LEARNING DISABILITY (L.D.)

Medical reports about academic difficulties in otherwise intelligent children appeared first in British Literature in early 20th Century, Hinshelwod in 1917 published a monograph describing problem of reading in children. Samuel Orton coined the term “Strephosymbolia” (twisted symbols) to describe the distortions, reversals, spelling errors, omissions, mirror writing that he observed. He noted that many children also showed disorganized & erratic behaviour. Eric Denhoft proposed the term “Cerebral Dysfunction” for such problems.

Prior to 1940 s, children who had difficulty in learning or paying attention were considered either mentally retarded or emotionally disturbed or culturally disadvantaged. In addition, there were children whose problem was “Neurologically based”. Initially, this disorder was called ‘Minimal Brain Damage’. Later the name was changed to ‘Minimal Brain Dysfunction’. These terms referred to children with neurologically based school problems, hyperactivity, short attention span, impulsivity and emotional problems.

More & more studies have been carried out in these area & different names have been coined for different problems such as Dyslexia for reading problems, Dyscalculia for math – problems. The term “Learning Disabilities” was applied to the types of learning difficulty that underlie the skill problems & manifest in various ways.

The National Joint Committee ‘s Learning Disabilities Definition (1988)

“L.D. is a generic term that refers to heterogenous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning & mathematical abilities. The disorders are intrinsic & presumed to be due to CNS dysfunction & may occur across the life span. Problems in self-regulatory behaviours, social perception & social interaction may exist with L.D. but do not by themselves constitute a Learning Disability. Learning Disabilities may occur concomitantly with other handicapping conditions or with extrinsic influenced, they are not the result of these conditions. (NJCLD – 1988).”

It is estimated that 10 – 20% of children have Learning Disability. The incidence of A.D.H.D. in children with L.D. is about 20 – 25%.

A child with L.D. has not only the difficulty in reading, writing or arithmetic problems but also in the activities such as playing indoor or outdoor games, carrying out day-to-day household work or communicating with family & friends. Therefore, management approach needs to be extended beyond the school premises into the full life of the individual. If this is not done he or she may experience frustrations & failures in the family in group activities & with
friends. These are likely to develop into emotional & social problems in a child leading to personality disorders.

L.D. may accompany a large variety of other neurological problems, but the usual child with such a problem is in excellent health. A thorough office evaluation for possible medical problem is always necessary but most children do not require laboratory testing. All the children should be seen for psycho-educational evaluation. The possibility of associated ADHD should be evaluated. Medication may be necessary in these Children with L.D. & ADHD.

A physician can be of great help to the child & his family in understanding this disorders & supporting them in difficult time.

Classification

The process of learning is split into four steps. These steps include process of recording information (input), organizing & understanding (integration), storing (memory) and communicating to people or translated into action (output).

I Input Disabilities :

Vision and hearing are not the most important Input processes for learning. Input does not refer to the physical conditions of the eye or ear but to the brain – processes dealing with what is seen or heard. This process is called perception & the input disabilities are visual perception disability or auditory perception disability.

II Integration Disability

The recorded information has to be placed in correct order (sequencing), to be understood in the correct context (abstraction) & to be integrated with all other information being processed (organisation). A child may have difficulty in one of more of these areas.

III Memory Disabilities

Once information is recorded & integrated, it must be stored so that it can be retrieved later. There are two types of memories – short term & long term. Short term memory is what you remember as long as you are paying attention. After many repetitions, the information will be retained – this is called long-term memory. Difficulty can occur with any of these types.

IV Output Disabilities :

Communication about the information takes place through words or through actions. Communication through words is of two types – 1) Spontaneous – one organizes the thoughts & finds the words before we speak.
2) Demand language includes perception of the question, integration, memory analysis, organization of thoughts & selection of words.

Communication through action involves motor activities such as writing, drawing, painting, gesturing etc. The motor disability could be in using the large muscle group (gross motor disability) or the small muscle group (fine motor disability).

Thus for better management of L.D., it is important to understand child’s areas of disabilities as well as the abilities. A team of Pediatrician, Psychiatrist, Psychologist & Education Specialist together will be able to undertake & complete this task.

It is true that there is no cure for learning disabilities but it is no longer necessary to be distressed if the child has L.D. A well – planned therapeutic program combining thorough medical examination to rule gross neurological problem, positive counseling to enhance self esteem, & curriculum adjustments in accordance with child’s style of learning & preferences will improve the conditions in majority of cases. With these measures children can be helped to participate in the mainstream of education & attain their own educational potential.