Effectiveness of Structured Teaching Programme on Knowledge and Attitude Regarding Attention Deficit Hyperactivity Disorder in Primary School Students Among Teachers at Selected Primary Schools, Khammam, Telangana, India

G. Rajini and G. Asha Kumari*

Department of Mental Health Nursing, Mamata College of Nursing, Khammam, Telangana, India

Abstract

Objective: A study was undertaken to assess the knowledge and attitude regarding attention deficit hyperactivity disorder in primary school students among teachers at selected primary schools, Khammam. The objectives of the study were to describe the socio demographic variables, to assess the levels of knowledge and attitude regarding attention deficit hyperactivity disorder in primary school students among teachers and to associate the knowledge and attitude scores with their selected socio-demographic variables of teachers.

Methodology: Quantitative evaluative approach was used for this study. The study was conducted at Saint francies desales of high school at Ballepalli, Khammam, Government school at kailondaigudem, Khammam, Government school at ragnunadapalem, Khammam, Telangana. The sample comprised of 50 teachers and sample was selected by non-probability convenience sampling technique. The data was collected by self-administered questionnaire.

Results: The pre-test mean knowledge score is 15.14 and standard deviation (4.88) whereas post-test mean score is 21.36 and standard deviation (4.45) and the mean difference is 6.22 the paired ‘t’ calculated value is 7.05, greater than table value (3.55) at P<0.001 level. There is significant difference between pre-test and post-test knowledge levels as mentioned in hypothesis 1. Hence H1 is accepted. The pre-test attitude mean score is 51.54 and standard deviation (4.71) whereas post-test mean is 58.52 and standard deviation (3.38) and the mean difference is 6.98, the paired ‘t’ calculated value is 8.82 which is greater than table value (3.55) at P<0.001 level. There is significant difference between pre-test and post-test attitude scores as mentioned in hypothesis-1. Hence H1 is accepted.

Conclusion: The study concluded that structured teaching programme was highly effective in enhancing the knowledge and attitude scores of the primary school teachers as per the calculated paired ‘t’ test.

Keywords: Attention Deficit Hyperactivity Disorder; School students; Knowledge; Structured teaching programme; Attitude.

Introduction

It is one of the most common chronic conditions of childhood. It affects 4% to 12% of school aged children. About 3 times more boys than girls are diagnosed with Attention Deficit Hyperactivity Disorder. Children spend most of their time in classrooms and other school settings. Here they are expected to follow rules, behave in socially appropriate ways, participate in academic
activities and refrain from disrupting the learning process or activities of others [1]. Teachers do not only have to teach the skills and knowledge that form part of the curriculum, but they also have to teach them to behave in a manner that meets organizational, cultural and social expectations. However, the work of the teacher becomes much more demanding when there are learners in the classroom that have Attention Deficit Hyperactivity Disorder (ADHD). Their problems with attention span, impulse control and activity level frequently interfere with both classroom and social activities [1].

Attention Deficit Hyperactivity Disorder (ADHD) is a medical condition characterized by difficulties within attention, hyperactivity and impulsivity. Attention Deficit Hyperactivity Disorder can have a profound effect on a person’s quality of life. Children and adolescents with the disorder often have difficulty with socialization, school performance and behavior. Attention Deficit Hyperactivity Disorder was first described by Dr. Hoffman in 1845. A physician who wrote books on medicine and psychiatry [2].

**Need for the Study**

Attention Deficit Hyperactivity Disorder, is a behavioral disorder in children is characterized by inability to focus or pay attention due to hyperactivity over a longer duration of time. This impairs the child academically as well as his /her social adaptability. Genetics and numerous environmental factors are considered as the most probable cause of the disorder. Attention Deficit Hyperactivity Disorder (ADHD) is the phase that is used to describe children who have significant problems with high levels of distractibility or inattention, impulsiveness and often with excessive motor activity levels. Attention deficit hyperactivity disorder is one of the most commonly diagnosed psychiatric childhood disorder and international studies revealed that it affects nearly 8% in US children aged 4 to 7 years [2].

In India it affects nearly about 3% of school age children. Boys are 6 to 8 times more often affected. The onset occurs before the age of 7 years and a large majority of children’s exhibit symptoms by the four years of age. Teachers play a major role in the identification and assessment of children’s academic and behavioral problems and make primary decision to help them. Teachers find aggressive behavior to be a more serious nature than with drawn behavior and that is why children with emotional disturbances are often ignored at schools [3].

Every year, 17 million new cases of Attention Deficit Hyperactive Disorder is diagnosed in children globally. In United States the incidence in school-age children is estimated to be 3-7%. In Great Britain, incidence is reported to be less than 1%. The differences between the US and British reported frequencies may be cultural (“environmental expectations”) and due to the heterogeneity of Attention Deficit Hyperactivity Disorder. However, other studies suggest that the worldwide prevalence of ADHD is between 8% and 12% [3].

In India, while there are no reliable figures available, the number of ADHD cases are said to be mounting. There is very little awareness in India about ADHD, and there is an acute need for information about the condition and the services available not only for the parents of those children affected with ADHD, but even to mainstream school teachers [3].

In the United States the number of children with the diagnosis increased from 12 per 1000 in the 1970s to 34 per 1000 in the late 1990s, to 95 per 1,000 in 2007, and 110 per 1,000 in 2011, it is believed that the changes to the diagnostic criteria in 2013 from the DSM IV TR to the DSM 5 will increase the number of people with ADHD especially among adults [4].

Based on the review of literature and the observation made by the investigator the school teachers have low knowledge regarding Attention Deficit Hyperactivity Disorder. So the investigator felt the need to conduct this study to determine the knowledge and attitude of teachers in primary schools, and enhance knowledge and attitude levels of teachers to help an identifying children with ADHD and guide parents in taking care of the children and researcher distributed information booklet regarding Attention Deficit Hyperactivity Disorder which will be useful to screen the children with Attention Deficit Hyperactivity Disorder and to refer to higher centers for early diagnosis and treatment.

**Methodology**

Quantitative evaluative approach was used with Pre experimental research design (one group Pre-test post-test design). The study was conducted at Saint francies desales of high school at Ballepalli, Khammam, Government school at kaikondaigudem, Khammam, Government school at raghanadapalem ,Khammam, Telangana. The sample comprised of 50 teachers and sample was selected by non-probability convenience sampling technique. The data was collected by self-administered questionnaire and tool used for data collection was structured questionnaire. Independent
variable was Structured teaching programme on Attention Deficit Hyperactivity disorder, variables Dependent variables are knowledge, attitude and selected socio-demographic variables are base line information of teachers such as age, gender, religion, place of residence, educational qualification, Modified Kuppu Swami socio-economic scale and source of information regarding Attention Deficit Hyperactivity Disorder. Split half method was used to find out the reliability of the tool. The research is organized into 3 sections (Section-A socio-demographic data, Section-B questions on knowledge, Section-C attitude rating scale).

Figure 1: Distribution of pre-test and post-test levels of knowledge among primary school teachers regarding attention deficit hyperactivity disorder (n = 50).

Results

The data do not provide the answers to research questions. Ordinarily the amount of data collected in a study by mere perusal.

The above figure shows the distribution of pre-test and post-test levels of knowledge among 50 sample regarding attention deficit hyperactivity disorder, Majority of them 30(60%) had moderately adequate knowledge, 15(30%) had adequate knowledge and 05(10%) had inadequate knowledge. And about post-test knowledge levels of among 50 sample regarding attention deficit hyperactivity disorder, Majority of them 37(74%) had adequate knowledge, 13(26%) had moderately adequate knowledge and none of them had inadequate knowledge [5-10].

Figure 2: Distribution of pre-test and post-test attitude scores of samples regarding attention deficit hyperactivity disorder (n = 50).
The above figure shows that distribution of pre-test and post-test attitude scores of 50 sample regarding attention deficit hyperactivity disorder. Majority of them 44(88%) had favorable attitude, 06 (12%) had moderately favorable attitude and none of them had unfavorable. And about post-test attitude scores of 50 sample regarding attention deficit hyperactivity disorder. Majority of them 50 (100%) had favorable attitude, none of them had moderately favorable attitude, and none of them had unfavorable attitude [11-15].

**The effectiveness of structured teaching programme on knowledge levels and attitude scores**

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Mean difference</th>
<th>‘t’ calculated value</th>
<th>‘t’ Table value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre – test</td>
<td>15.14</td>
<td>4.88</td>
<td></td>
<td>6.22</td>
<td>7.05</td>
<td>S**</td>
</tr>
<tr>
<td>Post – test</td>
<td>21.36</td>
<td>4.45</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It proves that there is a significant difference between pre-test and post-test knowledge levels. It indicates that structured teaching programme was very effective [16-18].

<table>
<thead>
<tr>
<th>Attitude</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Mean difference</th>
<th>‘t’ calculated value</th>
<th>‘t’ Table value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre – test</td>
<td>51.54</td>
<td>4.71</td>
<td></td>
<td>6.98</td>
<td>8.82</td>
<td>S**</td>
</tr>
<tr>
<td>Post – test</td>
<td>58.52</td>
<td>3.38</td>
<td></td>
<td></td>
<td>3.55</td>
<td></td>
</tr>
</tbody>
</table>

It proves that there is a significant difference between pre-test and post-test attitude scores. It indicates that structured teaching programme was very effective.

**Discussion**

A Study to assess the knowledge and attitude regarding Attention Deficit Hyperactivity Disorder among Primary school teachers at selected schools, Khammam, Telangana. In order to achieve the objectives of the study. The data was collected from 50 Sample at schools in Khammam by Questionnaire technique. The findings have been discussed with reference to the objectives.

**Objective 1:** To describe the socio demographic variables of primary school teachers.

Regarding distribution of knowledge levels of primary school teachers according to age among 50, majority of them 16(32%) belong the age group between 31-35 years. According to Gender among 50, 32(64%) were females and 18(36%) were males. Regarding religion among 50, majority of them 24(48%). according to experience in teaching among 50, majority of them 35(70%) were above 4 years, 12(24%) were 2.1-4 years, and 03(06%) were 0-2 years. According to place of residence among 50, majority of them 34(68%) from urban area. About distribution of primary school teachers according to source of information on Attention Deficit Hyperactivity Disorder among 50, majority of them 26 (52%) were getting information...
from family members, friends, and relatives. Regarding distribution of primary school teachers according to modified kuppuswami socio-economic scale, among 50 majority of them 35(70%) belong to upper middle (II), 09 (18%) belong to Upper (I), 06(12%) belong to middle/lower middle (III), none of them belong to Lower (v), none of them belong to lower / upper lower (IV).

Objective 2: To assess the pre-test levels of knowledge and attitude regarding Attention Deficit Hyperactivity Disorder among Primary school teachers among 50, Majority of them 30(60%) had moderately adequate knowledge, 15(30%) had adequate knowledge and 05(10%) had Inadequate knowledge. Majority of them 44 (88%) had favorable attitude, 06(12%) had moderately favorable attitude and none of them had unfavorable attitude.

Objective 3: To assess the effectiveness of structured teaching programme on knowledge and attitude regarding attention deficit hyperactivity disorder in students among teachers.

The pre-test mean knowledge score is 15.14 and standard deviation (4.88) whereas post-test mean score is 21.36 and standard deviation (4.45) and the mean difference is 6.22 the paired 't' calculated value is 7.05, greater than table value (3.55) at P<0.001 level.

The pre-test attitude mean score is 51.54 and standard deviation (4.71) whereas post-test mean is 58.52 and standard deviation (3.38) and the mean difference is 6.98, the paired 't' calculated value is 8.82 which is greater than table value (3.55) at P<0.001 level.

Objective 4: To find out the association between post-test knowledge and attitude scores and selected socio demographic variables. There is a significant association between post-test knowledge scores with their selected socio-demographic variable. The chi square is not applicable as the expected value are less than at P <0.05 level.

Recommendations

• A similar study can be conducted by using comparative descriptive design in urban and rural areas.
• A similar study can be conducted by using Quasi-experimental design.
• A similar study can be conducted on a large sample for wider generalizations.
• A similar study can be conducted by using true-experimental design.

• A similar study can be conducted at different settings in schools.

References


This manuscript was peer-reviewed
Issue Editor: Dr. M.A. Jahangir

Copyright: ©2021 Rajini and Kumari. This article is distributed under the terms of the Creative Commons Attribution 4.0 International License [http://creativecommons.org/licenses/by/4.0/], which permits unrestricted use, distribution, and reproduction in any medium, provided you give appropriate credit to the original author[s] and the source, provide a link to the Creative Commons license, and indicate if changes were made.