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Knowledge regarding learning disabilities in children among primary school teachers

Harmanjot Dhindsa¹, Hiteshi Borana², Jyoti Yadav¹, Jyoti Jangid², Kavita Gharu², Sanju Pukhraj Khawa^{2*}, Ashok Kumar²

¹Department of Nursing, VMMC and Safdarjung Hospital, New Delhi, India

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*Correspondence:

Dr. Sanju Pukhraj Khawa,

E-mail: khawasanju803@gmail.com

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ABSTRACT

Background: Children are precious resources of a nation and if they are physically and psychologically healthy, then they can excel in all domains of life. Learning disabilities mainly affects the psychological domain of child as it interferes with basic skills such as organization, time planning, abstract reasoning, memory and attention. This disorder is unable to cure at primary stages as it is mostly neglected due to lack of knowledge regarding learning disabilities.

Methods: A descriptive cross sectional study was used to assess the knowledge regarding learning disabilities in children among primary school teachers in selected schools of Jodhpur, Rajasthan, India in April 2017. A total sample size of 70 primary school teachers from Class 1st to 5th of four selected schools of Jodhpur, Rajasthan, India were taken using total enumeration sampling technique. The tool for data collection was self structured questionnaire.

Results: The results of the study showed that the majority of primary school teachers (70% had average knowledge regarding learning disabilities, 27.14% had poor knowledge whereas only 2.86% had good knowledge and there is no significant association between the knowledge of primary school teachers and their socio-demographic variables like age, gender, marital status, religion, educational qualification, type of school, teaching experience, in-service education on learning disabilities, any family member/friend suffering with learning disabilities.

Conclusions: The study concluded that primary school teachers had limited knowledge regarding learning disabilities in children. Therefore, there should be provision of awareness programmes among them along with parents of children.

Keywords: Learning disabilities, Children, Primary school teachers, Knowledge

INTRODUCTION

Children are the future of the nation and our most precious resources. Healthy children are not only assets but also the stepping-stone to build a strong and prosperous nation. They are always in a continuous process of growth and development. Therefore, if favourable and adequate environment is provided to children, they may excel in all domains of life. Both

parents and teachers play an important role in moulding the child's personality.¹

Learning disabilities are neurologically based processing problems. These processing problems can interfere with learning basic skills such as reading, writing and/or math. They can also interfere with higher level skills such as organization, time planning, abstract reasoning, long or short term memory and attention. They can affect an individual's life beyond academics and can impact

²Department of Nursing, All India Institute of Medical Sciences, Jodhpur, Rajasthan, India

relationships with family, friends and in the workplace. Since difficulties with reading, writing, and/or math are recognizable problems during the school years, the signs and symptoms of learning disabilities are most often recognized during that time. However, some individuals do not receive an evaluation until they are post-secondary education or adults in the workplace.² In India, learning disabilities account for 10% of all cases and this number is increasing every year. The rate of specific disabilities such as reading, writing and calculation were found to be 4.9%, 5.15% and 15.96% respectively.³ These disabilities are considered as most neglected part because there is little awareness among people regarding learning disabilities and they are often confused with learning problems which are primarily occurs due to visual, hearing or motor handicaps, mental retardation, emotional disturbance, or environmental, cultural or economic disadvantage.4

Karnade et al conducted a descriptive cross-sectional study among primary school children in Mumbai, Maharashtra. The result of the study showed that children who had specific learning disabilities were compromised of psychosocial, physical, and overall health related quality of life (HRQoL).⁵

School is the workplace for children where they perform tasks, by which they learn; develop their personality; selfesteem and confidence whereas a child with learning disability struggles with school work, poor grades and low self-esteem. A learning disability cannot be cured or fixed; it is a lifelong challenge. However, with appropriate support and intervention by parents, teachers, and other professionals a child's learning disability can be discovered at early stage and thereby right kind of help can be provided to them, thus leading to a successful and productive life.6 The school authorities should provide a comprehensive educational evaluation assessment tests. Teachers should explore the possible existence of a learning disability when a student who appears to be capable has a history of struggling with specific components of school and/or begins to demonstrate behavioral difficulties. The parent should also play an active participant in the evaluation process. If the evaluation shows that the child has a learning disability and is eligible for special education services then the teacher should work in coordination with a team of professionals and parent, to develop an Individualized Education Program (IEP).²

Many teachers lack appropriate training and experience to identify a young child who is at risk. Moreover, they often delay frequent evaluation of a child with reading difficulties until third and fourth grade because they think that the problems are just temporary and that they will be outgrown.⁴ Sawheny et al conducted a descriptive study to assess the awareness regarding learning disabilities among elementary school teachers in selected schools of Chandigarh, Punjab, India. The results of the study stated

that teachers (86%) had medium level of awareness regarding learning disabilities and thus it concluded that there is a need for awareness regarding learning disabilities among teachers.⁷

Hence the researchers felt the need to study on learning disability in order to assess the knowledge among primary school teachers regarding this disorder so that early intervention can be taken to improve the quality of life of children with learning disabilities.

METHODS

A descriptive, cross sectional research study was used. The objectives of the study were: to assess the knowledge regarding learning disabilities in children among primary school teachers and to determine association of knowledge regarding learning disabilities with selected personal variables.

The research settings used for main study were four schools namely, St. Anne's Prep School, Madhuban Public Senior Secondary School, Apex Academy Senior Secondary School and Saint Patrick's Vidhya Bhawan School, Jodhpur, Rajasthan, India. The study was conducted for a period of two week, i.e. 2nd and 3rd week of April 2017. The study population was primary school teachers of class 1st to 5th standard. The sample size was calculated based on previous studies using Raosoft Software. The sample size calculated was 70. Schools were selected using simple random sampling technique from various primary schools in Jodhpur which were found in its proximity from AIIMS Institute and feasibility of estimated sample size. It was done by using lottery method. After selecting schools, total enumeration technique was used for selection of sample. The inclusion criteria were primary school teachers of Class 1st to 5th standard; those who were present at time of data collection and willing to participate in research study. The exclusion criteria were primary school teachers who were unwilling to participate in study.

The tools for data collection comprised of self structured questionnaire consisting of socio-demographic profile of teacher and knowledge questionnaire regarding learning disabilities of 30 multiple choice questions. The level of knowledge was subdivided in categories like poor, average and good knowledge. The validity and reliability of tool was assessed before implementation in final study data collection. The ethical consideration was obtained from Institutional Ethical Committee of All India Institute of Medical Sciences, Jodhpur, Rajasthan, India. A written permission was taken from the school authorities before conducting research study. A written consent was taken from primary school teachers regarding their willingness to participate in research study.

The pilot study was conducted at Ridhi Sidhi Memorial International School, Jodhpur, Rajasthan, India among primary school teachers of class 1st to 5th Std. for a period of one week in month of April 2017 with sample size of 13 teachers.

The main study was conducted for a period of two weeks i.e. 2nd and 3rd April 2017. The nature and purpose of study was explained before conducting the study. The questionnaire was developed in both Hindi and English language based on participant's understanding. The knowledge questionnaire was filled by primary school teachers after taking consent regarding their willingness to participate in study. The data was analyzed using descriptive and inferential statistics.

RESULTS

Frequency and percentage distribution of primary school teachers with selected socio-demographic variables

Nearly half of primary school teachers (41.42%) were aged between 31-40 years of age and majority of them (98.57%) were females while only 1.43% were males. The educational qualification of most of teachers (74.29%) were B.Ed. More than half of primary school teachers (55.72%) were having teaching experience of more than 8 years followed by 27.14% had teaching experience of 4-7 years and 17.14% had teaching experience of 0-3 years.

Table 1: Frequency and percentage distribution of primary school teachers with selected socio-demographic variables (n=70).

Socio-demographic variables	Categories	f	0/0
Socio-demographic variables	20-30	16	
A ()			22.86
Age (in years)	31-40	29	41.42
	>40	25	35.72
Gender	Male	1	1.43
Genuci	Female	69	98.57
	Married	50	71.43
Marital status	Unmarried	17	24.28
	Divorced/Widowed	3	4.29
	Hindu	52	74.28
Religion	Muslim	2	2.86
	Any other, specify	16	22.86
T-14'11'C'4'	B.Ed	52	74.29
Educational qualification	Any other, specify	18	25.71
	0-3	12	17.14
Teaching experience (in years)	4-7	19	27.14
• • •	>8	39	55.72
T	Hindi Medium	7	10
Type of schools	English Medium	63	90
Any in-service education about learning	Yes	4	5.71
disabilities	No	66	94.29
Any family member having learning	Yes	3	4.29
disabilities	No	67	95.71

Table 2: Frequency and percentage distribution of primary school teachers according to knowledge score.

Levels of knowledge regarding learning disabilities	Range of scores	f	%
Good	>60%	2	2.86
Average	35%-60%	49	70
Poor	<35%	19	27.14

As per the medium of school, majority of primary school teachers belonged to English medium school while rest 10% belonged to Hindi medium school. Among 70

primary school teachers, only 5.71% attended in-service education regarding learning disabilities in past. 4.29% primary school teacher had family member with learning disabilities (Table 1).

Table 3: Association of level of knowledge regarding learning disabilities among primary school teachers with their selected socio-demographic variables (n=70).

Socio-		Knowledge level			Test statistic			
Demographic Variables	Categories	Good	Average	Poor	N	df	χ2 and p value	Inference
Age (in years)	20-30	-	14	02	16		χ2=0.161 p=5.804	NS
	31-40	-	18	11	29	04		
	Above 40	02	17	06	25	U -1		
Gender	Male	-	01	-	01	02	χ2=1.000 p=2.284	NS
Gender	Female	02	48	19	69	02		
	Married	02	34	14	50	_	2 0.252	
Marital Status	Unmarried	02	12	03	17	04	χ2=0.352 p=4.30	NS
	Divorced/Widow	-	01	02	03	04		
	Hindu	-	36	16	52	_	2 0 154	
Religion	Muslim	-	02	-	02	04	χ2=0.154 p=7.123	NS
	Other	02	11	03	16			
Educational qualification	B.Ed	01	34	17	52	00	χ2=1.574	NS
	Other	03	10	05	18	02	p=3.885	
Teaching	0-3	-	11	01	12		χ2=0.367 p=4.104	NS
experience (in	4-7	-	12	07	19	04		
years)	>8	02	26	11	39			
Type of school	Hindi Medium	-	06	01	07	02	χ2=0.732 p=0.874	NS
	English Medium	02	43	18	63			
Any in-service education	Yes	-	02	02	04	02	χ2=0.3994 p=1.927	NS
	No	02	47	17	66			
Any family having learning disability	Yes	-	02	01	03	02	χ2=1.003 p=1.224	NS
	No	02	47	18	67			

χ2= Chi Square value; NS: not significant

Frequency and percentage distribution of primary school teachers according to knowledge score

The mean±SD of knowledge regarding learning disabilities was 16.06±3.157. The result showed that 70% primary school teacher had average knowledge, followed by 27.14% had poor knowledge and 2.86% having good knowledge regarding learning disabilities in children. (Table 2)

Association of level of knowledge regarding learning disabilities among primary school teachers with their selected socio-demographic variables

The association of level of knowledge with selected socio-demographic variables of primary school teachers was calculated with Chi- Square (χ^2). The results revealed that there were no significant association between knowledge regarding learning disabilities among primary school teachers with their selected socio-demographic variables (Table 3).

DISCUSSION

The present study was a descriptive cross-sectional study to assess the knowledge regarding learning disabilities among primary school teachers in selected schools of Jodhpur, Rajasthan, India. A similar study was conducted by Bhavya et al in Mangalore, Karnataka, India which also assessed knowledge and attitude of teachers regarding specific learning disabilities among children. The results of the study showed 64% of teachers had average level of knowledge which was consistent with present study in which nearly 49% of teachers had average score. In both the studies, maximum number of teachers were females and majority of them had educational qualification degree as B.Ed. Also there was no significant association found between knowledge level and socio-demographic profile of teaches which were consistent with present study.³

Another study was conducted by Shari et al among primary school teachers in Bangalore, Karanataka, India. The study revealed that the majority (74%) of the

teachers had moderately adequate knowledge and 21% had inadequate knowledge and only 5% had adequate knowledge. Sawhney et al also showed in their study that 86% of the teachers had medium level of knowledge, 14% had low level of knowledge.

The present study showed that there was no significant association between level of knowledge regarding learning disabilities and teaching experience. The result where consistent with Lingeswaran study which also showed that there was no statistically significant association was found between level of knowledge among primary school teachers and their teaching experience. Another study conducted by Adebowale et al also showed same result of no significant association found between total score of knowledge and teaching experience.

CONCLUSION

These studies shows that there is need to develop the skill of teachers to identify learning disabilities in children and provide them better intervention and environment to overcome their weakness and this can be done by introducing a curriculum having compulsory education about learning disabilities in children.

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