Role of Language in Multilingual Children with Suspected Dyslexia: A Pilot Study

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Abstract

To evaluate language profiles, Limited English Proficiency and Primary Language Disorders in multilingual suspected dyslexics. Methods: A crosssectional was conducted in a tertiary care hospital at Mumbai. The sample consisted of 46 participants aged 8-13 years. Performances of children were compared using the Linguistic Profile Test and Dyslexia Assessment for Languages of India (DALI). Nonparametric statistics were carried out to assess the data. Results: It was found that the dyslexics had affection in semantics and literacy domain, but LEP cases had poor phonological awareness and PLD group closely mimicked the SLD group in overall test performance. In linguistic profile test, delayed language was found in Group 3. This study highlights the fact that in order to characterize SLD in multilingual societies it is important to assess the child in all languages familiar to them. Keywords: Language • Specific learning disorder • Multilingualism

Children with Primary Language Disorders such as receptive, expressive or both struggle with the form, content, or function of language ,and their childhood prevalence is estimated at 4-13%. They have a core deficit in areas of listening or speaking and have associated problems such as in reading, writing and social skills. In multilingual countries like India with a complex language environment, assessment of language disorders is a formidable task. In a typical language developmental profile, children acquire Language Proficiency in their Native Language first and later acquire skills in instructional languages such as english). Typically second language acquisition in English Language Learners can take 5-7 years to develop proficiency. The process for understanding whether a child's learning difficulties are due to the

developmental pattern of english language acquisition, limited school opportunity rather than a Specific Learning Disorder is not well understood by teachers. Children acquiring english often display similar characteristics to those with an SLD.

Specific Learning Disorders (SLD) refers to a deficit in neural-processing of basic processes involved in understanding or using spoken or writing languages that manifests in in the skills of reading, writing, mathematical concepts, organization, long and short term memory. Prevalence of SLD is 5-10% among children in India. SLD encompasses dyslexia, dysgraphia and dyscalculia, with dyslexia (inability to skilled reading) being the most common prototype with a prevalence of 3% to 10% among Indian children. Inclusion of SLD in the RPWD Act 2016 has created awareness among parents, a felt need among teachers for the need of early identification of children at risk for SLD. However in India, there is lack of standardized tests in regional languages to assess linguistic proficiency, language disorders and specific learning disorders. The purpose of this study was to assess the language profiles and comorbidities in multilingual children with suspected dyslexia. To analyses the data, inferential statistics used were one-way ANOVA and pearson correlation. The findings indicate a plethora of conclusions which are as following. Findings from this study show the following. Firstly, the confusion between second language acquisition, its proficiency, primary language disorders and learning disorders is a ground reality and leads to over referrals and uncalled stress to children and Journal of Psychology and Brain Studies

parents. Secondly, CBA cluster scores on WJ as well as its qualitative input are important to obtain a definitive diagnosis of Specific Learning Disorder (SLD) and raise a suspicion of possible SLD mimic. Thirdly, DALI-iLAB assessments in two languages are able to differentiate children of Limited English Proficiency from suspected dyslexics and red flags concerns for a learning or primary language disorder.

References

- 1. Cone JB, et al. Manipulation of the inflammatory response to burn injury. J Trauma 1997;43:41-6.
- Jeschke MG and Finnerty CC. The hepatic response to thermal injury. In: Herndon DN, editors. Total Burn Care. London: Elsevier. 2012;361-378.
- 3. Drost AC, et al. Plasma cytokines following dermal injury and their relationship with patient mortality, burn size, and time post burn. J Trauma Injury Infect Crit Care. 1993;35:3.

 Cannon JG, et al. Circulating interleukin-1 and tumor necrosis factor in septic shock and experimental endotoxin fever. J Infect Dis.1990;161:79-84.

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- Offner F, et al. Serum tumor necrosis factor levels in patients with infectious disease and septic shock. J Lab Clin Med. 1990;16:100-105.
- 6. Ritossa F. A new puffing pattern induced by temperature shock and DNP in Drosophila. Experientia.1962;18:571-573.
- 7. Gething MJ and Sambrook J. Protein folding in the cell. Nature. 1992;355:33-45.
- 8. Meyer TN, et al. Heat shock response reduces mortality after severe experimental burns. Burns 2000;26:233-238.
- 9. Evers LH, et al. The biology of burn injury. ExperDermat. 2010;19:777-783
- Pielesz A. Temperature-dependent FTIR spectra of collagen and protective effect of partially hydrolysedfucoidan. SpectrochimActa A. 2014;118:287-293.
- 11. Struzyna J. in Treatment of Burns Wydawnictwolekarskie PZWL, Warszawa. 2006;50-59.