Assess the Knowledge and Attitude of School Teachers Regarding Attention Deficit Hyperactivity Disorder in Selected School at Gwalior (M.P)

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Abstract: Parenting is something that no-one person is an expert and that no expert can tell you how to do it. If a person’s child is an absolute angel, does nothing wrong, and gets straight A’s, parenting still is difficult. When a child has a disorder such as ADHD (Attention deficit hyperactive disorder), the child needs much more from the parent than most parents bargain for. Parenting roles for a child with ADHD change greatly. ADHD is a common childhood disorder affecting approximately 5% of primary school-going children. The disorder is characterised by severe difficulties in one or more of three areas; inattention, impulsivity, and hyperactivity. Considering that, school teachers are often the first to notice behavioural difficulties in children, it is surprising that relatively little research has been undertaken with teachers. Based on objectives of the study, knowledge questionnaire consists of 30 items and attitude questionnaire tool consists of 15 items on attention deficit hyperactivity disorder were prepared. Non experimental descriptive research approach & Convenient sampling technique was used. Results: out of 60 school teachers who were teaching in schools (1st standard to 5th standard) in a selected school knowledge and attitude relation was assessed by various statistical test and the association between the knowledge and attitude scores with selected demographic variables was computed by using χ² statistics. The result showed that there is positive relation of knowledge and attitude scores on ADHD.

Keywords: Assess, Knowledge, Attitude, Attention Deficit Hyperactivity Disorder (ADHD) & School teachers

1. Introduction

Mental health doesn’t mean the absence of distress and suffering, or strict societal conformity. Mental health and illness, beliefs and delusions, sadness and depression worry and severe anxiety lie on a continuum. An essential criteria for defining behavioural patterns or symptoms of psychological distress as a mental disorder is that they become significant enough to be functionally disabling and impose substantial increased risks ranging from an important loss of freedom to suffering pain, disability or health.

Mental health which today is recognized as an important aspect of one’s total health status is a basic factor that contributes to the maintenances of physical health as well as social effectiveness. Six days-a-week children spend most of their time in classroom and other school settings. Here they are expected to follow rules, behave in socially appropriate ways, participate in academic activities, and not disrupt the learning process or activities of others. The work of the teacher becomes much more demanding when some learners have ADHD. ADHD influences millions of children around the world. Approximately three to five percent of elementary school children have been diagnosed with this disorder.

2. Literature Survey

According to Brenda R, Kate W, Helen D. 2001; stated in International journal of nursing studies that Health and fitness – these are the common words today, even as work-related stress and hectic lifestyle take their toll on young population so each individual is responsible for the maintenance of his/her own health. Moreover, each individual has self-care potential in assuming this responsibility. Thus, the personal health approach involves counselling and face-to-face education.

Basavanthappa BT. 2004 stated in his book of Nursing education that Education is one of the most important aspects of human resource development. The inability to successfully navigate the educational system can cause serious problems for children and their parents. There are many reasons for children to underperform at school such as, medical problems, below average intelligence, specific learning disability, attention deficit hyperactivity disorder, emotional problems, poor socio-cultural and home environment, psychiatric disorders and even environmental causes.

Forness SR, Kavale KA. (2001): in journal of Education and Treatment of Children described that Noting the high incidence of (ADHD) in programs for children with emotional disturbances or learning disabilities A child’s academic success is often dependent on his or her ability to attend to tasks, and teacher and classroom expectations with minimal distraction. Such skill enables a student to acquire necessary information, complete assignments, and participate in classroom activities and discussions. When a child exhibits behaviours associated with ADHD, consequences may include difficulties with academics and with forming relationships with his or her peers if appropriate instructional methodologies and interventions are not implemented. evidence that comorbid diagnoses affect outcomes differentially and that psychopharmacologic treatments may be superior to behavioural interventions, depending on this co morbidity. Careful diagnosis, suggesting a return to the "medical model," is urged.

WWW.familydoctors.org. (ADHD) is the name of a group of behaviors found in many children and adults. People who have ADHD have trouble paying attention in school, at home or at work. They may be much more active and/or impulsive than what is usual for their age. These behaviors
contribute to significant problems in relationships, learning and behavior. For this reason, children who have ADHD are sometimes seen as being "difficult" or as having behavior problems.

ADHD is common, affecting 4% to 12% of school-age children. It's more common in boys than in girls. You may be more familiar with the term attention deficit disorder (ADD). This disorder was renamed in 1994 by the American Psychiatric Association (APA).

WWW.Nemoursfoundationkids.org Dr. Richard S. Kingsley says ADHD is a common behavioral disorder that affects an estimated 8% to 10% of school-age children. Boys are about three times more likely than girls to have this disorder characterized by persistent hyperactivity, impulsivity and inattention that impairs educational achievement and social functioning.

Sunil Karande (2005). Learning Disability Clinic, Division of Pediatric Neurology, Department of Pediatrics, Lokmanya Tilak Municipal Medical College and General Hospital, Sion, Mumbai, India said in Indian journal of medical science that Attention deficit hyperactivity disorder (ADHD) is a chronic behavioral disorder characterized by persistent hyperactivity, impulsivity, and inattentiveness that impairs educational achievement and/or social functioning. And the family physician can play an important role in detecting this condition early, coordinating its assessment and treatment, counseling the parents and classroom teacher, and monitoring the child's academic and psychosocial progress on a long-term basis.

Bhatia S.M.S...Ajeet C Sidana (2003) submitted case reports determine the Attention Deficit Hyperactivity Disorder among psychiatric outpatients in India. Three hundred and sixty-two children (aged 3-12 years) attending the outpatient clinic were included in the study. The result showed that 64 (17.7%) were found to have ADHD. The sex distribution of all the children attending clinic was 58% boys and 42% girls (1.4:1) whereas the boy-girl ratio of 3:1 among children with ADHD was significantly different from that in the sex distribution of children in the outpatient clinic.

Arcia E. (2000). conducted A cross-sectional study on teachers’ understanding of ADHD as reflected in attributions and classroom strategies in Miami. Twenty-one elementary school teachers were included in the study. The result indicated that teachers lacked information on the behavioural profiles of ADHD and lacked comprehensive plans of action for classroom management. These findings have substantial implications for teachers and for general classroom functioning as well as for the valid identification of children in need of supportive services and for their treatment.

http://www.nimhans.kar.nic.in An exploratory study was conducted on school teachers’ opinion about mental health problems of children, with 130 teachers from three schools located at Bangalore city, by administering structured questionnaire. The findings of the study revealed that sizable number of respondents consider only self destructive (37.7%), inattentive (20.7%), nervous/overactive (19.45%), and aggressive behaviour (38.44%) as they tended to overlook the other problems. It was also found that the teachers did not have an idea about the requirement of professional help for the management of the problem behaviour, the seriousness of the problems and the ways of tackling the problem behaviour.

3. Problem Definition

A study to assess the knowledge and attitude of school teachers regarding Attention Deficit Hyperactivity Disorder in selected schools at Gwalior (M.P)

4. Objectives of the study

1) To assess the level of knowledge of school teachers regarding Attention Deficit Hyperactivity Disorder.
2) To assess the attitude of school teachers regarding Attention Deficit Hyperactivity Disorder.
3) To identify the relationship between knowledge and attitude of school teachers regarding Attention Deficit Hyperactivity Disorder.
4) To find the association between pre-intervention knowledge about Attention Deficit Hyperactivity Disorder among school teachers with the selected variables.

5. Methods/approach

In this study, quantitative research design was adopted, because of availability & feasibility of the samples. Based on the problem statement & objectives of the study, non-experimental descriptive approach was used for this study. The purpose of descriptive study is to observe & explore the attention deficit hyperactivity disorder exist in the selected school at Gwalior (M.P). Here the investigator identifies, explore & evaluate the attention deficit hyperactivity disorder among school teachers with the help of structured questionnaire related to attention deficit hyperactivity disorder. The population & samples were school teachers of selected school who were fulfilling the inclusive & exclusive criteria & the sample consisted of 60 school teachers who were teaching in schools (1st to 5th standard). The sampling technique used in this study was convenient sampling technique. Tools used for data collection include two sections namely demographic variables & structured questionnaire on the attention deficit hyperactivity disorder among selected school teachers.

6. Result

For the data analysis and interpretation, various methods has been utilised by researcher that are descriptive and inferential statistics were widely used. In that frequency and mean percentage were calculated, total knowledge questionnaire 30 & attitude scale 15 are analysed based on the response of participant regarding attention deficit hyperactivity disorder such as general information, symptoms, diagnosis & treatment. A structured questionnaire is used for data collection. The analysis was done with the help of descriptive & inferential statistics.
The analysis of data is organized and presented under the following headings.

**Section I:** This section will deals with the Frequency & percentage wise distribution of demographic variables on Attention Deficit Hyperactivity Disorder for school teachers in selected schools.

**Section II:** This section will deals with the assessment of knowledge & attitude scores of school teachers on Attention Deficit Hyperactivity Disorder in selected schools.

**Section III:** This section will deals with the association between knowledge scores with selected demographic variables.

**Section IV:** This section will deals with the association between attitude scores with selected demographic variables.

**Section II: Assessment of knowledge and attitude scores**

This section deals with the analysis and interpretation of the data in order to Assess the knowledge and attitude of school teachers towards ADHD children. The data shows that the mean knowledge scores and attitude scores of teachers towards ADHD children in a range of 26.66-7.5294.

**Table 1:** Mean, median, standard deviation and mean% of knowledge scores of teachers, N = 60

<table>
<thead>
<tr>
<th>Area</th>
<th>Mean</th>
<th>Median</th>
<th>Standard Deviation</th>
<th>Mean%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>26.66</td>
<td>26.66</td>
<td>5.860</td>
<td>43.33</td>
</tr>
</tbody>
</table>

Minimum score=0 Maximum score =60

**Table 2:** Mean, median, standard deviation and mean% of attitude scores of teachers, N = 60

<table>
<thead>
<tr>
<th>Area</th>
<th>Mean</th>
<th>Median</th>
<th>Standard Deviation</th>
<th>Mean%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td>39.55</td>
<td>40</td>
<td>7.5294</td>
<td>52.73</td>
</tr>
</tbody>
</table>

Minimum score=5 Maximum score =75

The data in Table 1 shows that the mean knowledge scores (26.66). The data in Table 2 shows that the mean attitude scores (39.55)

**Table 3:** Frequency, cumulative frequency, and frequency percentage of knowledge scores, N = 60

<table>
<thead>
<tr>
<th>Knowledge scores</th>
<th>Frequency</th>
<th>Cumulative Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-19</td>
<td>0</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>15-20</td>
<td>2</td>
<td>2</td>
<td>3.33%</td>
</tr>
<tr>
<td>16-20</td>
<td>7</td>
<td>9</td>
<td>15.00%</td>
</tr>
<tr>
<td>21-25</td>
<td>16</td>
<td>25</td>
<td>41.66%</td>
</tr>
<tr>
<td>26-30</td>
<td>22</td>
<td>47</td>
<td>78.33%</td>
</tr>
<tr>
<td>31-35</td>
<td>9</td>
<td>56</td>
<td>93.33%</td>
</tr>
<tr>
<td>36-40</td>
<td>3</td>
<td>59</td>
<td>98.33%</td>
</tr>
<tr>
<td>41-45</td>
<td>1</td>
<td>60</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Grading attitude scores shows that there are the (71.66%) are in favourable attitude towards the ADHD children’s.

**Table 4:** Frequency, cumulative frequency, and frequency percentage of attitude scores, N = 60

<table>
<thead>
<tr>
<th>Knowledge scores</th>
<th>Frequency</th>
<th>Cumulative Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-20</td>
<td>0</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>21-30</td>
<td>4</td>
<td>4</td>
<td>6.66%</td>
</tr>
<tr>
<td>31-35</td>
<td>4</td>
<td>8</td>
<td>13.33%</td>
</tr>
<tr>
<td>36-40</td>
<td>3</td>
<td>11</td>
<td>18.33%</td>
</tr>
<tr>
<td>41-45</td>
<td>23</td>
<td>34</td>
<td>56.66%</td>
</tr>
<tr>
<td>46-50</td>
<td>14</td>
<td>48</td>
<td>80.00%</td>
</tr>
<tr>
<td>51-55</td>
<td>8</td>
<td>56</td>
<td>93.33%</td>
</tr>
<tr>
<td>56-60</td>
<td>4</td>
<td>60</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

**Table 5:** Grading of knowledge scores, N = 60

<table>
<thead>
<tr>
<th>Level of knowledge</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor (1-20)</td>
<td>09 (15.00%)</td>
</tr>
<tr>
<td>Moderate (21-40)</td>
<td>50 (83.33%)</td>
</tr>
<tr>
<td>Good (41-60)</td>
<td>1 (01.66%)</td>
</tr>
</tbody>
</table>

**Figure 1:** Cone diagram showing the frequency of knowledge score

Table 5 and Figure 1 show that majority of the teachers i.e. fifty teachers had a score above 35% and only one teacher i.e. (1.66%) scored above 40 score that shows maximum comes under range of 21-40 score that shows teachers have moderate knowledge regarding ADHD.

**Table 5:** Grading of attitude scores, N = 60

<table>
<thead>
<tr>
<th>Level of Attitude</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unfavourable (1-37)</td>
<td>17 (28.33%)</td>
</tr>
<tr>
<td>Favourable (38-75)</td>
<td>43 (71.66%)</td>
</tr>
</tbody>
</table>

**Figure 2:** Pie diagram shows unfavourable favourable attitude of teachers towards ADHD Childrens

Area-wise mean knowledge score

Area-wise mean and percentage of mean knowledge score mean was computed as data are presented in Table 10.
Table 7: Area wise mean percentage knowledge score.

<table>
<thead>
<tr>
<th>Areas</th>
<th>Percentage of mean knowledge scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section –A</td>
<td>10.13%</td>
</tr>
<tr>
<td>Section - B</td>
<td>6.266%</td>
</tr>
<tr>
<td>Section –C</td>
<td>10.20%</td>
</tr>
</tbody>
</table>

Figure 3: Cylindrical diagram showing area-wise distribution of mean percentage of knowledge score on attention deficit hyperactivity disorder

The data in Table 7 shows that mean percentage scores was the highest (10.2%) in Section C and least (6.26%) in Section B.

Table 8: Correlation between knowledge and attitude

<table>
<thead>
<tr>
<th>Items</th>
<th>r-value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>0.8489</td>
<td>p&gt;0.005</td>
</tr>
<tr>
<td>Attitude</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 4: shows line diagram of correlation of knowledge and attitude score

The Karl Pearson’s correlation coefficient between knowledge and attitude of school teachers regarding ADHD score was 0.8489 (p>0.254 tabled value). This reveals that there was a significant positive correlation between knowledge and attitude.

7. Discussion

Part I: Knowledge and attitude scores of teachers regarding ADHD

Knowledge scores of nine respondents (15.00%) ranged from 1 to 20 out of the total score of 60. Fifty subjects i.e. (83.33%) scored 21-40, and the remaining one subject scored i.e.(1.66%) between 41-60 The mean score was 26.66 out of 60. This indicates that the subjects have inadequate knowledge on ADHD.

Attitude scores of seventeen respondents i.e. (28.33%) ranged from 1 to 37 out of the total score of 75 and remaining forty three subjects ranged attitude score of 38-75. The mean Attitude score was 39.55 out of 75. This indicates that the subjects have favourable attitude towards ADHD children.

An area-wise mean percentage, for knowledge, was computed. Mean percentage score of the Section A is (42.22%) and in Section B area whereas the mean percentage score (44.00%) and in section C mean percentage score was highest i.e. (46.00%) Further, to know the statistical significance between correlation between knowledge and attitude it was 0.84894 by Pearson’s formula it shows the knowledge and attitude having positive significant correlation.

Part II: Association between knowledge scores with selected variables

The chi square knowledge scores with selected variables showed that there is significant relationship between the level of knowledge scores with selected variables, i.e., age \( \chi^2 = 15.27 \), and teaching experience \( \chi^2 = 8.10 \) at 0.05 level of significance.

Part III: Association between attitude scores with selected variables

The chi square attitude scores with selected variables showed that there is significant relationship between the level of knowledge scores with selected variables, i.e., age \( \chi^2 = 5.08 \), at 0.05 level of significance. The findings of the study revealed a significant relation with selected variable.

8. Conclusion

This chapter deals with the conclusions drawn based on the findings of the study. The conclusions drawn were:

1) Findings showed that teacher’s deficient knowledge regarding ADHD is existed in various degrees among school teachers in all areas of learning. The highest deficit was noted in the area of “symptoms and diagnosis.”

2) Findings showed that teacher’s attitude regarding ADHD is existed in varying degree among school teachers.

3) There was significant relationship between knowledge and attitude of school teachers on ADHD.

4) There was significant association between specific variables like age and teaching experience with knowledge score.

5) There was significant relationship between variables age and attitude score

9. Future Scope

The findings of the study have several implications for nursing practice, nursing education, nursing administration and nursing research.

Nursing practice

Health survey is an important tool of healthcare agency to identify problems in community. It is one of the most cost effective interventions. It is concerned with promoting health. The extended and expanded role of a professional
nurse is an emphasis the preventive and promotive aspects of the health.

Primary prevention is one of the important components of psychiatric nursing. Nurses have a major role in the preventive aspects than the curative aspects.

The existing and expected levels of knowledge and attitude of school teachers indicates that there is urgent need of education regarding ADHD. This will help them to improve their knowledge and attitude, and support the children better. In many ways, schools are an ideal location for the provision of mental health services to children. Most school-based mental health services are delivered by school psychologists, social workers, and nurses.

From the present study, it was found that survey was a very effective method. to find problems in community The investigator as a nurse felt the need that nurses should act as facilitators to educate teachers so that they could be the resource persons as well as help their students to meet the challenges of the transitional age. Therefore, nursing personnel working in the community should be equipped with adequate knowledge and skills to educate teachers individually or in groups on ADHD. Also, nurses should motivate teachers about their role as counsellors in the school and community about handling ADHD. Nurse administrators should provide facilities in terms of personnel, time and health education material to carry out educational programme in the school and community. The teaching programme should be developed in the form of SIM, pamphlets, audio and videotapes.

**Nursing education**

The present healthcare delivery system emphasises more on the preventive rather than the curative aspect. The study also implies that health personnel have to be properly trained on how to find out the problems regarding healthcare. Nursing curriculum should be such that it prepares the prospective nursing students to assist the client and community in the aspects of healthcare. The nursing curriculum should include more content on school going children.

The holistic healthcare approach should be emphasised during the training period of nursing students. Nursing students should be made aware of the importance of educating the public regarding the handling of school going children. The nursing personnel should be given in-service education to upgrade their knowledge and attitude and should also be trained to prepare and conduct STP regarding this topic.

**Nursing administration**

Even though India is a developing country and many of the health issues are being addressed effectively, school going children and their problems are not given due importance. So, the administrative departments of nursing at the institutional, local, state and national levels should focus their attention to educate the public regarding this commonly faced challenge.

Health administration should make the Education Department aware of the school going children’s health problems and should encourage them to include these topics and the techniques to handle the school going children.

They should conduct in-service education for the staff regarding this topic to upgrade the knowledge and attitude and assign them to conduct health teaching in the community. Periodical surveys should be conducted to find out the school going children’s issues.

In collaboration with Education Department, there should be necessary health education materials and administrative support provided to conduct health programmes. Cost effective production of health education should be provided to develop health teaching materials and make them accessible to all staff in the hospital as well as community.

Nursing administration should awaken the people that the public education is a necessity and should provide resources in terms of manpower, money, and materials.

**Nursing research**

The emphasis on research and clinical studies is to improve the quality of nursing care. Nurses need to engage in multidisciplinary research so that it will help to improve the knowledge and by applying it, many health problems can be solved. They should take initiatives to conduct research on the nature and severity of problems related to school going children.

Nurse researchers should be aware of the healthcare system and formulating new theories; researchers can improve the knowledge, skill, and attitude of nurses and ultimately improve the status and standards of nursing profession too.

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**Author Profile**

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