

Original Research Article

A knowledge and attitude of school teachers towards learning disabilities in Bishnupur district, Manipur: a cross sectional study

Anaswara S. Asok, Pooja Akoijam, Avantika Gupta, Brogen Singh Akoijam*

Department of Community Medicine, Regional Institute of Medical Sciences, Imphal, Manipur, India

Received: 07 December 2020

Accepted: 18 January 2020

*Correspondence:

Dr. Brogen Singh Akoijam,

E-mail: brogen@rediffmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Background: Learning problems significantly interfere with academic activities that require reading, mathematical or writing skills. In India 10-14% of children have specific learning disability. The teacher with adequate knowledge of learning disabilities and skills or competencies can do better justice to the children than teacher with general pedagogy backgrounds. The study aimed to assess the teacher's knowledge and attitude towards learning disabilities and to determine the association between knowledge and attitude with their background characteristics.

Methods: A cross sectional study was conducted among 181 teachers of both government and private schools of Bishnupur. Data collected using self-administered questionnaires assessing the knowledge and attitude. Data entered in IBM SPSS 21. Data was expressed using descriptive statistics like frequencies and percentages. Chi-square test was used to check significance between proportions.

Results: Data was collected from 181 teachers. Mean age of participants was 42.7 ± 1 and 59.1% of them worked in govt. schools and 40.9% in private. 48.1% of them had adequate knowledge on learning disabilities. Majority (93.9%) had favourable attitude. Association between type of school the teachers taught and knowledge was found to be significant ($p < 0.05$). There was no significant association between attitude with any of the socio-demographic variables.

Conclusions: More than half of the teachers had inadequate knowledge on learning disabilities while majority of them had favourable attitude. Teachers belonging to govt. schools had better knowledge on learning disabilities.

Keywords: Knowledge, Learning disabilities, School teachers

INTRODUCTION

Learning disorders has been defined as a neuro-developmental disorder of biological origin manifesting in learning difficulties and problems in acquiring academic skills. It is a broad term that teachers, schools and assessors apply to kids who can't meet the normal requirements of classroom learning in the same way as others. Learning disorders affect the brain's ability to receive process, analyse, or store information. Learning problems significantly interfere with academic activities that require reading (dyslexia), mathematical (dyscalculia) or writing skills (dysgraphia).¹ The characteristic manifestations of students with learning

difficulties includes less attention to the instructions provided by the teacher and the task (and therefore reduced learning engagement), low efficiency, frustration, lack of motivation and depressive tendencies At school, students with learning difficulties are often rejected or are victims of various forms of bullying. The prevalence of learning disabilities in different regions of the world is estimated from 3 to 12 percent.² In India 13-14% of children have specific learning disability.³ According to National Centre for Learning Disability, teachers are the essential linkage between children with learning disabilities and interventions that help them. The teacher with adequate knowledge of learning disabilities and skills or competencies can do better justice to the children

than teacher with general pedagogy backgrounds. The teachers require specific skills to identify different types of learning disorders and manage the emotional and psychosocial problems of these children. In this context, the aim of our study was to assess the teacher's knowledge and attitude towards learning disabilities.

METHODS

A cross-sectional study was conducted in the schools located in Bishnupur district of Manipur from September-October, 2019. There are 133 affiliated schools (45 government and 88 private) in Bishnupur district. The study population consisted of 181 school teachers from 9 Government and 6 private schools of Bishnupur.

Those who refused to participate and those who could not be contacted even after two consecutive visits were excluded from the study.

Sample size and sampling

Sample size was calculated based on formula,

$$N = \frac{4PQ}{L^2}$$

Where, P= prevalence; Q = 100-P; L = Absolute allowable error.

Taking prevalence =11% from the study conducted by Shukla et al and, L=5 calculated and adding 10% non-response rate final sample size was derived as 173.⁴ Convenience sampling was used for selection of participants. A total of 15 schools were selected according to our convenience and all the teachers in those selected schools were included.

Study tools

A pretested structured questionnaire was used as study instrument which consists of three parts: Part I- background characteristics, Part II- knowledge questions on learning disabilities (10 questions). Knowledge questions were divided into two domains namely clinical features domain (6 questions) and concept and cause domain (4 questions). Part III- attitude statements on learning disabilities (10 statements).

For knowledge scoring, each correct answer was awarded a score of 1 and 0 for incorrect answer. Maximum attainable score was 10 and minimum was 0. Participants with a score of ≥ 7 was considered to have adequate knowledge adequate knowledge. Attitude scoring was done using a five-point Likert scale for the 10 attitude statements. Each question was given a scale of 1-5 scores against their option (strongly disagree/disagree/uncertain/agree/ strongly agree). Questions 4, 5 and 10 were negative statements so reverse scoring was done. Maximum attainable score was 50 and minimum was 10.

Favourable attitude = score more than or equal to 35 (70% of maximum attainable score). Unfavourable attitude = score less than 35.

Data collection

Data were collected using self-administered questionnaire method. Prior to the study initiation, permission was sought from school authorities. Participants were explained about the study and its importance and were reassured about their anonymity at the time of questionnaire administration. Approval was obtained from the Research Ethics Board, RIMS, Imphal before the beginning of the study. To maintain confidentiality collected data were kept locked, were utilized only for the purpose and not disclosed to anyone outside the research team.

Statistical analysis

Collected data were checked for consistency and completeness and entered in IBM SPSS version 21 for Windows (IBM Inc. Armonk, New York, USA). Data were presented in percentages, mean with standard deviation. Chi-square test was used to test the significance between proportions. A p value of <0.05 was considered as statistically significant.

RESULTS

A total of 190 teachers participated out of which 181 completed the questionnaires giving a response rate of 95%. Mean age of the participants was 42.7 ± 11.4 years with minimum age of the participants being 21 and maximum age was 75 years. Out of the total participants, 57.5% were females. Out of the total participants, 66.3% were above 35 years of age. Out of total participants 58.6% have bachelors' degree, 30.9% have master's degree. 59.1% teach in government schools and rest in private schools. Nearly 66.3% of the participants taught students below class eight and 37% of them reported previous experience in teaching students with learning disabilities.

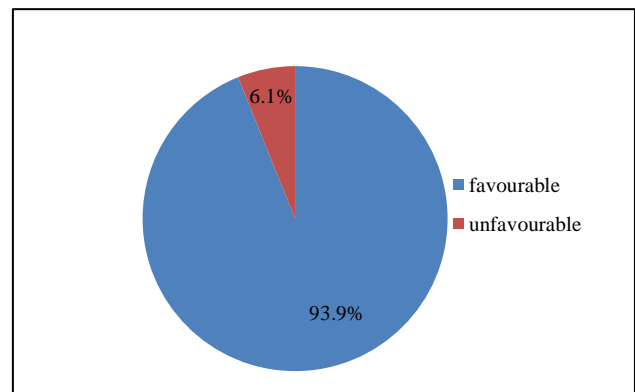


Figure 1: Distribution of participants by their attitude towards learning disabilities (n=181).

Out of total participants 48.1% had adequate overall knowledge and 51.9% had inadequate overall knowledge. Figure 1 shows the distribution of participants by their attitude towards learning disabilities. Out of total

participants majority of teachers had favourable attitude towards students with learning disabilities. 93.9% of the teachers had favourable attitude and 6.9% had unfavourable attitude towards learning disabilities.

Table 1: Distribution of the participants by their socio-demographic characteristics.

Demographic variables		Frequency	Percentage
Gender	Male	77	42.5
	female	104	57.5
Age category (in years)	Below or equal to 35	60	33.7
	36 to 50	70	38.7
	Above or equal to 51	50	27.6
Highest level of formal education	Doctoral degree	4	2.2
	Masters	56	30.9
	Bachelors	106	58.6
	Higher secondary	15	8.3
Type of school	Government	107	59.1
	Private	74	40.9
Classes they teach	Lower primary	35	19.3
	Upper primary	40	22.1
	Both lower and upper primary	45	24.9
	Secondary	61	33.7
Previous experience in teaching students with LD	Yes	67	37
	No	114	63

Table 2: Association of knowledge with selected socio-demographic variables.

Variables	Knowledge		P value
	Adequate n (%)	Inadequate n (%)	
Gender			
Male	51 (49)	53 (51)	
Female	36 (46.8)	41 (53.2)	0.761
Age category (in years)			
≤35	32 (52.5)	29 (47.5)	
≥36	55 (45.8)	65 (54.2)	0.579
Education completed			
Bachelors and below	63 (52.0)	58 (47.9)	
Masters and below	24 (40)	36 (60)	0.126
Type of school			
Government	58 (54.2)	49 (45.8)	
Private	29 (39.2)	45 (60.8)	0.047
Classes being taught			
Primary	61 (50.8)	59 (49.2)	
Secondary	26 (42.6)	35 (57.4)	0.296
Previous experience in teaching students with learning disabilities			
Yes	34 (50.7)	33 (49.3)	
No	53 (46.5)	61 (53.5)	0.580

There was significant association of knowledge with type of school ($p=0.047$). More number of teachers belonging to government schools had better knowledge on learning disabilities. There was no significant association between knowledge and other demographic variables like gender,

age, classes taught, previous experience in teaching students with learning disabilities.

Table 3: Association of attitude with selected socio-demographic variables.

Variables	Attitude		P value
	Favourable n (%)	Unfavourable n (%)	
Gender			
Male	98 (94.2)	6 (5.8)	
Female	72 (93.5)	5 (6.5)	1.000*
Age category (in years)			
≤35	58 (95.1)	3 (4.9)	
≥36	112 (93.3)	8 (6.7)	0.579*
Education completed			
Bachelors and below	114 (94.2)	7 (5.8)	
Masters and below	56 (93.3)	4 (6.7)	1.000*
Type of school			
Government	103 (96.3)	4 (3.7)	
Private	67 (90.5)	7 (9.5)	0.127*
Classes being taught			
Primary	113 (94.17)	7 (5.83)	
Secondary	57 (93.4)	4 (6.6)	1.000*
Previous experience in teaching students with learning disabilities			
Yes	63 (94.0)	4 (6.0)	
No	107 (93.9)	11 (6.1)	1.000*

*Fischer exact test.

Table 3 shows the association of attitude with socio-demographic variables. In our study it was found that there was no association between attitude and variables like age, gender and level of education. There was no association between knowledge of the teachers regarding learning disability and their attitude ($p=0.423$).

DISCUSSION

This study aimed to assess the teachers' knowledge and attitude towards learning disabilities in Bishnupur district, Manipur. In this study 59.1% teachers were from government school. 19.3% teachers taught lower primary, 22.1% taught upper primary and 24.9% taught both upper and lower primary. We included more teachers from primary schools because they would more likely be the first to encounter learning difficulties of students as these disorders are manifested at an early stage. In the present study, 48.1% has adequate knowledge and 51.9% had inadequate knowledge whereas in a study conducted by Shukla et al to assess the awareness of learning disabilities among primary school teachers in Haridwar among 60 primary school teachers it was found that 67% of the teachers had no knowledge regarding learning disabilities.⁴ In a study conducted by Shari et al study in 2015 to explore the knowledge of primary school teachers in identifying children with learning disabilities in Bangalore city among 200 primary school teachers by found that only 5% had adequate overall knowledge about LD.⁵ In our study 93.9% of teachers had favourable attitude and 6.9% had unfavourable attitude which was in line with the findings of the study conducted in Mangalore by Bhavya et al where 94% of participants had most favourable attitude.⁶ There was significant association of knowledge with type of school in our study which was similar to the findings of the study by Nsreen et al in Saudi Arabia in 2018.⁷ The reason for this could be attributed to the training received by government school teachers or they might sometimes be more likely to come across students with learning disabilities. There was no association of knowledge with socio-demographic variables like age, gender, educational qualification and which was also similar to the findings of Bhavya et al.⁶ It was found that there was no association between attitude and demographic variables like age, gender and level of education. Further there was no association between knowledge and attitude in our study. In a study conducted by Arifa et al to assess the knowledge and attitude of primary school teachers regarding learning disabilities in Pulwama district of Kashmir there was significant correlation between knowledge of teachers regarding learning disabilities and their attitude towards such children whereas in our study no association between knowledge and their attitude was found.⁸

The findings of our study clearly points out the need for educating the teachers about the common childhood disorders so that it address to the needs of children with these disorders.

CONCLUSION

Nearly half of the teachers had inadequate knowledge on learning disabilities while majority of them had a favourable attitude. Teachers employed in government schools had better overall knowledge on learning disabilities. Awareness programme about learning disabilities should be created to sensitize the problem of these children among teachers and develop a positive attitude towards the same Orientation workshops should be organised for teachers all across the nation for skill development and to increase their competency.

ACKNOWLEDGEMENTS

We thank all the school teachers who participated in this study for their valuable time and cooperation. We also thank the school principals for giving us the permission for data collection.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: The study was approved by the Research Ethics Board, RIMS, Imphal before the beginning of the study (A/206/REB/Prop(SP) 106/82/2019)

REFERENCES

1. Nair MK, Prasad C, Unni J, Bhattacharya A, Kamath SS, Dalwai S. Consensus statement of the Indian Academy of Pediatrics on evaluation and management of learning disability. *Indian Pediatr*. 2017;54(7):574-80.
2. Hallahan DP, Lloyd JW, Kauffman JM, Weiss MP, Martinez EA. Learning disabilities: Foundations, characteristics, and effective teaching. *Boston Pers Educ*. 2005;686:195-221.
3. Sadaket M. Learning disability in India. Available at: <http://www.merinews.com/article/learning-disability-in-india/15781618.shtml>. Accessed on 3 June 2020.
4. Shukla P, Agrawal G. Awareness of learning disabilities among teachers of primary schools. *Online J Multidiscipl Res*. 2015;1(1):33-8.
5. Shari M, Vranda MN. Attitude of primary school teachers towards children with learning disabilities. *J Indian Assoc Child Adolesc Ment Health*. 2016;12(4):68-76.
6. Bhavya SV, Parvathi NK, Bhagyalakshmi HS, Kumar SM. A Study on awareness and anxiety level of primigravida mothers on labour and its outcome in a selected hospital, Mysore. *Int J Nurs Educ*. 2015;7(1):184-7.
7. Alahmad NA. Assessing primary school teachers knowledge of specific learning disabilities in the kingdom of Saudi Arabia. *J Educ Develop Psychol*. 2018;9(1):9-22.

8. 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 J Paediatr Nurs Sci*. 2019;2(1):19-32.

Cite this article as: Asok AS, Akoijam P, Gupta A, Akoijam BS. A knowledge and attitude of school teachers towards learning disabilities in Bishnupur district, Manipur: a cross sectional study. *Int J Community Med Public Health* 2021;8:823-7.