



ORIGINAL RESEARCH PAPER

Health Science

REVIEW ON LEARNING DISABILITY IN INDIA AND ABROAD

KEY WORDS:

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ABSTRACT

Specific Learning Disability is one of 21 categories of disability which has been included in the current 'The Rights of Persons with Disabilities Act – 2016' as during the years it sent alarm bell for the parents, educators and professionals. It is believed that approximately 5% of all public school students are identified as having a learning disability (LD). An early diagnosis is necessary so as to prepare, plan and execute the remedial actions. There are various assessment devices which helps us in identifying learning disabilities. The items represent specific observable behaviours associated with LD in listening, speaking, reading, writing, mathematics and reasoning.

Introduction

Learning Disabilities (LDs) are heterogeneous group of disorders characterized by the unexpected failure of an individual to acquire, retrieve and use information competently. They are the most severe, pervasive and chronic form of learning difficulty in children with average or above-average intellectual abilities because the concept of learning disability has a brief and turbulent history both conceptually and operationally, making them victims of over expectation and social obligations of parents. The estimated figures show that about 15 million children suffer from this "invisible handicap" thus average class in schools has about five students with learning disabilities⁵. LD is not a single disorder, but includes disabilities in any of seven areas related to reading, language and mathematics. These different types of learning disabilities frequently co-occur with one another and with social skill deficits and emotional or behavioural disorders. The prevalence of learning disability identification has increased dramatically in the past 20 years. The "real" prevalence of LD is subject to much dispute because of the lack of an agreed-upon definition of LD with objective identification criteria. Some researchers have argued that the currently recognized 5% prevalence rate is inflated; others argue that LD is still under identified. The prevalence of learning disabilities is completely dependent upon the definition used. About 5% of all students in public schools were identified as having learning disabilities in 2009 and were eligible to receive educational assistance under the federal Individuals with Disabilities Education Act (IDEA).¹

Learning Disabilities in India:

The definition issued by the National Joint Committee for Learning Disabilities (1981) is the definition schools and SENCos in India refer to 'Learning disabilities is a general term that refers to a heterogeneous group of disorders manifested by significant difficulties in acquisition and use of listening, speaking, reading, writing, reasoning or mathematical abilities⁸. There are many associated features of SLD that are specific to the Indian contexts. These include the fact that bi and multilingualism is a common occurrence, classroom conditions are far from ideal and socio economic factors play a more significant role. Karanth (2003) has enumerated various environmental factors that are associated with SLD viz. poverty, lack of literary resources in the home environment, lack of access to preschool instruction, parental illiteracy, overcrowded classrooms and poor instruction. As stated by Mehta and Swarup (2004), Children, especially in cities in India, learn through English which is the medium of instruction and most often this is not the child's mother tongue. Bilingualism, another characteristic feature of the Indian educational system, also aggravates the problems for dyslexics in India. A sub group of dyslexics in the country are faced with a dual problem - one dealing with perceptual problem and the other dealing with the language aspect". A study from South India (Ramma and Gowramma, 2002)

has reported the incidence of dyscalculia to range between 5% to 6% in primary school children. Research conducted in the field of specific learning disabilities in India has been primarily done over the last two decades. Epidemiological studies of learning disability in India are burdened by problems ranging from identification, assessment to socio-cultural factors unique to India⁴.

Impact of socio-economic disadvantage is available from surveys in the Southern Indian city of Bangalore where socio-economic circumstances were more crucial in explaining prevalence rates than children's language of literacy learning. Among schools catering to families belonging to middle socio-economic classes and offering reading instruction in a non-dominant language viz English, the prevalence rate was 18%. However in an institutional home for children in conflict with the law who were learning to read in their home language (Kannada), the prevalence rate jumped to 60%². In a review of Indian studies on prevalence of learning disability, prevalence of various types of deficits of scholastic skills was reported to be 3-10 per cent among students population. In another study from rural India, prevalence of specific learning disability was reported to be 13 per cent in primary school children. In a study from northern region, 1 % of children attending an outpatient clinic of a tertiary hospital were found to be having specific learning disability⁶. Specific learning disability including dyslexia, dysgraphia and dyscalculia afflicts 5-15% of school-going children. Over the last decade; awareness about this invisible handicap has grown in India⁷. These disorders are intrinsic to the individual, presumed to be due to central nervous dysfunction. India is thought to have approximately ninety million people with varying degrees of learning disabilities and an average class in schools has about five students with learning disabilities. Yet we do not have a clear idea about the incidence and prevalence of learning disabilities in India (Karnath 2001)⁹.

In India, the magnitude of the problem and prevalence has not been fully understood (Suresh and Sebastian, 2003). However, the incidence of learning disability in school children varies from 9-39% (Kapur 1995). It is an alarming thought that in a school of 1000 children, about 100-300 could have a learning disorder. Mogasale, et al (2011) conducted a prevalence study of specific learning disabilities among primary school children in a south Indian city reported the prevalence of specific learning disabilities was 15.17% in sampled children and 11.2 % of dyslexia, 12.5 % of dysgraphia and 10.5 % of dyscalculia also reported from the same study¹¹. Study done by Padhy SK et al reveals that prevalence and patterns of LD in school going children in northern city of India represented 3.08% of the total population.¹²

Learning Disabilities in World:

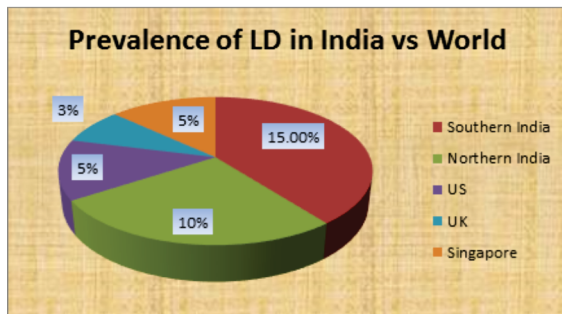
People with learning disability are among the most vulnerable and socially excluded in society. The WHO has estimated the

prevalence of learning disability in industrialized countries to be around 3%. In another study done in United States of America, approximately 5% of all public students were identified as having learning disability³. The Survey of Income and Programme Participation (SIPP) shows the LD prevalence rate among the U.S. population to be 1.8%. The SIPP found a parent-reported LD rate of 3% among school-age children. The true prevalence of learning disabilities in the U.S. is estimated at between 4-6% in both children and adults based on data.¹

In an epidemiological survey in the city of London, UK, the prevalence of dyslexia was put at 3% in the metropolitan area while in another survey using exactly the same tools and criteria for identification, prevalence rate was 6%. In England it is estimated that there are 1.2 million people with mild or moderate learning disability and about 120,000 adults with severe or profound learning disability. Over the past three decades, almost all the long stay National Health Services beds for people with learning disability have closed and virtually all people with learning disability are now living in the community and depend on their practice for their primary health care needs.²

In Singapore, approximately 5% of primary student were likely to suffer from dyslexia. The World Health Organisation has estimated the prevalence of learning disability in industrialized countries to be around 3%.³ However, Lyon suggests that it should be made clear that difficulties in the identification of children with learning disabilities do not make the disabilities any less "real" to the student who cannot learn to read, write, or understand mathematics despite good intelligence, an adequate opportunity to learn, and ostensibly good teaching. Valid prevalence estimates depend upon a set of criteria for identification that are clear, observable, measurable, and agreed upon¹⁰.

Graph 1: Showing prevalence of LD in India vs. World



Discussion:

Out of a number of estimates of prevalence of LD in the world the "real" prevalence of learning disabilities is subject to much dispute because of the lack of an agreed-upon definition of LD and objective diagnostic criteria. Some have argued that the currently recognized 5 percent prevalence rate is excessive and is based on vague definitions, leading to inaccurate identification.

Conclusion:

Learning Disability is an important concern in young school aged children. This is why it has been included among the 21 categories of disabilities defined in the RPWD Act- 2016. Early identification of such students can help in early institution of intervention and suitable modifications in teaching techniques. Prevalence rate in India is also quite alarming and a systematic and scientific approach will help parents, educators and professionals to deal children with Learning disabilities much efficiently. Rates of LD among adults range from 2.7% between ages 18-24 to as low as 0.4% for those over age 85. Prevalence rate of Learning Disability in the UK is approximately 3% as compared to 4-6% in the US while it is near by 5% in Singapore.

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References:

1. Cortiella, C. (2011). *The State of Learning Disabilities*. New York, NY: National Centre for Learning Disabilities.
2. Nag S, Snowling MJ (2012). School underachievement and specific learning difficulties. In Rey JM (ed), *IACAPAP -Textbook of Child and Adolescent Mental Health*. Geneva: International Association for Child and Adolescent Psychiatry and Allied Professions.
3. A M Aina Mariana, MMed, S L Wong, December (2011). Children with Learning Disabilities in the Paediatric Clinic, Hospital Tuanku Ja'afar Seremban: An Overview. *Med J Malaysia* Vol 66 No 5, 487-490.
4. Ms. Sailaja Chennat (Ph.D) and Ms. Anviti Singh (2014) *International Journal of Advance Research*, Volume 2, ISSN 2320-9151.
5. Kau N., Narkeesh A (2011). Effect of Combined Integrated Learning Programme (CILP) in Children with Learning Disabilities *Journal of Exercise Science and Physiotherapy*, Vol. 7, No. 1: 50-55.
6. Priti Arun, Bir Singh Chavan, Rachna Bhargava, Archana Sharma & Jaspreet Kaur (2013) Prevalence of specific developmental disorder of scholastic skill in school students in Chandigarh. *Indian J Med Res* 138, pp 89-98.
7. Sunilkarande, Rukhshanasholapurwala and Madhurikulkarni (2011). *Managing Specific Learning Disability in Schools in India: Indian pediatrics* volume 48.
8. Sheila Saravanabhavan and RC Saravanabhavan (2010). Knowledge of learning disability among pre- and in-service teachers in India. *International journal of special education* vol 25 No 3.
9. Scheme of Integrated Education for the Disabled Children (IEDC) India, 1986: section, 3.1; updated in 1992.
10. Grace Kwamboka Omete Rasugu (2010). Nature and prevalence of learning disabilities among standard three primary school pupils in Nairobi province, Kenya Research Thesis.
11. Johnson Alex (2013). *Learning Disabilities: Assessment and Intervention*, Paripex - Indian journal of Research, Volume: 2, Issue: 2, ISSN - 2250-1991.
12. Padhy SK, Goel S, Das SS, Sarkar S, Sharma V, Panigrahi M (2015). *Indian Journal of Pediatrics*; 83 (4);300-6. doi:10.1007/s12098-015-1862-8. Epub