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### Original Article

## Knowledge of Primary School Teacher Regarding Learning Disabilities in School Children.

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### Abstract

#### Background

Learning disability refers to a heterogeneous group of disorders manifested by difficulty in reading, writing, spelling and reasoning ability. It usually show up when a child has difficulty reading, speaking, writing, figuring out a math problem, communicating with parents or paying attention in class. Children with learning disability can succeed in school and can have successful career in life if right support and intervention is provided to them.

#### Material & Methods

Quantitative approach with Descriptive crosssectional design was used to assess the knowledge of primary school teachers. A structured knowledge questionnaire was developed focusing on learning disabilities. The study was carried out in 16 schools of Dharan, Nepal. About 150 primary school teachers were selected by convenience sampling technique. Structured knowledge questionnaire was used to collect needed data on knowledge of primary school teachers. The data collected were tabulated and analyzed by using descriptive and inferential statistics.

#### Results

Majority, 79 (52.67%) of the primary school teachers had moderately adequate knowledge and 71 (47.33%) had inadequate knowledge regarding learning disabilities. There was a significant association of knowledge of primary school teachers with demographic variables such as class involved in teaching.

#### Conclusion

The school teachers have inadequate knowledge regarding learning disabilities. The teachers play an important role in identifying learning disabilities in school children at initial state. The children with learning difficulties should be helped at early stage and proper training and guidance should be provided to them.

**Keywords:** *Knowledge, Learning disabilities and School children, Primary school teachers*

### Introduction

Learning disability is a disorder that refers to difficulties in listening, speaking, reading, writing and mathematics. 10 out of every 100 school children are said to suffer from learning disabilities in the world [1]. Nearly 3 million students receive

special education every year and halves which are 15% of US population are diagnosed with learning disabilities every year [2]. The common learning disabilities are dyslexia (Problem in reading); dysgraphia (problem with spelling, handwriting); dyscalculia (problem in

mathematics); dysparaxia (Poor balance and eye- hand coordination) [3]. A child with a learning problem has several related difficulties which last over time. The sign differ from one person to another. Schools are hostile towards learning disabilities at large. The teachers are unknown about features and difficulties in children. The lack of necessary facilities for identification results in damage to the self esteem and discourages them to study [4].

The teachers are challenged to find and provide best possible instructions to the children with learning disability as they find it difficult to adjust in schools. The source of best support and good resources should be initiated in the school environment by the teachers [5]. A study conducted by Shari M found that only 5% of the teachers had adequate knowledge about learning disabilities. There were statistically significant differences in overall knowledge, causes and classification, clinical manifestation, investigations across the 'gender' variable [6]. In Nepal, teachers and parents are not aware of learning problems found in children. Children with learning disabilities find difficulties in trying hard, have low attention span and cannot be motivated themselves on their own. It is not a problem with intelligence but it is caused by a process that affects receiving, processing and communicating information. People with learning disabilities have difficulty in processing sensory information because they have different view to see, hear and understand things [3]. A study was conducted by Shenoy J, Kapoor M to assess the factors affecting learning in children revealed that teacher's negligence, parent's bad behavior and poor instruction are the factors responsible for learning problems [7].

Children with learning difficulties are risk population. The children have trouble in expressing their feelings, calming themselves down. These children are likely

to develop low self-esteem, have fewer friends, and are one and one-half times more likely to drop out of school. So, they need to be identified at the earlier stage and proper training and guidance should be provided to them [8].

**Materials and Methods**

Quantitative approach with Descriptive cross-sectional design was used to assess the knowledge of primary school teachers regarding learning disabilities in school children. A structured knowledge questionnaire was developed focusing on learning disabilities. The level of knowledge was categorized into adequate, moderately adequate and inadequate [6]. Convenience sampling technique was used. The study was carried out in 16 schools of Dharan, Nepal. About 150 primary school teachers were selected by convenience sampling technique. Structured knowledge questionnaire was used to collect needed data on knowledge of primary school teachers. The collected data were analyzed using SPSS version 22. Frequency and percentage distribution was used to determine the level of knowledge. Chi square test was used to associate the knowledge of primary school teachers with demographic variables.

**Results**

**Table - 1: frequency and percentage distribution of primary school teachers according to their demographic variables.**

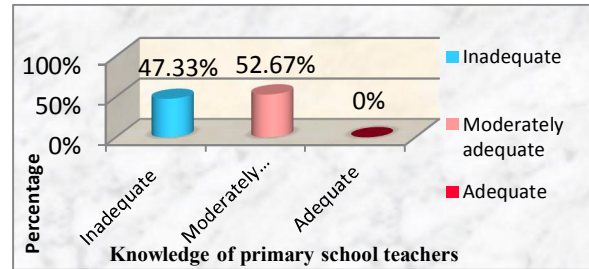
n = 150

S. no	Demographic variables	Categories	Frequency	Percentage
1	Age	21-30 yrs	40	26.7
		31 – 40 yrs	46	30.7
		41-50 yrs	40	26.7
		51- 60 yrs	24	16
2	Sex	Male	58	38.7
		Female	92	61.3
3	Marital status	Married	103	68.7
		Unmarried	33	22.0
		Separated	14	9.3
4	Religion	Hindu	12	84.7

			7	
		Muslim	1	0.7
		Christian	7	4.7
		Buddhists	15	10.0
5	Educational qualification	Certificate level	18	12.0
		Intermediate level	58	38.7
		Bachelor level	56	37.3
		Master level	18	12.0
6	Years of teaching experience	Below one year	16	10.7
		1-3 yrs	31	20.7
		Above three years	10	68.7
7	Class involved in teaching	One	16	10.7
		Two	38	25.3
		Three	41	27.3
		Four	39	26.0
		Five	16	10.7
8	Identification of child with learning disabilities	Yes	98	65.3
		No	52	34.7

Table 1 Depicts the frequency and percentage distribution of primary school teachers according to their demographic variables. Maximum numbers

46(30.7%) of the subjects were in the age group of 31-40 years, majority i.e. 92(61.3%) of the subjects were females, majority i.e.103(68.7%) of the subjects were married, maximum of 127 (84.7%) subjects belonged to Hindu religion, majority i.e.58(38.7%) completed their intermediate level of education, majority of the subjects 103(68.7%) had more than 3 yrs of teaching experiences, 39(26.0%) were involved in teaching third grade students, majority of the respondents 98(65.3%) had identified a child with learning disabilities before.



Graph 1: Distribution of primary school children according to their level of knowledge regarding learning disabilities in school children.

The above graph depicts that majority of the subjects 71(47.33%) had inadequate knowledge and 79 (52.67%) of them had moderately adequate knowledge and none of them had adequate knowledge regarding identification of learning disabilities.

Table 2: Knowledge Scores of Primary School Teachers on Knowledge Questionnaire

n = 150

S.No	Knowledge / Domains	Max. Score	Attributes			Mean	SD
			Adequate knowledge	Moderately adequate knowledge	Inadequate knowledge		
1	Concept and definition	4	6(4%)	94(62.67%)	50(33.33%)	1.84	0.97
2	Causes and classification	4	1(0.66%)	55(36.67%)	94(62.67%)	1.19	1.008
3	Clinical manifestations	11	1(0.67%)	38(25.33%)	111(74%)	4.57	1.569
4	Diagnosis	3	0	106(70.67%)	44(29.33%)	1.81	0.775
5	Management	8	5(3.33%)	94(62.67%)	51(34%)	3.96	1.330
6	Role of a teacher	3	146(97.33%)	0	4(2.67%)	2.59	0.545
7	Outcomes	2	116(77.33%)	30(20%)	4(2.67%)	1.75	0.494
<b>Over all</b>		35	0	79(52.67%)	71 (47.33%)	33.51	6.884

The above table describes the outcomes of maximum score, knowledge score of different attributes, mean and SD in overall aspects and also the different domains of knowledge. On an overall aspect of knowledge, with the maximum score of 35, the mean score was 33.51 having SD of 6.884. Majority of the respondents ie 146(97.33%) had adequate knowledge about role of a teacher.

**Table - 3 : Association of Level of knowledge of primary school teachers with their demographic variables.**

n = 150

Sl no	Demographic variables	Categories	Knowledge level		N	Test Statistic		Inference
			Moderately adequate	Inadequate		df	$\chi^2$ and p- value	
1	Age	21-30 yrs	21	19	40	3	$\chi^2 = 4.064$ $p = 0.255$	NS
		31 – 40 yrs	29	17	46			
		41-50 yrs	18	22	40			
		51- 60 yrs	10	14	24			
2	Sex	Male	31	27	58	1	$\chi^2 = 0.079$ $p = 0.78$	NS
		Female	47	45	92			
3	Marital status	Married	52	51	103	2	$\chi^2 = 0.944$ $p = 0.62$	NS
		Unmarried	17	16	33			
		Separated	9	5	14			
4	Religion	Hindu	67	60	127	3	$\chi^2 = 2.75$ $p = 0.60$	NS
		Christian	2	6	8			
		Buddhists	9	6	15			
5	Educational qualification	Certificate level	9	9	18	3	$\chi^2 = 1.57$ $p = 0.67$	NS
		Intermediate level	31	27	58			
		Bachelor level	31	25	56			
		Master level	7	11	18			
6	Years of teaching experience	Below one year	6	10	16	2	$\chi^2 = 2.69$ $p = 0.26$	NS
		1-3 yrs	14	17	31			
		Above three years	58	45	103			
7	Class involved in teaching	One	8	8	16	4	$\chi^2 = 13.13^*$ $p = 0.01$	S
		Two	11	27	38			
		Three	25	16	41			
		Four	22	17	39			
		Five	12	4	16			
8	Identification of child with learning disabilities	Yes	52	46	98	1	$\chi^2 = 0.13$ $p = 0.72$	NS
		No	26	26	52			

Above table envisage the outcome of chi square analysis being carried out to bring out the association between the knowledge of primary school teachers with their demographic variables. Out of which, only class involved in teaching (chi square value = 13.13, 4 df) was significant and rest of the demographic characteristics such as age, sex, marital status, religion, educational qualification, years of teaching experience and identification of child with learning disabilities were not significant with the knowledge.

### Discussion

Teachers play a important role in identifying children with learning difficulties. They are the first ones to recognize difficulties in school children. There is lack of knowledge regarding these conditions due to lack of awareness and

special training courses to the teachers regarding identification of learning difficulties. The study conducted in Pakistan have shown inadequate knowledge about learning problem seven amongst healthcare providers [9,10].

The objective of the study was to assess the knowledge of primary school teachers regarding learning disabilities in children. The distribution of primary school teachers according to the level of knowledge showed that majority of the teachers 79 (52.67%) of them had moderately adequate knowledge and 71 (47.33%) had inadequate knowledge and none of them had adequate knowledge regarding identification of learning disabilities. Findings are supported by a study conducted on 200 primary school teachers in Bangalore, India. The study revealed that the majority of the teachers 148 (74) had moderately adequate knowledge and 42 (21) had inadequate knowledge and only 5% had adequate knowledge [6]. The other study on awareness of learning disabilities also had similar findings which showed that 86% of the teachers had medium level of knowledge, 14% had low level of knowledge [11].

Additionally, there was high number of responses marked with "Don't Know". This indicates that the teachers are aware that they have insufficient knowledge regarding identification of learning difficulties. Similar findings were seen in study conducted by Gerber MM. [12], where 86% of teachers identified that their knowledge regarding learning disabilities were low. The present study showed that majority of the teachers had inadequate knowledge regarding causes and definition (62.67%) and clinical manifestations i.e 74%. The primary teachers had adequate knowledge regarding role of teacher and outcomes of treating learning disabilities i.e 97.33% and 77.33% respectively. It is interesting to know that none of them had adequate knowledge on diagnosis of learning disability.

The above findings were supported by the study on awareness of learning disabilities which explained that 32% were aware of the concept, 35% on type of learning

disabilities, 29% on causes of learning disabilities [13]. These findings were also in agreement with the results of Kakabaraee K.Arjmandnia A. Afrooz G. [14] that revealed 82.1% of teachers achieved a score higher than 10 for causes of learning disabilities. Teachers had 82.1% of knowledge and information about the causes of learning disability. The findings were on the contrary with the results of Jeromey and Kelvan et al. [14, 15], which revealed that school teachers have a good knowledge about the nature of learning disability. The findings of Westwood [16] claimed that primary teachers are skilled in determining the age of occurrence of learning problem.

The second objective was to associate the knowledge scores with selected demographic variables. There was a significant association of knowledge of primary school teachers with demographic variables such as class involved in teaching. Another important finding is no association between knowledge and teaching experience. It is consistent with the study conducted by Anand Lingewaran [17]. While, the findings were contrary with Adebawale and Moye [18] who found that there was no significant difference in the knowledge of school teachers with age or teaching experience.

The results of the study conducted by Shari M, Narasimha Vrandana [6] revealed that teachers had low level of knowledge. School teachers should be familiar with the children with learning problems and should be capable of identification of these problems in them. This cannot be accomplished without increasing the knowledge of teachers and parents who close relationship with the students. The findings of the study on identification of learning disabilities explained that 85.5% of teachers didn't attend any special courses on learning disabilities. 69.5% of them had never seen a child with learning

problem before, and only 30.5% teachers were able to identify learning disabilities in their students. Today, teachers are more aware and have positive attitude towards children with learning disabilities, but have less knowledge about the sign and symptoms and management of children with LD. The priority of the teachers is to be focused on helping all children learn to reach the highest levels of their potentials. Primary school teachers were deficient in knowledge and skill in spite of working with children with LD. Learning Package is an effective method to increase the competency of Primary School Teachers regarding LD by saying that cognitive change can be brought about by teaching programme [19].

Teachers do not have adequate knowledge regarding learning problems, and don't know what should be done when facing those problems. The results evidenced that their knowledge about learning disorders is superficial, because they did not have any courses about learning disabilities during their academic session.

### Conclusion

The present study assessed the knowledge of primary school teachers regarding learning disabilities among the school children. The findings of the study revealed that majority of the teachers 79 (52.67%) of them had moderately adequate knowledge regarding learning disabilities. Appropriate training should be provided to the teachers regarding identification, diagnosing and managing the child with learning problems so that child can succeed in school and go on successful careers later in life.

### References

- [1] Sakhuja S. Education for all and learning disabilities in India, 2004.
- [2] Latha V. Dyslexia or learning disability- 10- the concluding post, 2008.
- [3] Children with learning disabilities a misunderstood lot, The Himalayan Times, 2009.
- [4] Dalwai S, Kanade D, Sane M, Chatterjee S. Awareness and sensitivity- The Alpha and Omega of learning disability.
- [5] Padmavati. D., K. Lalitha., Effectiveness of Structured Teaching Programme for teachers towards learning disabilities, Nightingale Nursing Times. 05 (2009) 14-17.
- [6] Shari M, Narasimha V, Vranda, Knowledge of Primary School Teachers in Identifying Children with Learning Disabilities. Disability, CBR & Inclusive Development. 26 (2015) 443.
- [7] Shenoy J, Kapoor M, Prevalence of scholastic backwardness among 5 to 8-year old children, Indian J Psychiat. 38 (1996) 201-7.
- [8] Vandenberg B, Emery D, A longitudinal examination of the remediation of learning disability, 2006.
- [9] Jawaid A, Zafar AM, Naveed A, Sheikh S, Waheed S, Zafar MA, et al, Knowledge of primary paediatric care providers regarding attention deficit hyperactivity disorder and learning disorder: a study from Pakistan, Singapore Med J. 49 ( 2008) 985-93.
- [10] Rahbar MH, Ibrahim K, Assassi P, Knowledge and Attitude of General Practitioners Regarding Autism in Karachi, Pakistan, J Autism Dev Disord. 41 (2011) 465-7.
- [11] Sawhney N, Bansal S. Study of awareness of learning disabilities of elementary school teachers. (2014).
- [12] Gerber MM, Teachers are still the test: limitations of response to instruction strategies for identifying children with learning disabilities, J Learn Disabil. 38(2005) 516-24.
- [13] Shukla P, Agrawal G, Awareness of learning disabilities among teachers of primary schools, OJMR 1 (2015) 33-38.
- [14] Kakabarae K., Arjmandnia A., Afroz G., The study of awareness and capability of primary school teachers in identifying students with learning disabilities in the province of

- Kermanshah, Social and behavioural sciences. (2012) 2615-19.
- [15] Fatahi A A., Effects of teacher knowledge of learning disabilities on how to return feedbackacademic and emotional reactions to students with learning disabilities, *Journal in new Science Education*. 3 (2007) 143-160.
- [16] Westwood PS, What teachers need to know about learning difficulties, Carolyn Glascodine (ed.), Camberwell, Vic.: ACER Press. (2008) 2.
- [17] Lingeswaran A., Assesing knowledge of primary school teachers on specific learning disabilities in two schools in India, *J Educ Health Promot*. 2 (2013) 30.
- [18] Adebowale OF, Moye GP, Teachers' Knowledge of, and Attitude towards Learning Disabilities, *The Online Education Research Journal*. (2013).
- [19] Williams A, Singh G, Narayan P., Competency of School Teachers Regarding Learning Disabilities, *IOSR Journal of Nursing and Health Science*. 2(2013) 20-23