



A STUDY TO ASSESS THE KNOWLEDGE REGARDING ATTENTION-DEFICIT/ HYPERACTIVITY DISORDER (ADHD) AMONG SCHOOL TEACHERS IN SELECTED SCHOOLS OF KOHIMA, NAGALAND

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Abstract:

Attention-Deficit/Hyperactivity Disorder (ADHD) is a significant neurodevelopmental disorder that affects the academic performance, social functioning and behaviour of children. Teachers spend a crucial amount of time with children; therefore, this study was conducted to assess the level of knowledge regarding ADHD among school teachers and also examine its association with some sociodemographic variables. A quantitative descriptive cross-sectional design was used with 101 school teachers from six schools which were selected through non-probability purposive sampling technique. Data was collected using google forms that included two sections: socio-demographic proforma and a standardized tool known as the Knowledge of Attention Deficit Disorders Scale (KADDs). Results showed that 72.28% had moderate knowledge, 23.76% had adequate knowledge, and 15.84% had poor knowledge. The study also found a statistically significant association between knowledge level and place of permanent residence ($p = 0.047$) as well as professional teaching qualification ($p = 0.043$), while no significant association was found with the other sociodemographic variables.

INTRODUCTION

“When a flower doesn’t bloom, you fix the environment in which it grows, not the flower.”

-Alexander Den Heijer

Attention-Deficit/Hyperactivity Disorder (ADHD) is also known as hyperkinetic disorder.¹ It is one of the most common neurodevelopmental disorders in children, characterized by inattention, hyperactivity, and impulsivity.² According to the 11th edition International Classification of Diseases (ICD-11, 2018), ADHD is defined as “A persistent pattern of inattention and/or hyperactivity-impulsivity that negatively affects academic, occupational, or social functioning.”¹

In current times, Attention-Deficit/Hyperactivity Disorder has become an important educational and public health concern worldwide due to its influence on children’s academic achievements, behaviours and social functioning. Since children spend a considerable amount of their time in school settings, teachers are among the earliest individuals to identify the signs and symptoms of ADHD in the children.

ADHD is characterized by three core symptoms: inattention, hyperactivity, and impulsivity. These symptoms must persist for at least 6 months and significantly impact academic, social, and occupational functioning.⁽¹⁾

Studies from multiple countries across the world has reported that the overall knowledge of ADHD remains inconsistent, even though the awareness of it exists. Limited understanding regarding the causes, symptoms, diagnosis and management of ADHD have been exhibited in many studies. Similarly, studies in India have also shown variations in the level of knowledge with many reporting to have average to inadequate understanding of ADHD. These studies have highlighted the importance of structured training and awareness programs to strengthen teachers’ competence in recognizing and supporting students with ADHD and also emphasized that inadequate training opportunities and limited school-based awareness initiatives are contributing factors for the inconsistent understanding of the disorder. Therefore, strengthening teachers’ education and improving awareness regarding ADHD remain important to promote early identification and appropriate support for the affected children.

Teachers play an important role in the identification, treatment and management of children with ADHD, because they are in a position to observe a child’s behaviour across various contexts where academic and social demands are high.³ When



teachers are equipped with current knowledge about ADHD and trained in classroom strategies, they can support classroom engagement and reduce functional impairment. Collaboration among teachers, parents, school psychologists, and healthcare professionals is essential for effective management.⁴

Most studies on the teachers' knowledge of ADHD in India focus on metropolitan cities, while schools from small cities remain understudied. This study titled, "A study to assess the knowledge regarding Attention-Deficit/Hyperactivity Disorder (ADHD) among school teachers in selected schools of Kohima, Nagaland" was conducted among 101 school teachers in selected schools of Kohima to assess their knowledge regarding ADHD and identify factors associated with knowledge levels. The findings will provide baseline data and help guide future training and awareness programs.

OBJECTIVES OF THE STUDY

- To assess the knowledge regarding ADHD among school teachers in selected schools of Kohima, Nagaland.
- To find the association between the knowledge regarding ADHD among school teachers in selected schools of Kohima, Nagaland with selected socio-demographic variables.

HYPOTHESIS OF THE STUDY

- **H₁:** There will be a significant association between the knowledge of school teachers regarding ADHD and selected socio-demographic variables.

METHODOLOGY

The study adopted a quantitative approach with a descriptive cross-sectional research design. It consisted of 101 participants which were selected using the non-probability purposive sampling technique from six selected schools in Kohima, Nagaland. Data was collected using a structured google form comprising of two sections. Section I consisted of socio-demographic variables and section II consisted of the Knowledge of Attention Deficit Disorders Scale (KADDS), a standardized tool developed by Scitutto et al., to assess the knowledge and misconceptions regarding ADHD. The KADDS consists of 39 items covering three domains: general information, symptoms and diagnosis, and treatment. The instrument was used with prior permission from the original author and in accordance with the author's permission, the KADDS tool is not reproduced in this article. The analysis of the data was done using descriptive analysis where frequency, mean and standard deviation were calculated for the socio-demographic variables and the knowledge. Chi-square test using the Jamovi software was used to find the association between knowledge and the selected socio-demographic variables.

RESULTS

The highest proportion of participants was observed among those aged 26-30 years and those over 35 years with an equal percentage of **31.68%**. The majority of the participants were female (**82.18%**) and reported to have permanent residences in urban areas (**59.41%**). Most of the participants had less than five years of teaching experience (**54.44%**) and held a graduation degree (**47.52%**). Regarding the professional teaching qualifications, majority of the participants had a B.Ed degree (**28.71%**), followed by no professional teaching qualification (**26.73%**) and the remaining participants reported various other professional teaching qualifications. The majority were teaching in private schools (**85.15%**) and a substantial majority had not undertaken any courses on ADHD/Mental Health (**98.02%**). Regarding the parental status, majority of the participants had no children (**73.27%**).

The majority of the participants had a moderate level of knowledge regarding ADHD (**72.28%**), followed by adequate level (**23.76%**) and poor level of knowledge (**15.84%**).

A statistically significant association was observed between the level of knowledge regarding ADHD and place of permanent residence ($\chi^2=6.11$, $df=2$, $p=0.047$) and professional teaching qualification ($\chi^2=26.9$, $df=16$, $p=0.043$). No statistically significant association was observed with the other socio-demographic variables.



SECTION I: DESCRIPTION OF THE SOCIODEMOGRAPHIC VARIABLES

This section describes the different sociodemographic variables in terms of frequency and distribution which is presented through a table.

EDUCATIONAL QUALIFICATION	Graduation	48	47.52%
	Higher secondary	6	5.94%
	Diploma	2	1.98%
	High school	1	0.99%
	Post Graduation	44	43.56%
PROFESSIONAL TEACHING QUALIFICATION	B.Ed	29	28.71%
	None	27	26.73%
	D.El.Ed	19	18.81%
	M.Ed	1	0.99%
	ECCE	3	2.97%
	Montessori teachers training	18	17.82%
	Theology	1	0.99%
	Criminal psychology	1	0.99%
	Early Childhood Education (PGD ECE)	2	1.98%
TYPE OF SCHOOL	Private	86	85.15%
	Government	15	14.85%
ANY EXTRA COURSES ON ADHA/MENTAL HEALTH	No	99	98.02%
	Attended Enables Training	1	0.99%
	Genesis Early Intervention	1	0.99%
PARENTAL STATUS	Does not have children	74	73.27%
	Have children	27	26.73%

Table 1: Distribution of participants based on the socio-demographic variables

AGE		Frequency	Percentage
	<25 years	12	11.88%
	26-30 years	32	31.68%
	31-35 years	25	24.75%
	>35 years	32	31.68%
GENDER	Female	83	82.18%
	Male	18	17.82%
PLACE OF PERMANENT RESIDENCE	Rural area	41	40.59%
	Urban area	60	59.41%
YEARS OF TEACHING EXPERIENCE	<5 years	57	56.44%
	6-10 years	19	18.81%
	11-14 years	13	12.87%
	>15 years	12	11.88%

SECTION II: ASSESSMENT OF THE LEVEL OF KNOWLEDGE USING THE KNOWLEDGE OF ATTENTION DEFICIT DISORDERS SCALE (KADDS)

This section uses a standardized tool known as the Knowledge of Attention Deficit Disorders Scale (KADDS) to assess the knowledge of the participants regarding ADHD. This tool is a closed tool and permission to use the tool was taken prior to the study.

The knowledge was analysed using descriptive statistics where the mean and the standard deviation were calculated. The mean being 16.47 and the standard deviation being 8.23

Table 2: Distribution of participants based on their level of knowledge

Knowledge level	Frequency	Percentage
Poor	16	15.84%
Moderate	73	72.28%
Adequate	24	23.76%
Total	101	100%

SECTION III: ASSOCIATION BETWEEN THE LEVEL OF KNOWLEDGE AND THE SOCIODEMOGRAPHIC VARIABLES

This section of the study describes the association of the socio-demographic variables with the level of knowledge of the participants. The association was determined using the Chi-square test through the jamovi statistical software.

Table 3: Association between level of knowledge and sociodemographic variables

Sociodemographic variables	Level of knowledge			Chi Square	df	p value	Remarks
	Poor	Moderate	adequate				
AGE							
26-30 years	7	22	3	2.41	6	0.879	NS
<25 Years	1	10	1				
>35 years	4	24	4				
31-35 years	4	17	4				
GENDER							
Female	12	62	9	1.36	2	0.506	NS
Male	4	11	3				
PLACE OF PERMANENT RESIDENCE							
Rural area	11	24	6	6.11	2	0.047	S
Urban area	6	48	6				



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YEARS OF TEACHING EXPERIENCE							
<5 years	9	41	7	1.57	6	0.955	NS
> 15 years	1	10	1				
11-14 years	3	8	2				
6-10 years	3	14	2				
LEVEL OF EDUCATIONAL QUALIFICATION							
Graduation	10	34	4	6.73	8	0.566	NS
Higher secondary	2	3	1				
Diploma	0	1	1				
High school	0	1	0				
Post Graduation	5	33	6				
PROFESSIONAL TEACHING QUALIFICATION							
B.Ed	6	23	0	26.9	16	0.043	S
None	3	20	4				
D.El.Ed	2	15	2				
M.Ed	0	0	1				
ECCE	0	2	1				
Montessori teachers training	5	11	2				
Theology	0	1	0				
Criminal psychology	0	0	1				
Early Childhood Education (PGD ECE)	0	1	1				
TYPE OF SCHOOL							
Private	13	63	10	0.3	2	0.861	NS
Government	3	10	2				
EXTRA COURSES TAKEN ON ADHD/MENTAL HEALTH							
No	16	71	12	0.822	4	0.935	NS
Attended enables training	0	1	0				
Genesis Early Intervention	0	1	0				
PARENTAL STATUS							
Does not have children	12	54	8	0.31	2	0.856	NS
Have children	4	19	4				

DISCUSSION

The present study, titled “A study to assess the knowledge regarding Attention-Deficit/Hyperactivity Disorder (ADHD) among school teachers in selected schools of Kohima, Nagaland,” was conducted to evaluate the teachers’ level of



knowledge regarding this neurodevelopmental disorder in Kohima, Nagaland. Utilizing a quantitative descriptive cross-sectional research design, the study sampled 101 school teachers via a non-probability purposive sampling technique. Data was systematically collected using google form consisting of selected socio-demographic variables and the standardized Knowledge of Attention Deficit Disorders Scale (KADDS) to quantify the participants' comprehension of ADHD, and subsequently analysed using descriptive and inferential statistics to draw meaningful conclusions regarding the teachers' knowledge levels and associated demographic factors.

DISCUSSION OF THE FINDINGS IN RELATION TO THE OBJECTIVES OF THE STUDY:

Objective 1: To assess the knowledge regarding ADHD among school teachers in selected schools of Kohima, Nagaland.

The primary objective of the study was to quantify the baseline knowledge of ADHD among the selected cohort of teachers. The analysis of the KADDS scale revealed a mean knowledge score of 16.47 with a standard deviation of 8.23, indicating an overall moderate level of understanding among the participants. Specifically, the data distribution highlighted that 72.28% of the teachers possessed moderate knowledge, 23.76% had adequate knowledge, and 15.84% demonstrated poor knowledge.

These findings are heavily supported by existing literature, which consistently demonstrates a widespread, albeit partial, understanding of ADHD among teaching professionals.

- Chadda et al. (2023) reported parallel results in Punjab, where 55% of primary school teachers demonstrated moderate knowledge and 35% had inadequate knowledge. ⁵
- Similarly, Choudhary (2022) found that 59% of teachers in Himachal Pradesh possessed average knowledge, mirroring the moderate baseline established in the current study. ⁶
- Furthermore, Mani Rani & Halemani (2021) concluded that 55% of teachers in Maharashtra had average knowledge, underscoring a nationwide trend wherein educators lack comprehensive mastery of ADHD diagnostic and management principles despite possessing basic awareness. ⁷

Objective 2: To find the association between the knowledge regarding ADHD among school teachers in selected schools of Kohima, Nagaland with selected socio-demographic variables.

The secondary objective sought to determine if a teacher's demographic background influenced their understanding of ADHD. To achieve this, the study cross-tabulated knowledge levels against various demographic parameters including age, gender, place of permanent residence, years of teaching experience, educational qualification, professional teaching qualification, type of school, prior extra courses taken, and parental status.

The association was determined using the Chi-square test through the jamovi statistical software. The analysis successfully identified a statistically significant association between the teachers' knowledge levels and two specific variables: place of permanent residence ($p=0.047$) and professional educational qualification ($p=0.043$). Conversely, the Chi-square test revealed that the remaining socio-demographic factors did not possess any significant association with the participants' level of knowledge. This statistical exploration directly set the foundation for proving the study's core hypothesis.



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DISCUSSION OF THE FINDINGS IN RELATION TO THE HYPOTHESIS:

Hypothesis (H₁): There will be a significant association between the knowledge of school teachers regarding ADHD and selected socio-demographic variables.

The formulated research hypothesis (H₁) was accepted, as inferential statistical analysis via the chi-square test confirmed significant associations between knowledge levels and two specific demographic variables, while rejecting associations with the others.

- **Place of Permanent Residence:** The study proved a statistically significant association between the teachers' place of permanent residence and their level of ADHD knowledge ($p=0.047$). This finding is robustly supported by the Review of Literature (ROL). Patel, Chawla, and Pandya (2021)¹¹ established that urban teachers exhibited significantly higher knowledge levels compared to their rural counterparts. Additionally, Nar Vijayanti et al. (2025)⁸ confirmed a significant association between a teacher's area of residence and their baseline knowledge of ADHD. This suggests that urban environments may offer better access to health information and awareness resources.
- **Professional Teaching Qualification:** The analysis further proved a significant association between professional educational qualifications and the participants' level of knowledge ($p=0.043$). This aligns seamlessly with Mohammed Menna et al. (2025)⁹, who found through statistical analysis that teachers with higher educational qualifications and specific training scored significantly better in knowledge assessments ($p < 0.001$). This relationship likely exists because professional teaching curricula inherently include broader educational and child-development content.

Conversely, the hypothesis was not supported for the remaining variables. The chi-square tests revealed no statistically significant association between knowledge levels and age ($p=0.879$), gender ($p=0.506$), years of teaching experience ($p=0.955$), level of educational qualification ($p=0.566$), type of school ($p=0.861$), extra courses on mental health ($p=0.935$), or parental status ($p=0.856$). These null findings are corroborated by Nithyapriya et al. (2024)¹⁰, who similarly found no significant association between ADHD knowledge scores and demographic factors such as age, gender, education, or teaching experience.

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