

ATTENTION DEFICIT HYPERACTIVITY DISORDER: A STUDY ON AWARENESS AMONG STUDENT-TEACHERS AT SECONDARY LEVEL

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Abstract: Attention Deficit Hyperactivity Disorder (ADHD) has stirred up controversies among clinicians, teachers, policymakers, parents and the media since the 1970s. Researchers who study ADHD have used different definitions to diagnose ADHD leading to disagreement about the number, characteristics and outcomes of children with the disorder. On reviewing the research literature in educational research, investigator realized that there are many unanswered questions about ADHD, and there is more we need to learn about ADHD. The investigator intends to find out the awareness on ADHD among student-teachers at secondary level. Survey method was found appropriate for the study. The population for the present study consisted of student-teachers at secondary level from Ernakulam district of Kerala state, India. The investigator conducted a survey among 100 student-teachers at secondary level selected through random sampling technique. Data was collected using self-report questionnaire containing 40 true/false statements. Descriptive statistical techniques were used for interpretation of data. The data analysis indicated that the level of awareness in ADHD among student-teachers is low to medium. 80% of student-teachers possess medium level of awareness. Findings suggest that student-teachers need a better training for identifying and managing problems of students with ADHD. It is hoped that dissemination of findings of this paper would prompt educationists to critically review the present situation and take adequate measures to enhance the level of awareness in tackling ADHD.

Keywords: ADHD, awareness, student-teachers

I. INTRODUCTION

Attention Deficit Hyperactivity Disorder (ADHD) is a psychiatric disorder or neurobehavioral disorder characterized by significant difficulties either of inattention and/or hyperactivity and impulsiveness. "The essential feature of ADHD is a persistent pattern of inattention and hyperactivity-impulsivity that is more frequent and severe than is typically observed in individuals at a comparable level of development" (APA, 1994). Children are diagnosed as having ADHD according to criteria found in the Diagnostic and Statistical Manual of Mental Disorders (DSM) by American Psychiatric Association, 1994.

ADHD is one of the most commonly studied and diagnosed psychiatric disorders in children (APA). Hundreds of research articles are published in professional journals every month regarding the prevalence, neurobiological basis, co-morbid conditions, diagnosis and treatment of ADHD. Despite this fact, ADHD is a term that stirs up controversies within the professionals. American Psychiatric Association frequently has revised the official definition of ADHD in the Diagnostic and Statistical Manual a number of times. This is clear evidence that rapid conceptual changes are taking place in ADHD research. The debate in the scientific community centers mainly on cause, diagnosis and treatment. Researchers who study ADHD have used different tools to diagnose ADHD leading to disagreement about the prevalence rate of the disorder.

Teachers have a pivotal role in the identification of ADHD in classrooms. The school based evaluation of ADHD rests upon the shoulders of teachers. Teachers have ample opportunities to observe their students' behaviour in the classroom as well as playground. Usually teachers are the first ones to identify and raise the concern about child's behavioral problems such as inattention, hyperactivity and impulsivity. They are the ones whom the parents consult when they notice behavioral problems in their children.

Therefore the teacher education courses bear the responsibility to equip student-teachers to identify and manage ADHD students. The Teacher education owes the responsibility of preparing teachers as a powerful resource of knowledge and skill. Management of students with learning disabilities and behavioral problems such as ADHD is a challenging job in real classrooms. Despite scoring very high marks in the theory paper during teacher training course, whether a student-teacher is really equipped to tackle problems related to ADHD is a matter of fact.

Shetty and Rai, (2014) assessed the awareness and knowledge of Attention Deficit Hyperactivity Disorders among primary school teachers in India. 312 teachers were surveyed to know their ability to identify signs and symptoms of ADHD. Data was collected using a self-report questionnaire based on DSM –IV-TR criteria. Results showed that 268 teachers were aware of the term ADHD and their knowledge of ADHD ranged from poor to adequate. 28 (9%) of teachers had prior training. Only 92 (29%) of the teachers had a good understanding of ADHD.

Akram *et al.* (2009), compared the knowledge and attitudes of Scottish qualified and student teachers towards ADHD and its pharmacological treatment. Data regarding teachers' sources of information on ADHD and their familiarity with ADHD websites are asked. 43 experienced and 25 student teachers were surveyed using an anonymous self-administered questionnaire with 15 true/ false statements. Beliefs and attitudes were assessed using Likert-scale with 12 statements. The mean score of student teachers were higher than qualified teachers. On questions related to medication student teachers scored more than qualified teachers. Qualified teachers indicated greater conviction of their attitudes, opting for the extreme values ('strongly agree' or 'strongly disagree') on 3.1 of the 12 items, whereas the corresponding value for student teachers was 1.6. The study concludes that Scottish school teachers and student teachers have inadequate knowledge and understanding of ADHD.

Youseff *et al.* (2015), studied teachers' knowledge of and attitudes toward ADHD in Trinidad & Tobago in the Caribbean region. Using convenience sampling, 440 questionnaires were distributed and 277 valid questionnaires were returned (response rate, 63%). Total knowledge scores were low, mean 12.6/26. Both postgraduate education and in-service training significantly improved knowledge scores as did having previously taught a child with ADHD. Attitudes toward children with ADHD were generally positive although most teachers responded that children with ADHD should be taught by specialist teachers. Results suggested that greater efforts must be made to provide teacher training specifically in the identification and management of children with ADHD.

The investigator limited the study to know the awareness of prospective secondary school teachers on essential concepts of ADHD. It was further been limited to collect data from 4 teacher education institutions under Mahatma Gandhi University, Kottayam.

II. NEED AND SIGNIFICANCE OF THE STUDY

ADHD is a serious problem affecting a large number of students. Both pre-service and in-service teachers should be made aware of the symptoms, causes, diagnosis, and management of ADHD in classroom settings. On reviewing the research literature in educational research, investigator realized that, in Kerala, only few studies have examined teachers' beliefs and knowledge relating to general issues of identification, diagnostic criteria, and treatment of students with ADHD. Since students with ADHD occupy an important place in school there is a need identify and manage students with ADHD. Therefore the investigator is intended to find out the level of awareness on ADHD among student-teachers at secondary level.

III. OBJECTIVE

To find out level of awareness on ADHD among student-teachers at secondary level

IV. METHODOLOGY

In the present study, descriptive survey method was employed in order to know the level of awareness on ADHD among student-teachers at secondary level. The population for the present study consisted of student-teachers at secondary level. The investigator conducted a survey among 100 student-teachers at secondary level selected through random sampling technique. Data was from 4 teacher training colleges under Mahatma Gandhi University, Kottayam.

Data was collected using self-report ADHD awareness questionnaire developed by the investigator. The first (Part A) collected demographic information about each respondent including age, gender, teaching experience, and teacher training. Part B contained items intended to attain teachers' actual knowledge of ADHD and contained 40 questions with *true*, *false*, and *don't know* options. Several questions were worded in the negative to prevent random completion by participants. One point was awarded for each correct answer and the results for each question summed to yield a total knowledge score. The maximum possible score was therefore 40 (i.e. 40x1). For this analysis, both wrong answers and *don't know* were considered incorrect although the summary of each response is also presented. 18 items were from DSM criteria for ADHD namely inattention, hyperactivity/impulsivity. Remaining 22 questions were related to knowledge on cause of ADHD, diagnostic techniques, assessment tools, treatment modalities. Descriptive statistical analysis was used for data interpretation.

V. MAJOR FINDINGS

After the experiment, the investigator systematically classified and tabulated the collected data sheets. They were then scientifically analyzed, intelligently interpreted and rationally concluded as per the purpose. For this relevant statistical technique were used.

Table 1: Descriptive analysis of awareness on ADHD among student-teachers

Statistics computed	Value
Sample Size (N)	100
Mean	19.8
Median	20.5
Mode	22
Standard Deviation	3.05
Maximum score	40
Minimum Score	0
Highest score	23
Lowest score	13

The level of awareness on ADHD among student-teachers at secondary level was classified as low, medium and high based on the formula $M \pm \sigma$. Percentage analysis was used for data analysis.

Table 2: Percentage analysis of level of awareness of student-teachers on ADHD

Level of Awareness on ADHD	% of teachers
Low	10%
Medium	80%
High	10%

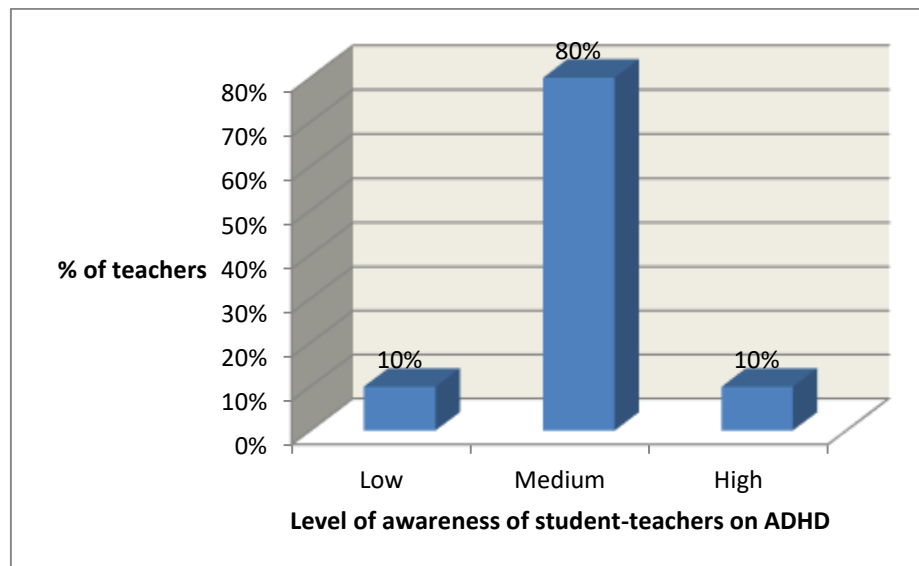


Figure 1: Graph showing level of awareness on ADHD among student-teachers

From the above data analysis it can be interpreted that majority of student-teachers (80%) have medium level of awareness on problems of ADHD students. Whereas 10% teachers have low level of awareness and only 10% have high level of awareness on essential concepts and problems of ADHD.

VI. CONCLUSION

The data analysis indicated that the level of awareness on ADHD among student-teachers is medium. 80% student-teachers possess medium level of awareness and 10% possess low level of awareness. Only 10% of student-teachers have high level of awareness on academic problems of ADHD. Therefore it can be concluded that a vast majority of student-teachers lack high level of awareness about the symptoms of ADHD. Findings suggest that student-teacher need a better training for identifying and distinguishing problems of ADHD students.

Proper understanding of the disadvantages faced by ADHD students will help teachers to reduce teacher student-conflicts. When the teacher does not have adequate knowledge regarding ADHD, the identification of certain behavioral problems may be erroneous. This may exacerbate the relations instead of improving them. Frequently the teachers may respond to the behavior of ADHD students with excessive authoritativeness and assertiveness. This will create serious negative impact on teacher-student relationship. This will have adverse effects such as poor academic achievement, problems in social relations, reduced motivation and poor self-image of the child, and repeated failures over time. Teachers should increase their awareness and must attain in depth knowledge regarding this disorder. It is important that the teachers should have at least the basic knowledge to identify the students with ADHD in order to meet their needs and help them become successful future citizens. Therefore teachers should enhance their knowledge horizons especially with regard to behavioral problems such as ADHD.

It is hoped that dissemination of findings of the study would prompt educationists to critically review the present status of the BEd. curriculum. It is hoped that the study will be useful to the curriculum planners, teacher educators and students for designing suitable measures to enhance the level of awareness in ADHD and other learning disabilities and classroom management.

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