

Bridging the Knowledge on Attention Deficit Hyperactivity (ADHD) Disorder among Primary School Teachers

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Abstract: Attention Deficit Hyperactivity (ADHD) is a prevalent neurobehavioral disorder affecting children's social, academic, and emotional development, with rising global incidence among children. This study assessed ADHD knowledge among 30 primary school teachers. A Quantitative approach-non-experimental univariate descriptive design was adapted to assess ADHD knowledge among 30 primary school teachers. Data was collected via Google Forms, with oral consent obtained from the principal. Convenient sampling was employed for participant selection. Using a structured questionnaire, the results showed that 90% of teachers had inadequate knowledge about ADHD, with no teachers demonstrating adequate understanding. The study found a correlation between teaching experience and ADHD knowledge but no significant relationship with other demographic factors. Data were collected via a Google Form, and statistical analysis was conducted using SPSS software. The study highlights that while teachers generally have a positive attitude, misconceptions about ADHD may hinder early diagnosis and intervention, emphasizing the need for increased training and awareness.

Keywords: Assess, ADHD, Primary School Teacher, Knowledge.

1. INTRODUCTION

Background

Attention Deficit Hyperactivity Disorder (ADHD) is one of the most common neurodevelopmental disorders affecting children globally, significantly impacting their social, emotional, and academic development. Early identification and appropriate intervention are crucial for managing ADHD, and teachers play a pivotal role in this process as they are often the first to observe behavioural patterns in children. However, limited knowledge or misconceptions about ADHD among teachers can delay diagnosis and proper support for affected students. In India, the prevalence of ADHD in school-aged children is increasing, yet awareness among educators remains low. This study aims to assess the knowledge of primary school teachers regarding ADHD at a selected primary school in Bangalore. By identifying gaps in understanding, the research seeks to highlight the need for enhanced training and awareness programs to support effective ADHD management in educational settings.

In primary education, teachers play a crucial role in identifying and supporting children with Attention Deficit Hyperactivity Disorder (ADHD). Often the first to notice symptoms like inattention and impulsivity, teachers with adequate knowledge can make necessary classroom adjustments and communicate effectively with parents. However, many teachers in India lack training in ADHD, leading to misunderstandings that may result in punitive actions rather than supportive interventions. This knowledge gap hinders timely identification and support, impacting students' academic success and

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self-esteem. The Indian education system's overcrowded classrooms and limited resources further exacerbate these challenges, highlighting the urgent need for targeted teacher training programs.

Need for the Study

According to WHO (in 2023) the estimated prevalence of ADHD is about 5% in children and adolescents. According to the American Psychiatric Association (2022 in America). Prevalence rates can vary by region due to differences in diagnostic practices, cultural perceptions, and health care access. ADHD prevalence estimates are often around 7-10%. In Europe, reported prevalence rates typically range from 5% to 7%. According to the study of Indian journals (2022, In India) ADHD is estimated to affect around 5-7% of children, based on various studies and surveys. The prevalence can vary depending on the region and the diagnostic criteria used. Awareness and diagnostic practices may also influence these statistics, as ADHD might be underreported or misdiagnosed in some areas. Efforts to improve diagnosis and treatment are ongoing to better address the needs of children with ADHD in India. According to the study of Indian journals (2022, In India) ADHD is estimated to affect around 5-7% of children, based on various studies and surveys. The prevalence can vary depending on the region and the diagnostic criteria used. Awareness and diagnostic practices may also influence these statistics, as ADHD might be underreported or misdiagnosed in some areas. Efforts to improve diagnosis and treatment are ongoing to better address the needs of children with ADHD in India.

Smith, J., & Roberts, A. (2023). "Teacher Training and Its Impact on ADHD Management in the Classroom." This study, published in *Educational Psychology Review*, examines the role of teacher training in improving the management of students with ADHD. The researchers found that insufficient knowledge and negative attitudes toward ADHD among teachers significantly hinder the effective implementation of classroom interventions. The study highlights that, teachers with specialized training in ADHD management showed improved classroom outcomes, such as better academic performance and reduced behavioural issues in ADHD students. It underscores the need for ongoing professional development to equip educators with the skills necessary to handle ADHD effectively in an academic setting.

The study revealed that insufficient knowledge and negative attitudes about ADHD among teachers hinder effective classroom interventions. However, teachers with specialized ADHD training showed improved academic performance and reduced behavioural issues in students with ADHD, highlighting the need for ongoing professional development.

Proposed Approach

The study aims to assess the knowledge of primary school teachers regarding Attention Deficit Hyperactivity Disorder (ADHD) and its implications for students. It is expected that teachers will demonstrate enhanced knowledge of ADHD, including its symptoms, causes, and effective management strategies. The study will also identify specific knowledge gaps, informing the development of targeted training programs. Greater awareness of the importance of early identification and intervention for children with ADHD is anticipated, leading to timely support. Furthermore, teachers are expected to adopt effective strategies to accommodate students with ADHD, such as differentiated instruction and behaviour management techniques.

Statement of the Problem

"A study to assess the knowledge of primary school teachers regarding attention deficit hyperactivity disorder in selected primary school at Bangalore"

Aim of the Study

- To assess the level of knowledge regarding ADHD among primary school teachers in selected primary school.
- To determine the relationship between the level of knowledge regarding ADHD and their selected demographic variables among primary school teachers in selected primary school.

2. MATERIALS AND METHODS

The research approach selected for the present study is Quantitative approach. The research design used in this study is Non-Experimental; Univariate descriptive design.

Setting of the Study: The setting of the study was selected at RC International school Thammanahalli village, BANGALORE, Karnataka.

Participants

The selected population is the primary school teachers of RC International School, Thammanahalli village, BANGALORE, Karnataka.

Sampling Technique: The sampling technique adopted for the study is Convenient Sample Technique.

Sample Size: Sample size for the present study is 30 primary school teachers.

Instruments:

Structured Knowledge Questionnaire was constructed for the study to determine the level of Knowledge of primary school teachers regarding ADHD.

Description of the Tool

Section A: Socio-demographic variable

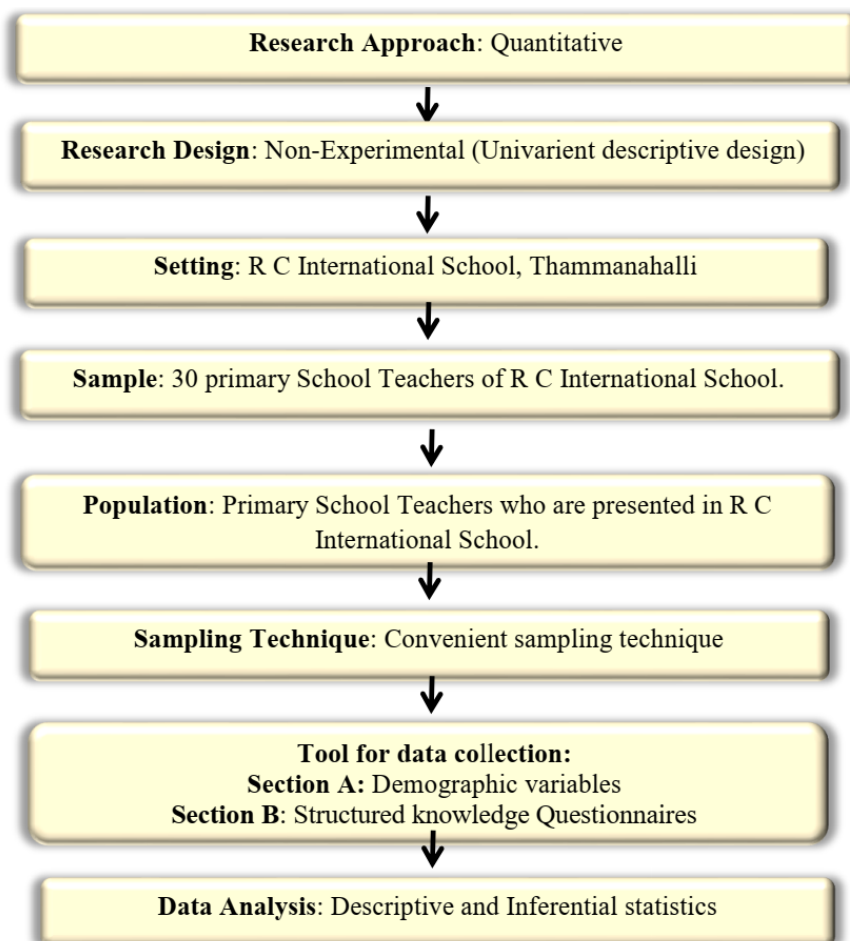
This section consists of several items, they are Age in years, Educational qualification, Gender, Year of experience, Designation, Experience of handling ADHD child.

Section B: This section deals with the structured knowledge questionnaire to assess the level of knowledge among primary school teachers regarding ADHD.

Table 1.1: Score Interpretation on Level of Knowledge

Score Interpretation		
level of Knowledge	N	%
Inadequate knowledge	0-15	33.3%
Moderately adequate knowledge	16 -30	67 %
Adequate knowledge	31 - 45	100%

Schematic Representation of Research Methodology



Data Collection Procedure

Prior to the data collection, permission was obtained from the concerned authority. The samples were informed about the purpose of the study and consent was taken from the respondents. The support of the principal was instrumental in facilitating the research process and ensuring access to the necessary participants for this important study.

We had made structured 45 knowledge questionnaires in Google form and we have reached the school and explains about ADHD to the primary school teachers and then we have shared the questionnaires to the teachers through Google form links. Almost 30 teachers responded and then we have done the data analysis.

Analysis Strategies

The collected data were organized, tabulated and analysed by using both descriptive statistics (mean, standard deviation) and inferential statistics (chi square or cross tabulation analysis) was done to determine the level of knowledge regarding ADHD among primary school teachers.

The data collected from the participants were grouped and analysed with the help of descriptive and inferential statistics.

- **Section A:** frequency and percentage distribution among Primary School Teachers regarding demographic variables.
- **Section B:** Association between the level of knowledge scores of respondents with the selected socio-demographic variables.

3. RESULTS AND DISCUSSION

Results

In this study primary school teachers' demographics variables regarding ADHD, the majority of respondents (46.7%) are aged between 30 and 40 years, followed by 43.3% aged 20 to 30 years, and 10% aged 50 to 60 years. Most respondents are female, representing 80%, while males make up 20%. Regarding educational qualifications, the majority hold a bachelor's degree (70%), with others having a diploma (20%) or other qualifications (10%). In terms of teaching experience, 50% have 4–5 years, 40% have 1–3 years, and 10% have 6–7 years of experience. Based on their designation, 56.6% are senior teachers, 36.7% are junior teachers, and 6.7% fall into other designations. The majority reside in urban areas (53.3%), while 46.7% are from rural areas. Concerning ADHD-related knowledge, 63.4% of teachers have received training, while 36.6% have not. Furthermore, 56.6% of respondents have no experience handling children with ADHD, whereas 43.4% have some experience in this area.

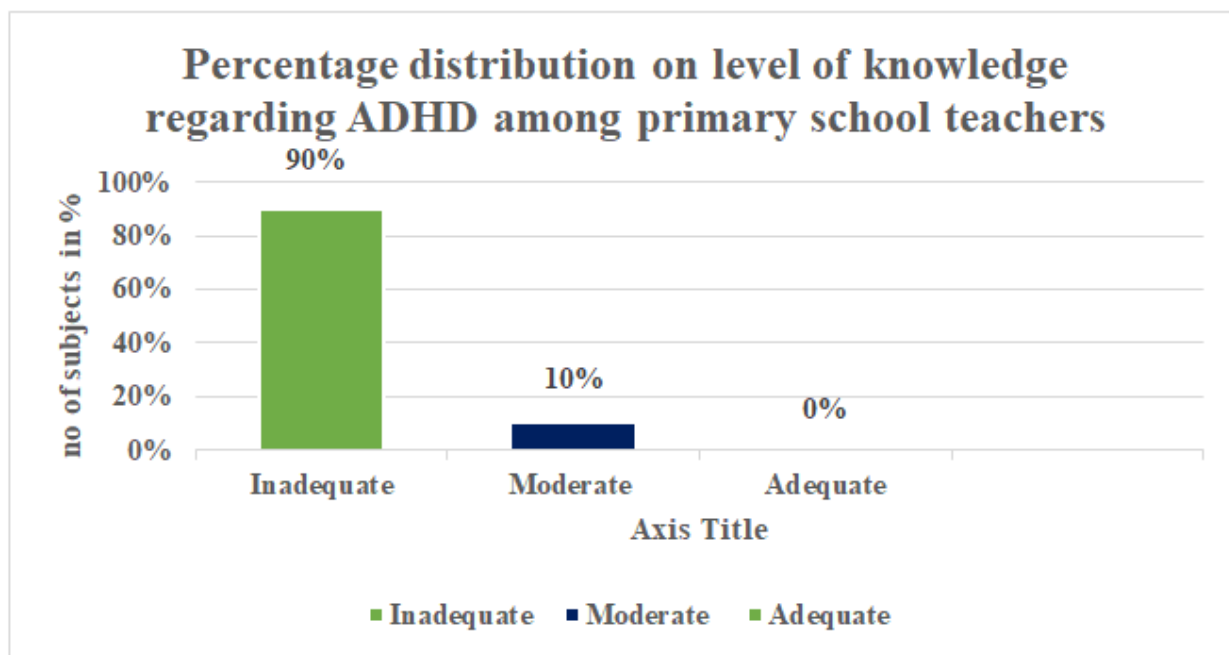


Figure 1.1: Percentage distribution on level of knowledge regarding ADHD among primary school teachers

Figure 1.1 Illustrates the frequency & percentage distribution on level of knowledge regarding ADHD among primary school teachers define that 27 (90%) have inadequate knowledge, 3 (10%) moderate knowledge and 0 have adequate knowledge.

Table 1.2: Mean, Median, Standard Deviation distribution on level of knowledge regarding ADHD among primary school teachers

Study Group	Mean	Median	Standard deviation
Level of Knowledge	11.7	12	2.5

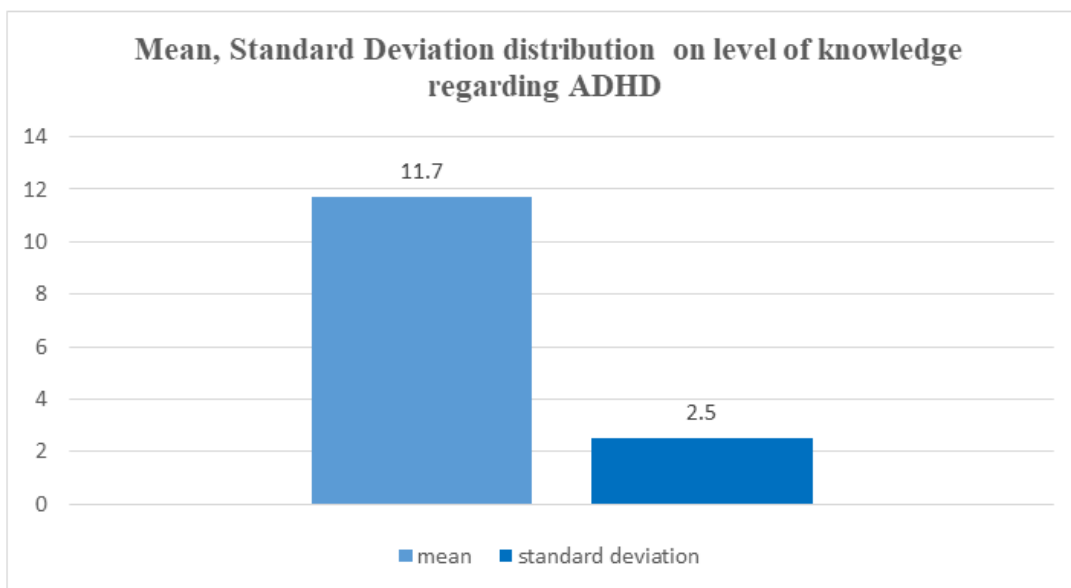


Figure 1.2: Mean, Standard Deviation distribution on level of knowledge regarding ADHD

Table 1.2 and Figure 1.2 reveals the Mean, Median, Standard Deviation distribution on level of knowledge regarding ADHD among primary school teachers define that Mean (11.7), Median (12), and Standard deviation (2.5)

To determine the association level of knowledge regarding Attention Deficit Hyperactivity with the selected demographic variables among primary school teachers.

Table 1.3: Association level of knowledge regarding ADHD with the selected demographic variables among primary school teachers

Sl/No	Demographic variables	Frequency	Percentage	Chi-square	df	P-value	Table value
1	Age in year			0.644	2	0.879 NS	5.99
	20 - 30	13	43.3 %				
	30 - 40	14	46.7 %				
	50 - 60	3	10 %				
2	Gender status			0.000	1	13.333 NS	3.84
	Male	6	20%				
	Female	24	80%				
3	Educational qualification			0.490	2	1.429 NS	5.99
	Diploma	6	20%				
	Bachelor degree	21	70%				
	Others	3	10%				
4	Year of experience			0.574	2	1.111 NS	5.99
	1 – 3	12	40%				
	4 – 5	15	50%				
	6 - 7	3	10%				
5	Designation			0.506	2	1.361 NS	5.99
	Head teacher	2	6.7%				
	Senior teacher	17	56.6%				
	Junior teacher	11	36.7%				
6	Residential area			0.088	1	2.917 NS	3.84
	Urban	16	53.3%				
	Rural	14	46.7%				
7	Training or workshop on ADHD			0.900	1	0.016 NS	3.84
	YES	19	63.4%				
	NO	11	36.6%				
8	Handling ADHD on child			0.390	1	0.739 NS	3.84
	YES	13	43.4%				
	NO	17	56.6%				

The knowledge of primary school teachers regarding attention deficit hyperactivity disorder in selected primary school in Bangalore, the results are considered significant if this value is equal to or less than the predetermined alpha level. Demonstrate that there was no significant association between the level of knowledge and their socio-demographic variables among Primary school teachers at ADHD.

Discussion

This study investigates the growing prevalence of ADHD among primary school children, emphasizing the pivotal role of teachers in recognizing and managing ADHD symptoms within the classroom. Focusing on Bangalore's diverse educational landscape, it assesses teachers' understanding of ADHD, its effects on student learning, and practical strategies for classroom management, including referral practices. By analysing these factors, the research aims to inform teacher training programs to foster better academic and behavioural support for students with ADHD. Findings suggest that training teachers in ADHD management can improve their ability to implement effective classroom strategies, as seen in similar studies emphasizing early intervention and teacher training. Studies from other regions have also noted that teachers with ADHD training show greater confidence in managing ADHD behaviours and in collaboration with mental health professionals. Consequently, the study recommends mandatory ADHD training and expanded research across various regions to generalize best practices and improve outcomes for students with ADHD. Research consistently shows that teacher training in ADHD management can significantly impact students' academic and behavioural success, as illustrated in this study's findings. Studies from various regions have emphasized similar themes, demonstrating that teachers with ADHD training are better equipped to implement effective strategies and demonstrate increased confidence in managing ADHD-related behaviours. For instance, studies conducted in the U.S. and Europe have reported that trained teachers are more likely to use adaptive classroom strategies and actively engage in referral procedures, resulting in improved classroom experiences for ADHD students.

This aligns with research in Asian contexts, where training correlates with a more proactive approach in recognizing and addressing ADHD symptoms. Moreover, other studies highlight that teachers trained in ADHD are more open to collaborating with mental health professionals, leading to early interventions and better support for affected students. These comparisons affirm that the recommendation for mandatory ADHD training is crucial to equipping teachers across regions with the skills needed to foster positive outcomes for ADHD students.

4. CONCLUSION

The study revealed that the majority of primary school teachers (63.4%) had received training on ADHD, many (56.6%) had no practical experience in handling children with ADHD. Most teachers were in their early to mid-career stages, with varying levels of education and experience, indicating a need for continuous professional development. Senior teachers, who comprised 56.6% of the respondents, play a key role in influencing educational practices but may still benefit from targeted ADHD training. The gender and residential distribution also suggested potential differences in access to resources and training, with urban teachers possibly having more exposure. Overall, while the study supports the hypothesis that knowledge levels vary, it highlights the importance of ongoing training and practical exposure to better prepare teachers for managing ADHD in the classroom.

RECOMMENDATION

Advocate for classroom accommodations, such as extended test time, distraction-reducing seating, and tech tools to support learning. Teacher training on ADHD helps educators recognize symptoms and implement strategies. A strong support network of family, friends, and professionals is vital. Foster collaboration among teachers, nurses, and special educators, with regular meetings to discuss progress. Nursing research, through qualitative and quantitative studies, advances practice, improves patient care, and shapes healthcare policies, focusing on areas like child safety and health outcomes.

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Finally, I acknowledge the institutional ethics committee for granting approval and ensuring the ethical standards of this research were met.

Deceleration

Author contribution:

Authors were the sole researcher for this study. The author was responsible for:

- ^{3,4,5,6} Conceptualizing the research problem.
- ^{3,4,5,6} Designing the study and developing the methodology.
- ^{3,4,5,6} Conducting data collection and interacting with the selected primary schools.
- ⁵ Analysing the data and interpreting the results.
- ^{5,6} Writing and revising the research manuscript.

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Competing Interest: The author declares that there are no competing financial or non-financial interests in relation to this study. All procedures followed in the research were unbiased and independent of any external influences.

Ethical Clearance: Every procedure in this investigation complied with equivalent ethical standards. “The ethical aspect of the study has been institutionally reviewed”. Informed consent has been procured by all respondents in this study.

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