A case control study on specific learning disorders in school going children in Bikaner city (north western Rajasthan), India

Madan Gopal Choudhary
Sardar Patel Medical College, India

Specific learning disorders (SpLD) are a group of neuro developmental disorders that manifest in childhood as persistent difficulties in learning for efficient reading (dyslexia), writing (dysgraphia) or performing mathematical calculations (dyscalculia) despite normal intelligence, conventional schooling, intact hearing, vision, adequate motivation and socio cultural opportunity. LD afflicts almost 5–15% of school-going children, believed to be genetically inherited with dyslexia is the foremost cause affecting 80% of those identified as learning disorder. Prevalence of LD was 10.25% in our study including reading, writing and mathematics disorder 7.47%, 1.70% and 1.07% respectively. The incidence of dyslexia in schoolchildren in USA ranges between 5.3- 11.8% and in India 2-18%. In our study we included 468 student of class III to V with age of 7 to 11 years and same group of control. When comparison of medical history between case and control was observed, delivery complications (20.83% v/s 4.17%; \(X^2\) – 4.667, p value – 0.031), family members using left hand (16.67% v/s 2.08%; \(X^2\) – 4.41, p value – 0.036) and emotional problems (39.58% v/s 8.33%; \(X^2\) – 11.20, p value – 0.001) were significantly increased LD in case group than control. These emotional problems were low self esteem (10.42% v/s 2.08%), somatic complaints (10.42% v/s 2.08%), anxiety (6.25% v/s 2.08%), depression (4.17% v/s nil), distractibility (4.17% v/s 2.08%) and verbal aggression (4.17 % v/s nil). When classroom behavior was studied it showed that children with LD ask questions less than control group (10.42% v/s 75%; \(X^2\) – 40.91, p value – 0.0001) while children with LD answer questions less frequently than control group (6.25% v/s 79.16%; \(X^2\) – 52.15, p value – 0.0001) and LD children took notes less attentively than control group (4.17% v/s 58.33%; \(X^2\) – 32.77, p value – 0.0001).

Biography
Dr. M.G. Choudhary has completed his M.B.B.S. at the age of 24 year from S.P. Medical College, Bikaner, affiliated with Health University, Rajasthan (India) and post graduation (M.D.) in 2008 from the same university. He is working as Assistant Professor since last three years in the same college mentioned above. He has published 3 international and 2 national pub med affiliated research papers. He is involved in two national research projects. This research paper is published in Indian Journal of Pediatrics 2012 with DOI – 10.1007/S12098-012-0899-7. Recently a research on Prevalence and cardiovascular complications in severe malaria in Bikaner city (north western Rajasthan, India) has been published in international journal of medical science (July 2012), (5):159-168.

dr.madangopalchoudhary@yahoo.com