self instructional module on knowledge of Primary school teachers on Attention deficit hyperactive disorder.

had moderate adequate knowledge regarding Attention deficit hyper active and none of the respondents had an inadequate knowledge.



*Fig. 1: Frequency and Percentage Distribution of Respondents to Their Level of Knowledge Score.*

**Section-III: Effectiveness of Self Instructional Module on Knowledge of Primary School Teachers on Attention Deficit Hyperactive Disorder.**

The “Z” value was computed to determine the effectiveness of self instructional module on knowledge of Primary school teachers on Attention deficit hyperactive disorder.

The following research hypothesis was stated:

**H<sub>1</sub>:** There is a significant difference between pre test and post test knowledge score among primary school teachers regarding ADHD.

**H<sub>2</sub>:** There is a significant association between knowledge of primary school teachers regarding ADHD and selected socio-demographic variables.

**Table 3: Area Wise Pre-Test and Post-Test Knowledge Score (N= 120)**

Domains	Max score	Pre test			Post test		
		mean	Mean %	SD	mean	Mean %	SD
1) Introduction and Definition of Behavioral Disorder	2	0.61	30.5	0.665	1.95	97.5	0.219
2) Causes of behavior disorder	3	1.07	35.66	0.941	2.95	98.33	0.254
3) Definition and meaning of ADHD	3	1.07	35.66	0.867	2.95	98.33	0.254
4) Causes, Sign, Symptoms of ADHD	9	3.18	35.33	1.449	7.94	88.22	1.19
5) Incidence and types of ADHD	1	0.39	39	0.49	0.92	92	0.264
6) Diagnosis and Management of ADHD	4	1.39	34.75	0.955	3.4	85	0.911
7) Prevention of ADHD	8	2.38	29.75	1.078	6.26	78.25	1.081

Table 3 shows the result showed that the mean, mean percentage and standard deviation of pre-test and post-test knowledge score on different areas of Attention deficit hyperactive.

Area wise analysis reveals that in the pretest score the maximum mean percent obtained by the respondents is 39 percent with SD of 0.49 in the aspect of incidence and types of ADHD. The minimum mean percent obtained by the respondents is 29.75 with SD of 1.07 in the aspect of

prevention of ADHD. The mean percentage of overall knowledge obtained by the respondents is 33.63 Percent with SD of 2.36. in post test knowledge score maximum mean percent obtained by the respondents is 98.3 percent with SD of 0.25 in the aspect causes, definition & meaning of ADHD. The minimum mean percent obtained by the respondents is 78.25 with SD of 1.08 in the aspect of prevention of ADHD. The mean percentage of overall knowledge obtained by the respondents is 87.9 Percent with SD

of 1.7. Therefore, the results confirmed that the self instructional module was highly effective in improving the

knowledge of primary school teachers regarding ADHD.

**Table 4: Effectiveness of Self Instructional Module on Knowledge of Primary School Teachers Regarding ADHD (N=120)**

	Mean	Mean%	SD	Enhancement	Enhancement %	Df	Z value	Inference
<b>Pre test</b>	10.09	33.63	2.36	15.48	54.30	119	60.37	<b>S</b>
<b>Post test</b>	26.38	87.93	1.77					

Table 4 shows the result showed that the mean post-test knowledge score (26.38) was higher than the mean pre-test score (10.09). The mean difference pre-test score (15.48) of knowledge was significant at 0.05 % level at the “Z” = 60.37 \*P<0.05. Hence research hypothesis H1 was accepted. This indicates that the Self-instructional module was effective in increasing the knowledge of primary school teachers regarding ADHD.

**Section IV: Association between pre test knowledge scores of respondents with selected demographic variable.**

There is a significant association between knowledge of primary school teacher and Out of which age in years ( $\chi^2 = 5.06^*$ ) found to be significantly associated with pre test knowledge at 0.05% level and the rest of the demographic variables such as gender ( $\chi^2=0.40$ ), education ( $\chi^2=2.73$ ), teaching experience ( $\chi^2=3.69$ ) & source of information ( $\chi^2 = 1.04$ ) is not significant. Hence research hypotheses H<sub>2</sub> was accepted.

**CONCLUSION**

The study aimed at testing the effectiveness of Self instructional module on knowledge of primary school teachers regarding ADHD. The result showed that the Self instructional module was highly effective. The implications of this study emphasize on inclusion of Self

instructional module on knowledge of primary school teachers regarding ADHD.

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