Original Research Article

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

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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). 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. In India 13-14% of children have specific learning disability. 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).](image)
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) |
| Age category (in years)               | ≤35 32 (52.5) | 29 (47.5) |
|                                       | ≥36 55 (45.8) | 65 (54.2) |
| Education completed                   | Bachelors and below 63 (52.0) | 58 (47.9) |
|                                       | Masters and below 24 (40) | 36 (60) |
| Type of school                        | Government 58 (54.2) | 49 (45.8) |
|                                       | Private 29 (39.2) | 45 (60.8) |
| Classes being taught                  | Primary 61 (50.8) | 59 (49.2) |
|                                       | Secondary 26 (42.6) | 35 (57.4) |
| Previous experience in teaching students with learning disabilities | Yes 34 (50.7) | 33 (49.3) |
|                                       | No 53 (46.5) | 61 (53.5) |

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) |
| Age category (in years)               | ≤35 58 (95.1) | 3 (4.9) |
|                                       | ≥36 112 (93.3) | 8 (6.7) |
| Education completed                   | Bachelors and below 114 (94.2) | 7 (5.8) |
|                                       | Masters and below 56 (93.3) | 4 (6.7) |
| Type of school                        | Government 103 (96.3) | 4 (3.7) |
|                                       | Private 67 (90.5) | 7 (9.5) |
| Classes being taught                  | Primary 113 (94.17) | 7 (5.83) |
|                                       | Secondary 57 (93.4) | 4 (6.6) |
| Previous experience in teaching students with learning disabilities | Yes 63 (94.0) | 4 (6.0) |
|                                       | No 107 (93.9) | 11 (6.1) |

*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. In a study conducted by Shari et al 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. 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. 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. 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. 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.

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 sensitise 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.

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