

Knowledge and Attitude on Learning Disabilities among Selected Primary School Teachers in Madi, Chitwan

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ABSTRACT

Background: Learning disabilities (LD) represent a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities. Teachers play a pivotal role in identifying the child with LD and many aspects of treatment planning and implementation. This study aimed to find out the knowledge regarding learning disabilities among primary teachers of Madi Municipality, Chitwan.

Method: A descriptive cross-sectional study was carried out among 105 primary teachers from 10 government schools in Madi Municipality, Chitwan. A non-probability purposive sampling technique was used to select the sample. The data were analyzed in SPSS version 26, using descriptive statistics.

Result: Among 105 respondents, 66.7 % were age group between 30-49 years. Regarding knowledge, 9.5%, 53.3%, and 37.2% of respondents had adequate, moderate, and inadequate level knowledge on learning disabilities respectively.

Conclusion: Adequate knowledge on learning disabilities found to be low among respondents. The study highlights the necessity for targeted professional development programs for enhancing teachers' knowledge on learning disabilities, so that children can do well in school and have fulfilling lives in the future.

Key words: learning disabilities; primary teacher; knowledge.

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INTRODUCTION

The term "learning disabilities" refers to a broad category of disorders characterized by notable challenges in the development and application of speaking, listening, reading, writing, reasoning, and arithmetic skills.¹ Learning disability generally appear in early childhood, usually before children start school, and can persist into adulthood. Its negatively impact a person functioning in one or more domain of life i.e., personal, social, academic and occupational.² Learning disabilities are differences in a person's brain that can affect how well they read, write, speak, do math, and handle other similar tasks. Having a learning disability, isn't related to intelligence. It just means that the person's brain works differently from others.³ The prevalence rate for all types of specific learning disabilities are around 5-15%, 4 million children younger than 18 year have learning disabilities and boys and girls ratio is are 3:1.⁴ In Nepal, 30%, 20%, 11% and 30% had severe dyslexia, severe dysgraphia, mild dysgraphia and severe dyscalculia in government school while in private schools, 4%, 6%, and 10% had severe dyslexia, severe

dysgraphia and severe dyscalculia respectively.⁵

METHODS

A descriptive cross-sectional study design was conducted to assess the knowledge on learning disabilities among primary teachers of ten government schools of Madi Municipality, Chitwan. Ethical approval was taken from Institutional Review Committee of the same institute, Madi Municipality, schools and written informed consent was taken from participants prior to data collection. The primary teachers who met the inclusion criteria were recruited in the study. A purposive sampling method was used to select the sample. The sample size was 105 with 10 % non-response error and calculated by using 6.7% of prevalence.⁶ A study conducted by Arifa and Siraf showed the level of knowledge as 6.7%, with 95% CI and 5% error, sample size was calculated using following formula. $Sample\ size(n) = Z^2 p q / (d)^2$

$$n = (1.96)^2 * 0.067 * 0.933 / (0.05)^2 = 96$$

By adding 10% non response rate, optimal sample size was 105. Data was collected by distributing self-administer questionnaire. Questionnaire consists of socio-demographic variables of the respondents,

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professional information, and knowledge related questions regarding learning disabilities. Data was taken from each participant of 10 schools by ensuring not to disclose the given information to anyone unrelated to the research project. After collecting data, checked it for completeness and restore for further analysis. The data was analyzed in SPSS version 20.

RESULTS

Out of 105 respondents, the most (66.7%) of respondents were the age group between 30-49 years old. The mean age was 36.74 years (SD=8.68). More than two-thirds (78.15%) of respondents were female, and the remaining 21.9% were male. majority (97.1%) of respondents were Hindu, and nearly half (47.6%) of the respondents belong to Brahmin. Regarding the educational qualification, 43.8% and 8.6% of the respondents had completed their intermediate and S.L.C. levels, respectively and respondents who got information from the internet were 56.3% (Table 1).

Variables	Frequency (%)
Age in years	
<30	23 (21.9)
30-49	70(66.7)
≥50	12 (11.4)
Mean±SD 36.74±8.68	
Gender	
Male	23 (21.9)
Female	82 (78.1)
Religion	
Hindu	102 (97.1)
Buddhist	1 (1.0)
Christian	2 (1.9)
Ethnicity	
Brahmin	50 (47.6)
Chhetri	25 (23.8)
Janjati	17 (16.2)
Dalit	12 (11.4)
Madhesi	1 (1.0)
Educational qualification	
S.L.C passed	9 (8.6)
Intermediate level	46 (43.8)
Graduate	38 (36.2)
Post graduate	12 (11.4)
Source of information (Multiple responses)	
Television	36 (35.0)
Radio	30 (29.1)
Colleague	39 (37.9)
Internet	58 (56.3)
News Paper	38 (36.9)
Books	27 (26.2)
Others	6 (5.8)

Table 2 illustrates that more than one-third (37.1%) of the respondents had 1-5 years of teaching experience, and nearly two-thirds (72.4%) of the respondents are currently teaching at the primary level. In addition, 24.8% of respondents had received in-service education, and among them, teacher professional development training was taken in 92.3%. The majority (73.3%) of respondents had faced with learning disabilities children, and among them, maximum (80.3%) and minimum (13.2%) of respondents were faced with dyslexia and dyspraxia, respectively.

Variables	Frequency (%)
Teaching experience	
<1 years	9 (8.6)
1-5 years	39 (37.1)
6-10 years	22 (21.0)
>10 years	35 (33.0)
Area of teaching	
Early childhood development	17 (16.2)
Primary level	76 (72.4)
Both	12 (11.4)
Attended of In-Service Education	
26 (24.8)	
Type of in-Service education	
Continue education	2 (7.7)
Teacher professional development training	24 (92.3)
Faced with learning disabilities Children	
77 (73.3)	
Type of learning disability faced by teachers*	
dyslexia	61 (80.3)
dysgraphia	50 (65.8)
dyscalculia	36 (47.4)
Auditory processing disorder	20 (26.3)
Nonverbal learning disability	15 (19.7)
Dyspraxia	10 (13.2)

*Multiple responses

Table 3 Illustrates, 61%, 58%, and 63.8% of the respondents answered correctly the meaning of dyslexia, dysgraphia and dyscalculia respectively.

Table 4 demonstrates that, 59.0 %, 84.8%,91.4% and 49.5% of respondents had answered correctly about the meaning of dyspraxia, auditory processing disorder, visual processing disorder and non-verbal learning disability respectively.

Table 5 demonstrates, among 105, only a few (9.5%) respondents had adequate level of knowledge while 60% of respondents have most favorable attitude on learning disabilities.

Table 3. Respondents' Knowledge on Dyslexia, Dysgraphia, Dyscalculia. (n=105)	
Variables	Frequency (%)
Dyslexia	
Dyslexia is difficult with reading and reading fluency	64 (61.0)
Remedial teaching for children with dyslexia is choosing the appropriate teaching strategies	63 (60.0)
Dysgraphia	
Dysgraphia is difficulty with handwriting and written expression	61 (58.1)
Common symptoms of dysgraphia*	
Difficulty writing in a straight line	63 (60.0)
Omitting word from sentence while writing	35 (33.3)
Writing letter reverse	33 (31.4)
Frequent erasing while writing	49 (46.7)
Providing alternatives such as assistive technology and oral test is helpful for children with dysgraphia	59 (56.2)
Dyscalculia	
Dyscalculia is difficulty with mathematical concepts	67 (63.8)
Common symptoms of dyscalculia *	
Losing tract while counting	61(58.1)
Difficult telling time on a clock	52 (49.5)
Difficult to figuring out days/month	32 (30.5)
Difficult to solve math problems	72 (71.4)
Multisensory structure math instruction helps dyscalculic child	53 (50.5)

*Multiple responses

DISCUSSION

The study was conducted to identify the knowledge on learning disabilities among primary teachers of selected schools of Madi Municipality, Chitwan. In this study, majority (66.7%) of respondents were in age group between 30-49 years. Similar finding was obtained from the study of India, where more than half (54%) of respondents were the age range between 31 to 50 years.⁷ Furthermore, current research presents more than three quarters (78.1%) of respondents were female, which was comparable finding of Saudi Arabia where 81.7% were female.⁸ Similarly, the present study reveals, 9.5%, 53.3% and 37.2% of respondents have adequate, moderate and inadequate level of knowledge on learning disabilities. These findings were corresponding to the study conducted in India, where only 1.7%, 65.8% and 32. % of respondents had a good, average and inadequate

Table 4. Respondents' knowledge on dyspraxia, auditory and visual processing disorder, non-verbal learning disability. (n=105)	
Variables	Frequency (%)
Dyspraxia	
Difficult to coordinate body movement	62 (59.0)
Difficult with playground activities like hopping, jumping, catching are symptoms of dyspraxia	78 (74.3)
Occupational therapy is major intervention of dyspraxia	52 (49.5)
Auditory processing disorder	
Difficulty with understanding and interpreting auditory information	89 (84.8)
Trouble to distinguish between similar sound e.g. Cat, Cot is symptom of auditory processing disorder	80 (76.2)
Utilizing visual aid along with verbal instruction is the intervention of auditory processing disorder	73 (69.5)
Visual processing disorder	
Difficulty with understanding and interpreting visual information	96 (91.4)
Picture reorganization and discrimination are common symptom of visual processing disorder	90 (85.7)
Visual perceptual training is helpful to child with visual processing disorder	84 (80.0)
Non-verbal learning disability	
Difficulty understanding with body language and facial expression.	52 (49.5)
Poor social skills are the symptom of Non-verbal learning disability	62 (59.0)
Social skill training is beneficial the child with Non-verbal learning disability	64 (61.0)

Table 5. Respondents' Level of Knowledge on Learning Disabilities

Level of Knowledge	Frequency (%)
Adequate knowledge (>75%)	10 (9.5)
Moderate knowledge (50-75%)	56 (53.3)
Inadequate knowledge (<50%)	39 (37.2)
Mean±SD 1.72±0.62	

level of knowledge on learning disabilities respectively⁶ but the contradict results of another study in India, revealed that 0%, 58.33% and 41.67% of respondents had good, average and poor level of knowledge on learning disabilities.⁹ This contradict results could be due to variation in sample size. Despite having the different study setting, a limited sample size and purposive sampling technique were employed, therefore the results might not be generalized in other setting.

CONCLUSIONS

Based on the findings, we concluded that only a few teachers possess the adequate knowledge

about learning disabilities. The study highlights the necessity of training and continuing education for the primary teachers, ultimately the children can do

better performance and foster their growth.

Conflict of Interest: None

REFERENCES

1. National Joint Committee on Learning Disabilities, (2016) Learning Disabilities and Achieving High Quality Education Standards. <https://njcld.org/wp-content/uploads/2017/10/njcld-hqes-full-report-dec-2016.pdf>
2. American Psychiatric Association, (2013). Specific Learning Disorder. <https://www.psychiatry.org/patients-families/specific-learning-disorder>
3. National Institute of Child health and human development, (2018), Learning Disabilities. <https://www.nichd.nih.gov/health/topics/learningdisabilities>
4. Healthy Place Learning Disabilities Statistics and Prevalence (2024). <https://www.healthyplace.com/parenting/learning-disabilities/learning-disabilities-statistics-and-prevalence>
5. Thagunna NS, Dhungel S. Compare the learning disability among early adolescents in government and private schools of Kathmandu. *Disabilities and Impairments*. 2019;33(2):95-108.
6. Arifa S, Siraj SS. A descriptive study to assess the knowledge and attitude of primary school teachers regarding learning disabilities among children in selected schools of district Pulwama Kashmir. *IP Journal of Paediatrics and Nursing Science*. 2019;2(1):19-32.
7. Koshy B, Gamit N, Fernandes A, Chouhan DS. Knowledge and attitude of primary school teachers regarding early identification and management of learning disability. *Journal of Pharmaceutical Research International*. 2021 Nov 6;33:174-81.
8. Alahmadi NA, El Keshky ME. Assessing primary school teachers's knowledge of specific learning disabilities in the Kingdom of Saudi Arabia. *Journal of Educational and Developmental Psychology*. 2019;9(1):9-22.
9. Hunasikatti MR. A Descriptive Study to Assess the Knowledge and Attitude of School Teachers Regarding Learning Disabilities among Children in Selected Schools at Bagalkot.

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