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Research Article

# **Knowledge on Attention Deficit Hyperactivity Disorder Among School Teachers of Pokhara**

<sup>1</sup>Anushtha Chapagain, <sup>1</sup>Ratna Shila Banstola\*, <sup>1</sup>Romina Shrestha, <sup>2</sup>Indira Banstola

<sup>1</sup>Tribhuvan University, Institute of Medicine, Pokhara Nursing Campus, Pokhara

<sup>2</sup>Tribhuvan University, Prithvi Narayan Campus, Pokhara

\*Corresponding Email: bastolaratna@gmail.com

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#### **ABSTRACT**

Attention Deficit Hyperactivity Disorder (ADHD) is a neurodevelopmental condition that poses significant challenges on students' academic performance and social integration. Teachers have important role in recognizing and supporting such children and parents. Therefore, necessitates an evaluation of their knowledge and understanding of the disorder. Study was aimed to assess the knowledge on ADHD among school teachers of Pokhara and find out the association between selected variables and the level of knowledge on ADHD. A cross-sectional survey was done. Study was conducted in 4 schools of Pokhara with the sample size of 110 school teachers teaching the basic level (1-8 class), which was a complete enumeration sampling technique. Structured self-administered questionnaire was used for data collection and a standard tool 'Knowledge on Attention Deficit Disorder Scale (KADDS)' was used. The data was analyzed in SPSS 16 using descriptive statistical methods such as frequency, percentage, mean and standard deviation. Chi-square test was used to find out association between selected variables and the level of Knowledge. Findings revealed that 50.9% of teachers had adequate and 49.1% of teachers had inadequate knowledge on ADHD and mean knowledge score was 15.73±4.654 and maximum score was 32. There was statistically

significant association between sex, teaching subject and experience of teachers in dealing with ADHD children and level of knowledge on ADHD (p<0.05). The study concluded that about half of the basic level school teachers had inadequate knowledge on ADHD, so that education/training intervention related to ADHD can be provided to basic level school teachers.

**Keywords**: Attention deficit hyperactivity disorder, knowledge, school teachers, students.

### INTRODUCTION

Attention deficit hyperactivity disorder (ADHD) is one of the commonest neurodevelopmental disorders of childhood characterized by inattention, impulsivity, and hyperactivity (Center for Disease Control and preventions [CDC], 2022, 2022a). This disorder affects the child's overall development in terms of problems in written and adaptive skills, social relationship, decreased level of self-concept and self-esteem (Hockenberry et al., 2015). It often persists into adulthood and is a risk factor for other mental disorders and negative outcomes, including educational underachievement, difficulties with employment and relationships, and criminality (Fredriksen et al., 2014; Merrill et al., 2019). According to meta-analysis conducted with 175 eligible studies across the world, prevalence rate of ADHD among children and adolescents aged 18 and under is 7.2% (Thomas et al., 2015). It has been estimated that approximately 5% of children and adolescents are affected by ADHD worldwide (Song et al., 2021). According to National Health Interview Survey (NHIS), 10.2% children and adolescents aged 4-17 years were having ADHD in US in 2015-2016 (Xu et al., 2018). A cross sectional study in Ghana showed the overall prevalence of ADHD to be 12.8% (Afeti et al., 2017).

In the context of Southeast Asia region, a systematic review of 67 studies of China, Hong Kong and Taiwan showed that the prevalence of ADHD were 6.5%, 6.4%, and 4.2%, respectively (Liu et al., 2018). A prospective study in Bangladesh showed the prevalence of ADHD is higher in male (75%) than in female (25%) with a ratio of 3:1 (Hasan et al., 2016). In Nepal, the prevalence of ADHD was found 10-11.7% in various clinical samples of children and adolescents (Chaulagain et al., 2019), whereas another hospital based study in Nepal showed the prevalence of ADHD as 41% among school children (Rimal & Pokhrel, 2016).

The American Academy of Pediatrics (2011) first published clinical recommendations for evaluation and diagnosis of pediatric ADHD in 2000; recommendations for treatment followed in 2001. Again revised in 2011 with the addition of a key action statement (KAS) for the diagnosis and treatment of coexisting conditions in children and adolescents with ADHD. According to National parent survey, 2016 in US, About 23% children with ADHD were

receiving neither medication treatment nor behavior treatment in US which explained that even in developed countries like US, all children with ADHD don't get proper treatment due to lack of timely diagnosis (CDC, 2022, 2022a). Therefore, it is far to reach in the Nepalese context.

ADHD is most frequently diagnosed at school-age because ADHD leads to disturbance in classroom behavior or problems with homework or assignments. School staffs including teachers can give psychiatrist with information to help evaluate behavior and learning problems and also helps in behavioral training (CDC, 2022a; American Academy of Pediatrics, 2011). As per a study conducted among 62 primary school teachers in Colombia, only half of all the items (48.52%) in the questionnaire were answered correctly by the teachers which is particularly suboptimal or not adequate (Padilla et al., 2018). A cross sectional study in Iran showed that 6.3% teachers had low knowledge, 88.7% had medium knowledge and only 5% teachers had high knowledge of ADHD (Khademi et al., 2016).

Social Cognitive Theory, propounded by Albert Bandura, emphasizes the role of observational learning, social influences and specifically the self-efficacy- a person's ability to perform specific tasks (Bandura, 2014). In the context of ADHD, this theory suggests that teachers who have accurate and adequate knowledge about this disorder in children can identify the problem in their students, they feel more capable and confident in identifying and offering support the children with ADHD in their classroom. Teachers' knowledge of ADHD is most important for the early identification of the problem in children as well as to offer better support for the wellbeing and academic performance of the children having ADHD. Knowledge on ADHD among teachers helps in the management and treatment of children. However, to our knowledge, there is scarce of studies on school teachers' knowledge of ADHD in Nepal and none in Pokhara. Therefore, the objectives of this study were to assess the school teachers' knowledge on ADHD, and to determine the association between selected variables and the level of knowledge on ADHD among school teachers of Pokhara. The findings of the study might be useful to provide information to schools and concerned authorities about level of knowledge on ADHD among school teachers. So that the school level intervention can be planned. Similarly, findings might be of great use for school health nurses to plan and conduct the need based trainings and education sessions on ADHD for school teachers. Furthermore, the findings will also serve as a baseline for future research.

#### **DATA AND METHODS**

The study was carried out in four secondary schools (2 governments and 2 private schools) of Pokhara. These 4 schools were selected purposively considering the number of teachers. We selected the schools which have higher number of teachers in basic level. Quantitative data was collected using structured self-administered questionnaire. It was the primary data collected from the teachers teaching at basic level in selected schools. A cross sectional survey was conducted. Study population was the teachers teaching at basic level (class 1 to 8) of 4 schools (2 publics and 2 private). There were 115 teachers in the 4 selected schools and 110 teachers were participated in this study.

The teachers who were willing to participate and were available on the day of data collection were included in the study. Informed written consent was taken and the participation in the study was voluntary.

Structured self-administered questionnaire was used for data collection. The questionnaire was in Nepali language. The research questionnaire included questions on background information and Knowledge on ADHD scale (KADDS) tool. Background information consisted of questions related to age, sex, ethnicity, religion, marital status, residence, educational status, type of school, type of service, level of teaching, teaching experience, subject of teaching, source of information, training related to child health and development, experience with ADHD children, suspected ADHD children in class. Then, standard tool to measure knowledge on ADHD i.e., 'Knowledge on Attention Deficit Disorder Scale (KADDS)' was used. This tool was developed by Sciutto and colleagues, to measure the school teachers' knowledge on ADHD. There are 36 items and three subscales (associated features, symptoms/diagnosis, and treatment) with three options to response, that is incorrect, correct and don't know responses, which makes The internal consistency of instrument was established by Cronbach Alpha, which was 0.79. Each correct response was provided score 1 and incorrect response, don't know response and no response was provided score 0. Level of knowledge was classified as: adequate knowledge ( $\geq$ mean score =  $\geq$ 15.73) and inadequate knowledge (<mean score = <15.73) (Lamichhane et al., 2019). The English version of instrument was translated into Nepali language and then back translation to English language by bilingual expert. Then it was compared with the original version.

Validity was maintained by extensive literature review and consulting with subject matter expert. To ascertain the relevancy, completeness and usability of test instrument, pretesting was done in 10 % of the total sample i.e. 12 basic level teachers in a private school

which meet the sample criteria. Those who were pretested were not included in the actual study. On the basis of findings of pre-testing, instrument was revised for "others" options in religion and ethnicity characteristics and finalized for data collection.

Data was collected in the respective schools at the teacher's room/office. Administering the structured self-administered questionnaire. It took 15-20 minutes to complete the questionnaire by the teachers. The duration of data collection was two weeks from 30<sup>th</sup> October, 2022 to 12<sup>th</sup> November, 2022.

The data was analyzed on the basis of research objectives. Collected data was checked and organized for its completeness and accuracy. Then, analysis was done in Statistical Package for Social Science (SPSS) version 16. Both the descriptive statistics such as, frequency, percentage, mean and inferential statistics (chi-square test) was used to find out the association between selected variables and the level of knowledge.

"The study was approved by Research Committee of Tribhuvan University, Institute of Medicine, Pokhara Nursing Campus. Formal permission was obtained from concerned schools. Purpose of the study was explained and informed written consent was taken. Code number instead of name was used to maintain Anonymity, and the identity and information was not disclosed to others to maintain the confidentiality. Participants were informed about the purpose of the study and no identifying information was asked from any participants and data was used only for the research purpose.

#### **RESULTS AND DISCUSSION**

The ADHD stands as among the prevalent neurodevelopmental conditions in childhood, typically identified during this period and frequently persisting into adulthood. Young individuals affected by ADHD might struggle with focusing, managing impulsive actions (acting without considering the consequences), or displaying excessive activity levels (CDC, 2022, 2022a). It's common for kids to face challenges with focus and behavior occasionally. Yet, for children with ADHD, these difficulties don't naturally fade away. Instead, the symptoms persist, sometimes intensify, and can create challenges in school, at home, or in their social circles. Therefore, the teachers can play a vital role in identifying, and offering support to children and parents if they have adequate knowledge. Thus, the study was aimed to find out the existing knowledge on ADHD among the basic level school teachers in Pokhara.

Table 1 shows that the mean age of the teachers was 38.22 years and standard deviation was  $\pm 8.76$ . In this study, 60.9 percent teachers were female. The results show that 62.7 percent

of teachers were Brahmin/Chhetri and 91.8 percent were Hindu, 85.5 percent were married and 86.4 percent lived in urban area. Furthermore, 50.9 percent had completed bachelor degree of education.

Table 2 reveals that 58.2% teachers were from government schools and same percentage of teachers with permanent service tenure. Highest frequency (26.4%) of teachers had 5-10 years of teaching experience and 90% of teachers' subject of teaching was other than health. Likewise, 90% of teachers learned about ADHD via internet/social media and only 25.5% had taken training on ADHD. Among them, 58.2% had experience of teaching children with ADHD. Likewise, 56.4% mentioned that they suspected children with ADHD in their class but in a study conducted in Lalitpur, 27.4 percent of the teachers experience of dealing with children with ADHD. And 50.8 percent had admitted of having suspected children with ADHD in classroom (Bhattarai & Sharma 2019). This shows there is a notable prevalence of ADHD among Nepalese children and the school level screening and intervention might confirm the problem. So that, those in need can be helped and managed in time. The children can be prevented from stress and unnecessary disciplinary actions at schools as caused by their unidentified developmental problem. Study showed that most of the teachers (74.5%) did not have any training on child health and development. This finding is similar to a previous study in Nepal, where most of the respondents (73.4%) did not have training (Bhattarai & Sharma 2019). And another study conducted in Egypt also showed 81.4% of teachers were not trained (Safaan et al., 2017). The training to the teachers related to the developmental and psychological/mental issues of children can have huge benefit in return.

**Table 1**Socio Demographic Characteristics of the Respondents (n=110)

Characteristics	Number	Percent
Age (in completed years)		
≤30 years	24	21.8
31-40 years	44	40.0
41-50 years	32	29.1
≥51 years	10	9.1
Mean age $\pm$ SD (38.22 $\pm$ 8.76)		
Sex		
Male	43	39.1
Female	67	60.9
Ethnicity		
Brahmin/Chhetri	69	62.7
Janajati	29	26.4
Dalit	9	8.2
Madhesi	2	1.8
Thakuri	1	0.9
Religion		
Hinduism	101	91.8
Buddhism	4	3.6
Christianity	3	2.7
Bon	2	1.8
Marital status		
Married	94	85.5
Unmarried	14	12.7
Single	2	1.8
Residence		
Urban	95	86.4
Rural	15	13.6
Educational status		
SLC/SEE	1	0.9
Intermediate level	16	14.5
Bachelor's degree	56	50.9
Master's degree	37	33.6

**Table 2**Background Information of the Respondents (n=110)

Characteristics	Number	Percent
Type of school		
Government	64	58.2
Private	46	41.8
Service		
Permanent	64	58.2
Temporary	46	41.8
Teaching experience(in years)		
<5	15	13.6
5-10	29	26.4
11-15	27	24.5
16-20	22	20.0
≥21	17	15.5
Teaching subject		
Health	11	10.0
Othersµ	99	90.0
Source of informationa		
Social media/internet	99	90.0
Television and radio	87	79.1
Books	48	43.6
Magazines and newspapers	44	40.0
Training	3	2.7
Training on child health and development		
Yes	28	25.5
No	82	74.5
Experience with ADHD children		
Yes	64	58.2
No	46	41.8
Suspected ADHD children		
Yes	62	56.4
No	48	43.6

<sup>4</sup>Science, math, social studies, optional math, English, computer, Nepali, <sup>4</sup>Multiple response

Table 3 illustrates that highest proportion of correct response in general features of ADHD i.e. 79.1 percent on statement "Children with ADHD are more distinguishable from normal children in a classroom setting than in a free play situation." whereas lowest proportion of correct response i.e. 7.3 percent on statement "Most estimates suggest that ADHD occurs in approximately 15% of school age children." In this study most of the teachers (79.1%) answered that children with ADHD are more distinguishable from normal children in a classroom setting than in a free play situation which was similar to the previous study finding (Aljohani, 2022). Majority (80%) of the teachers responded that parent and teacher's training in managing children with ADHD combined with medication can be effective. But the finding was contradicted by study conducted by Aljohani (2022) in which just 4.1 percent of respondents had reported the same. The discrepancy in this finding might be due to the difference in setting and national contexts. Therefore, findings from this study based on our context have generated the evidence which can be implied in our schools for the teachers who teach at basic level. This large variability in previous findings also shows the need for further studies.

**Table 3** *Knowledge on General Features of ADHD (n=110)* 

General features	Correct	Incorrect	Don't	Level o	of
	response	response	know	Knowle	edge
	No.(%)	No.(%)	response	$\chi^2$	P
			No.(%)		
Most estimates suggest that ADHD	8(7.3)	71(64.5)	31(28.2)	0.964	0.496
occurs in approximately 15% of					
school age children. # ADHD children are typically more	61(55.5)	26(23.6)	23(20.9)	7.103	0.008
compliant with their fathers than					
with their mothers. ADHD is more common in the	64(58.2)	11(10)	35(31.8)	4.389	0.036
1st degree biological relatives					
(i.e. mother, father) of children					
with ADHD than in the general					
population.					

It is possible for an adult to be	74(67.3)	10(9.1)	26(23.6)	17.621	< 0.001
diagnosed with ADHD.  Symptoms of depression are found	78(70.9)	12(10.9)	20(18.2)	15.222	< 0.001
more frequently in ADHD children					
than in non-ADHD children. Most ADHD children "outgrow"	28(25.5)	61(55.5)	21(19.1)	2.689	0.101
their symptoms by the onset of					
puberty and subsequently function					
normally in adulthood. # If an ADHD child is able to	52(47.3)	42(38.2)	16(14.5)	0.932	0.334
demonstrate sustained attention to					
video games or TV for over an hour,					
that child is also able to sustain					
attention for at least an hour of class					
or homework. # A diagnosis of ADHD by itself	72(65.5)	17(15.5)	21(19.1)	1.532	0.216
makes a child eligible for placement					
in special education. # ADHD children generally experience	81(73.6)	21(19.1)	8(7.3)	6.638	0.010
more problems in novel situations					
than in familiar situations. # There are specific physical features	69(62.7)	24(21.8)	17(15.5)	4.876	0.027
which can be identified by medical					
doctors (e.g. pediatrician) in making					
a definitive diagnosis of ADHD. # In school age children, the	31(28.2)	42(38.2)	37(33.6)	14.257	< 0.001
prevalence of ADHD in males and					
females is equivalent. #					
In very young children (less than 4	65(59.1)	21(19.1)	24(21.8)	9.374	0.002
years old), the problem behaviors of					
ADHD children (e.g. hyperactivity,					
inattention) are distinctly different					
from age-appropriate behaviors of					
non-ADHD children. #					

Children with ADHD are more	87(79.1)	13(11.8)	10(9.1)	0.019	0.891
distinguishable from normal children					
in a classroom setting than in a free					
play situation.					
The majority of ADHD children	71(64.5)	20(18.2)	19(17.3)	2.362	0.124
evidence some degree of poor school					
performance in the elementary					
school years.					
Symptoms of ADHD are often seen	50(45.5)	39(35.5)	21(19.1)	1.844	0.174
in non-ADHD children who come					
from inadequate and chaotic home					
environments.					

#negative response; χ² Pearson's Chi square Test, \*p values significant at<0.05 level

**Table 4** *Knowledge on Sign and Symptoms/Diagnosis of ADHD (n=110)* 

Sign and symptoms/diagnosis	Correct	Incorrect	Don't	Level o	of
	response	response	know	Knowle	edge
	No.(%)	No.(%)	response	$\chi^2$	P
			No.(%)		
ADHD children are frequently	74(67.3)	19(17.3)	17(15.5)	6.614	0.010
distracted by extraneous stimuli. In order to be diagnosed with ADHD,	34(30.9)	28(25.5)	48(43.6)	5.517	0.019
the child's symptoms must have been					
present before age 7. One symptom of ADHD children is	41(37.3)	41(37.3)	28(25.5)	0.704	0.401
that they have been physically cruel					
to other people. # ADHD children often fidget or	83(75.5)	15(13.6)	12(10.9)	0.302	0.583
squirm in their seats. It is common for ADHD children to	51(46.4)	34(30.9)	25(22.7)	0.487	0.485
have an inflated sense of self-esteem					
or grandiosity. #					

of stealing or destroying other people's things. #	7
neonle's things #	7
people's unings.	7
Current wisdom about ADHD 83(75.5) 9(8.2) 18(16.4) 2.755 0.097	
suggests two clusters of symptoms:	
One of inattention and another	
consisting of hyperactivity/	
impulsivity.	
In order to be diagnosed as ADHD, a 82(74.5) 12(10.9) 16(14.5) 2.031 0.154	1
child must exhibit relevant symptoms	
in two or more settings (e.g., home,	
school).	
ADHD children often have 98(89.1) 4(3.6) 8(7.3) 1.665 0.197	7
difficulties organizing tasks and	
activities.	

#negative response;  $\chi^2$  Pearson's Chi square Test, \*p values significant at<0.05 level

**Table 5** *Knowledge on Treatment of ADHD (n=110)* 

Treatment	Correct	Incorrect	Don't	Level of	f
	response	response	know	Knowle	dge
	No.(%)	No.(%)	response	$\chi^2$	P
			No.(%)		
Current research suggests that ADHD	79(71.8)	17(15.5)	14(12.7)	0.033	0.855
is largely the result of ineffective					
parenting skills. # Antidepressant drugs have been	39(35.5)	15(13.6)	56(50.9)	16.361	< 0.001
effective in reducing symptoms for	, ,	, ,			
many ADHD children. Parent and teacher training in	88(80.0)	5(4.5)	17(15.5)	6.147	0.013
managing an ADHD child are					
generally effective when combined					
with medication treatment.					

When treatment of an ADHD child	36(32.7)	35(31.8)	39(35.5)	0.932	0.087
is terminated, it is rare for the child's					
symptoms to return. #					
Side effects of stimulant drugs used	45(40.9)	6(5.5)	59(53.6)	25.788	< 0.001
for treatment of ADHD may include					
mild insomnia and appetite reduction. Individual psychotherapy is usually	61(55.5)	33(30.0)	16(14.5)	9.296	0.002
sufficient for the treatment of most					
ADHD children.					
In severe cases of ADHD, medication	36(32.7)	27(24.5)	47(42.7)	7.356	0.007
is often used before other behavior					
modification techniques are					
attempted.					
Reducing dietary intake of sugar or	26(23.6)	38(34.5)	46(41.8)	3.485	0.062
food additives is generally effective					
in reducing the symptoms of ADHD.					
#	04/04 0	0.5 (0.0.5)	61 (55.5)	24.500	0.004
Stimulant drugs are the most	24(21.8)	25(22.7)	61(55.5)	24.790	< 0.001
common type of drug used to treat					
children with ADHD.	50(52.6)	24(21.0)	27(24.5)	7.120	0.000
Behavioral/Psychological	59(53.6)	24(21.8)	27(24.5)	7.129	0.008
interventions for children with					
ADHD focus primarily on the child's					
problems with inattention. # Electroconvulsive Therapy (i.e. shock	16(14.5)	17(15.5)	77(70.0)	0.033	0.855
treatment) has been found to be an					
effective treatment for severe cases of					
ADHD. #					
Treatments for ADHD which focus	10(9.1)	41(37.3)	59(53.6)	10.277	0.001
primarily on punishment have been					
found to be the most effective in					
reducing the symptoms of ADHD. #					

#negative response; χ² Pearson's Chi square Test, \*p values significant at<0.05 level

**Table 6**Level of Knowledge on ADHD (n=110)

Level of Knowledge	Number	Percent
Adequate	56	50.9
Inadequate	54	49.1
Mean $\pm$ SD (15.73 $\pm$ 4.654)		
Score Range (0-32)		

Table 4 depicts that highest proportion of correct response on sign and symptoms and diagnosis of ADHD i.e. 89.1 percent on statement "ADHD children often have difficulties organizing tasks and activities" whereas lowest proportion of correct response i.e. 30.9 percent on statement "In order to be diagnosed with ADHD, the child's symptoms must have been present before age 7."

Table 5 shows that highest proportion of correct response on treatment of ADHD i.e. 80 percent on statement "Parent and teacher training in managing an ADHD child are generally effective when combined with medication treatment." whereas lowest proportion of correct response i.e. 9.1 percent on statement "Treatments for ADHD which focus primarily on punishment have been found to be the most effective in reducing the symptoms of ADHD."

Table 6 shows that 50.9% of respondents had adequate knowledge on ADHD and mean score was 15.73 and maximum score was 32. This finding is similar to another study conducted in Rupandehi, Nepal where 44.2 percent of respondents had high level of awareness on ADHD whereas similar study conducted in Chitwan, Nepal revealed that 32 percent of respondent had adequate knowledge (Lamichhane & Sharma, 2019), and another study in Lalitpur by Bhattarai & Sharma (2019) found 24.2 percent of respondents had fair knowledge. Similarly, the studies conducted in in Egypt by Safaan et al. (2017) had illustrated 10.2 percent had good knowledge and the study conducted in Saudi Arabia represented the average percentage of overall knowledge score on ADHD as  $38 \pm 11.3$  (Safaan et al., 2017). Therefore, with a little variation, there is almost similar findings that the teachers' knowledge on ADHD among children is low. Considering this the educational intervention is very imperative to teachers. And the future study can assess the effectiveness of the intervention as well.

**Table 7** *Association between Selected Variables and Level of Knowledge (n=110)* 

Characteristics	Level of knowledge	Level of knowledge		P value	
	Adequate No.(%)	Adequate No.(%) Inadequate No.(%)			
Age					
≤40 years	31(45.6)	37(54.4)	2.018	0.155	
≥41 years	25(59.5)	17(40.5)			
Sex					
Male	29(67.4)	14(32.6)	7.721	0.005*	
female	27(40.3)	40(59.7)			
Ethnicity					
Brahmin/Chhetri	35(50.7)	34(49.3)	1.622	0.444	
Janajati	13(44.8)	16(55.2)			
others	8(66.7)	4(33.3)			
Marital status	, /	` '			
Married	47(50.0)	47(50.0)	0.214	0.644	
Unmarried/single	9(56.3)	7(43.8)			
Residence	` /	` /			
Urban	48(50.5)	47(49.5)	0.041	0.840	
Rural	8(53.3)	7(46.7)			
Educational status	- ( /	( )			
Secondary level	11(64.7)	6(35.3)	1.678	0.432	
Bachelor's degree	28(50.0)	28(50.0)			
Master's degree	17(45.9)	20(54.1)			
Type of school	. ( )	- (- · /			
Government	36(56.3)	28(43.8)	1.747	0.186	
Private	20(43.5)	26(56.5)			
Type of service	()	( )			
Permanent	34(53.1)	30(46.9)	0.301	0.583	
Temporary	22(47.8)	24(52.2)	0.501	0.505	
Teaching experience	22(.7.0)	- 1(02.2)			
<10 years	20(45.5)	24(54.5)	1.819	0.403	
11-20 years	25(51.0)	24(49.0)	1.01)	0.105	
>20 years	11(64.7)	6(35.3)			
Subject of teaching	11(07.7)	0(33.3)			
Health	9(81.8)	2(18.2)	4.672	0.031*	
Others	47(47.5)	52(52.5)	T.U/2	0.051	
Training related to child	17(37.5)	32(32.3)			
health and development					
Yes	11(39.3)	17(60.7)	2.031	0.154	
No	45(54.9)	37(45.1)	2.031	0.134	
Experience with ADHD	TJ(JT.7)	37(43.1)			
children	38(59.4)	26(40.6)	4.389	0.036*	
Yes		` /	4.307	0.030	
No	18(39.1)	28(60.9)			

 $<sup>\</sup>chi^2$  Pearson's Chi square Test, \*p values significant at<0.05 level

Table 7 illustrates that there is statistically significant association between sex of teachers (p=0.005), their subject of teaching (p=0.031) and experience of teachers with ADHD children (p=0.036), and level of knowledge on ADHD. This finding is similar to the previous findings in Nepal (Bhattarai & Sharma, 2019) and a study in Trinidad and Tobago, where the experience of respondents in dealing with children with ADHD was associated with the level of knowledge (Youssef et al., 2015). However, this finding contradicted to other multiple studies ((Lamichhane & Sharma, 2019; Nakarmi & Bhandari, 2022; Bhattarai et al., 2020; Dessie et al., 2021). Therefore, the associated factors with the teachers' level of knowledge on ADHD might be setting and context specific. Hence, this study has generated the findings that can be utilized with great assurance and can have important implication specific to the basic level school teachers in Pokhara. Consequently, this will help in planning effective educational and training intervention for teachers in enhancing teachers' knowledge level and to help in better recognition and support to the children with ADHD at schools.

#### **CONCLUSION**

Study concludes that about half of the basic level school teachers have inadequate knowledge on ADHD. The variables such as sex, teaching subject and experience of teachers in dealing with symptoms of ADHD in children were associated with the level of knowledge on ADHD of basic level school teachers. Based on the findings, the educational programs to enhance the knowledge on ADHD among basic level school teachers can be planned. So that it will be beneficial in timely recognizing and offering support to the children having ADHD. Findings might be used as baseline information for upcoming researchers to conduct further studies. The findings might be helpful to concerned schools and Municipal education division to plan educational programs on ADHD for school teachers in Pokhara. This study was limited in schools of Pokhara, so that the findings have limited generalizability to other geographical area.

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