

Perceptions of teachers about learning disorder in a northern city of India

Susanta Kumar Padhy¹, Sonu Goel², Shyam Sunder Das³, Siddharth Sarkar¹,
Vijaylaxmi Sharma³, Mahima Panigrahi⁴

¹Departments of Psychiatry, ²School of Public Health, Postgraduate Institute of Medical Education and Research, ³School of Public Health, Punjab University, Chandigarh, ⁴Community Medicine, Gian sagar Medical College, Banur, Punjab, India

ABSTRACT

Background: Teachers are perhaps the closest observers of child's academic performance and can be instrumental in detecting learning disorder (LD) early. **Objectives:** The present study aimed to assess the teachers' perceptions about LD. **Materials and Methods:** This is a cross-sectional questionnaire-based study in the public schools located in the urban, rural and slum areas of Chandigarh. Teachers were recruited from 20 randomly selected schools out of a total of 103 schools in the Union Territory by proportionate sampling. The sample size required for α of 0.05 and power of 0.80 to detect a difference of 15% from base rate of 35% was 80. Eighty teachers of 3rd and 4th grades of these schools were recruited using purposive sampling. Teachers were briefed for 5 minutes about the symptoms of LD. They were asked questions using a structured questionnaire about their socio-demographic status, methods of teaching, and students' progress and their perception about LD. Descriptive statistics was mainly used to represent nominal and ordinal data using frequency and percentages. Non-parametric statistical tests were used to assess relationship between the variables. **Results:** Eighty teachers were recruited, 87.5% were females, 57.5% had more than 5 years teaching experience; 56.3% of teachers thought that they were aware of LD, 67.5% of teachers perceived that they do encounter children with LD in the school, 43.8% endorsed educating such children in special schools, while 36.3% endorsed integration to regular schools. Interestingly, more than three fifth of teachers were willing to undergo special training for LD intervention. **Conclusion:** Teachers acknowledge that there is a need for further steps to be taken to help children with LD. They perceive opening special cells or sending such children to special schools for appropriate intervention which may not tally with the perception of clinician who may wish to provide LD intervention in hospital setting.

Keywords: Attitude, India, knowledge, learning disorders, perception, school teacher

Introduction

Learning disorders (LD) has often been under-diagnosed in India and its awareness has also been reported to be low^[1,2] with a prevalence of 3% in the city of Chandigarh, India, where this study was carried out by the same group of authors.^[3] LD is associated with behavioral and emotional problems in up to 30% of cases,^[4] and the pattern of deficits vary across the individuals^[5] affecting the child's academic performance further.^[4] The construct of LD itself encompasses a range of heterogeneous biological and psychosocial vulnerabilities into causation.^[6] LD has been classified in many ways, and there are a number of descriptive terms used to characterize the condition. These disorders are associated with significant impairment and

can result in less than optimum educational, occupational and social functioning.^[7]

Teachers can play an important role in early detection of LD as they are closely associated with the process of educating the child. They are at a vantage point with regards to observing the adequacy of the academic performance of the student. They are likely to identify these learning problems sooner and can help in formulating measures to target them.^[8] Therefore, assessment of teacher's knowledge and perceptions about LDs is pertinent.

Previous studies assessing teachers' knowledge and opinions about LDs from India have primarily focused on knowledge.^[9-11] Though knowledge assessment is important, how much knowledge should be considered adequate can be a matter of debate. Moreover, knowledge may not always translate into attitude and change in behavior of the respondents. Perception attitude and

Access this article online

Quick Response Code:



Website:
www.jfmpc.com

DOI:
10.4103/2249-4863.161347

Address for correspondence: Dr. Susanta Kumar Padhy, Department of Psychiatry, Postgraduate Institute of Medical Education and Research, Sector 12, Chandigarh - 160 012, India. E-mail: susanta.pgi30@yahoo.in

opinion-related aspects may have a larger bearing on teacher's behavior while dealing with a student with LD. Hence, this study was conducted to assess teachers' knowledge as well their opinion about LDs.

Materials and Methods

The present cross-sectional questionnaire-based study was conducted in May 2012 among the teachers of government co-educational schools of Union Territory of Chandigarh, India. Chandigarh is a Union Territory in India located about 250 km north of Delhi and covers about 114 km² in area and has about 1.1 million inhabitants. The present study included teachers from 20 randomly selected schools out of a total of 103 schools in the Union Territory. The number of schools chosen from urban, rural and slum areas were in proportion of the population of Chandigarh in these areas, respectively. The sample size required for α of 0.05 and power of 0.80 to detect a difference of 15% from base rate of 35% was 80. Written informed consent was taken from the participants. Eighty teachers of 3rd and 4th grades of these schools were recruited using purposive sampling. Teachers briefed for 5 minutes about the symptoms of LD. They were asked questions using a structured questionnaire about their socio-demographic status, methods of teaching, and students' progress and their perception about LD. Information was gathered in a single sitting by a research scholar who was trained by the first author (SKP) for conducting such interviews. Prior appointment and consent for undertaking the study was obtained from Director Public Instructions (School) and Principals (Head) of the selected schools. The study was approved by Institutional Ethics Committee. Analysis was conducted using Statistical Package for the Social Sciences (SPSS) version 17. Descriptive statistics was mainly used to represent nominal and ordinal data using frequency and percentages. Non-parametric statistical tests were used to assess relationship between the variables. A P value of less than 0.05 was considered significant.

Results

Eighty teachers were recruited from the 20 schools from urban, rural and slum localities (11, 7 and 2 schools respectively). The characteristics of the teachers are shown in Table 1. Majority of the teachers were females (87.5%) and were graduates (96.2%). Most (57.5%) had a work experience of more than 5 years. Fifteen teachers (18.8%) reported that they used a lesson plan, while 55 (68.8%) said that they gave personal attention to the students. The reasons of not being able to give personal attention to the students included lack of time in 12 (48%), large number of students in 11 (44%) and others in 2 (8%). Fifty (62.5%) teachers reported that they regularly discussed children's progress with higher authority.

The responses to questions related to perceptions of teachers about LD are depicted in Table 2. Majority of the teachers claimed to know about LD (56.3%) and 67.5% of teachers reported that

Table 1: Characteristics of teachers in government schools of Chandigarh, India

| Variable | N (%) |
|------------------------------|-----------|
| Gender | |
| Male | 10 (12.5) |
| Female | 70 (87.5) |
| Age group (years) | |
| Up to 30 | 30 (37.5) |
| 31 to 40 | 29 (36.3) |
| Above 40 | 21 (26.3) |
| Education level | |
| Diploma | 3 (3.8) |
| Graduation | 38 (47.5) |
| Post-graduation | 27 (33.8) |
| B.Ed. | 12 (15.0) |
| Work experience (years) | |
| <2 | 12 (15.0) |
| 2 to 5 | 22 (27.5) |
| >5 | 46 (57.5) |
| Number of students per class | |
| <30 | 6 (7.5) |
| 30 to 50 | 38 (47.5) |
| >50 | 36 (45) |

Table 2: Knowledge and perception of teachers about learning disorder in Chandigarh, India

| Questions | N (%) |
|---|-----------|
| Know about Learning Disorder | 45 (56.3) |
| Have you encountered students with LD in school? | 54 (67.5) |
| Do you Inform the parents about the LD? | 52 (65.0) |
| Would you like to join any special skill or special education training program for teaching children with LD? | 51 (63.8) |
| Should every school have a special cell for the children with LD? | 50 (62.5) |
| According to you, the students with LD should study in | |
| Normal school | 16 (20.0) |
| Integrated school | 29 (36.3) |
| Special school | 35 (43.8) |
| Would you like to participate to promote their education and employment of children with LD? | 43 (53.8) |

LD: Learning disorder

they do encounter students with LD. Majority (62.5%) also endorsed about having a special cell for students with LDs and was willing to undergo training for teaching such children. A substantial proportion (43.8%) endorsed such students should study in special schools. The perceptions about LDs were not significantly related to age or gender of the teacher, their educational status, their experience in teaching or class strength.

Discussion

The present study suggests that though majority of the teachers considered themselves being aware of LD, a substantial proportion (about two-fifths) were not aware. Previous studies using questionnaires to assess knowledge of teachers have also found them to be lacking in information related to LDs.^{9,10} Nonetheless, it is true that we have not assessed the knowledge

using structured questionnaire which itself may be a source of bias. Though 67.5% of teachers acknowledged that they encounter children with LD, but we had not asked teachers that in what percentage of students they teach, do they encounter the problem of LD?. However, it was encouraging to note that majority of the teachers were willing to undergo further training to understand more about LD. Such willingness may be because of the combined reason that (a) little less than half of teachers perceived student load to be large and were not able to give personal attention and lack of time; (b) teachers might have perceived themselves to be less knowledgeable and skilled enough to intervene children with LD. And such reasons were not assessed.

A considerable proportion of the teachers suggested for segregation of the students and their training in a special school. Fewer advocated teaching in an integrated manner in the regular school. In this context, a study comparing Indian and Australian schools found that students with special needs were often segregated in the Indian system, and learning support was comparatively infrequent for helping such students.^[12] The debate about which kind of setting is better for teaching such students have continued over time.^[13,14] Both inclusive and pull-out education (segregation) methods might be useful in different settings.^[13] It has been suggested that learning of such students can be improved by using techniques like small-group instruction and one-to-one instruction. Implementation of a special cell in school as suggested by majority of the teachers might be a bridge toward co-coordinating instruction and intervention for students with LD. Such a cell can serve for guidance of teachers, as well as monitoring progress of students with LD.

The results of the study should be interpreted in the light of strengths and limitations. The strength of the study includes recruiting a representative sample of teachers from multiple schools in urban, rural and slum areas of Chandigarh. Majority of the respondents were teachers of more than 5 years in service, and opinion of the teachers was the main focus. The limitations include possibility of respondent bias (because of no structured assessment of knowledge, briefing about LD symptoms before assessment, not asking the question that what proportion of children they teach may have LD), limited number of questions asked, limited sample size and lack of objective assessment of teacher's knowledge.

To conclude, this study provides the views of the teachers who are among the stakeholders in facilitating learning opportunities for children with LD. Majority of teachers acknowledged that they encountered children with LD in school. The willingness of teachers to learn more about LDs should translate into implementing training sessions for the teachers in current service. Systematic pre-post assessment of knowledge and attitude of teachers toward LDs can help evaluate efficacy of in-service teacher training in these subjects. Schools may consider special cell to track progress of students identified as having LDs, and

provide special education sessions or provide further referrals to specialist services. Moreover, the perception of opening special cells or sending such children to special schools for appropriate intervention may not tally with the perception of clinician who may wish to provide LD intervention in hospital setting.

Acknowledgements

We are thankful to Chandigarh administration, school administration and teachers for their consent and participation.

References

1. Choudhary MG, Jain A, Chahar CK, Singhal AK. A case control study on specific learning disorders in school going children in Bikaner city. *Indian J Pediatr* 2012;79:1477-81.
2. Karande S. Current challenges in managing specific learning disorder in Indian children. *J Postgrad Med* 2008;54:75-7.
3. Padhy SK, Goel S, Das SS, Sarkar S, Sharma V. Prevalence and pattern of Learning Disability in school going children in a northern city of India. *Indian J Pediatr* 2015 [In Press].
4. Sahoo MK, Biswas H, Pahy SK. Psychological co-morbidity in children with Specific Learning Disorders. *J Family Med Prim Care* 2015;4:21-5.
5. Kohli A, Sharma A, Padhy SK, Grover S, Subodh BN. Pattern of deficits in Specific Learning Disorders. *J Indian Assoc Clin Psychol* 2014.
6. Hammill DD. On defining learning disabilities: An emerging consensus. *J Learn Disabil* 1990;23:74-84.
7. Vellutino FR, Fletcher JM, Snowling MJ, Scanlon DM. Specific reading disorder (dyslexia): What have we learned in the past four decades? *J Child Psychol Psychiatry* 2004;45:2-40.
8. Bradley R, Danielson L, Hallahan DL, editors. In Identification of learning disabilities: From research to practice. New York, NY: Routledge Publishers; 2011. p. 98-121.
9. Kamala R, Ramganes E. Knowledge of Specific Learning Disabilities among Teacher Educators in Puducherry, Union Territory in India. *Int Rev Soc Sci Humanities* 2013;6:168-75.
10. Lingeswaran A. Assessing knowledge of primary school teachers on specific learning disabilities in two schools in India. *J Educ Health Promot* 2013;2:30.
11. Saravanabhavan S, Saravanabhavan RC. Knowledge of Learning Disorder among Pre-and In-Service Teachers in India. *Int J Spec Educ* 2010;25:132-8.
12. Thomas G, Whitten J. Learning support for students with learning difficulties in India and Australia: Similarities and differences. *Int Educ J Comp Perspect* 2012;11:3-21.
13. Vaughn S, Linan-Thompson S. What is special about special education for students with learning disabilities? *J Spec Educ* 2003;37:140-7.
14. Zigmond N. Where should students with disabilities receive special education services? Is one place better than another? *J Spec Educ* 2003;37:193-9.

How to cite this article: Padhy SK, Goel S, Das SS, Sarkar S, Sharma V, Panigrahi M. Perceptions of teachers about learning disorder in a northern city of India. *J Family Med Prim Care* 2015;4:432-4.

Source of Support: Nil. **Conflict of Interest:** None declared.