

CHRONIC STRESS AND ITS IMPACT ON CHILDREN WITH DEVELOPMENTAL COORDINATION DISORDER IN SOUTH INDIAN CONTEXT- A QUALITATIVE STUDY

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ABSTRACT : *Developmental coordination disorder (DCD) is defined as a poor motor proficiency and it has the characteristics features of inability in performing the activities of daily living , difficulty in motor coordination interferes with children's participation in academics as well as in physical activity. Stress is unavoidable for the children with DCD and it will definitely affect all aspects of life. For children stress at school during exam time and during other competitive skills at some level is considered to be the natural one and it will not affect their performance and these children were not in the facet of chronic stress disorder. Children will be having a negative social attitude and increased suicidal tendency as they have increased demand from the physical environment that surrounds him or her.PSS-4 has been given to the children and ask to score it in 5 point scale after baseline examination using MABC criteria's of DCD. A total of 10 children were given a self reported questionnaire on PSS-4 as these children recruited for the study belongs to standard 8 and they were regularly exposed to the environmental stress.*

I.INTRODUCTION

Developmental coordination disorder (DCD) is defined as a poor motor proficiency and it has the characteristics features of inability in performing the activities of daily living , difficulty in motor coordination interferes with children's participation in academics as well as in physical activity[1]. This disorder identifies children with motor performance deficit instead of having IQ greater than 80%. Children with DCD are often referred and call on by their teachers and peer group members as "clumsy" and "awkward". They experience difficulty in learning any new motor task that demands bilateral coordinated body movements, such as difficulty while playing ball games and when trained they fails to cope up with the new pattern of movement and they struggle to perform the everyday activities like opening a box and drinking water by properly grasping the water bottle and also in handling fork and knife[2]. Other co morbidities commonly associated with DCD include poor fine and gross motor control, speech interception, abnormal muscle tone (hypo/hypertonia), poor body awareness, and gross motor sequencing. Those general complications are noteworthy whenever the child is asked to perform its activity of living in a new environment were the child is never experienced before[3].

Developmental coordination disorder has been represented as a "hidden problem,"and the majority of the children diagnosed with a false positive results[4] According to Dr.U.ganapathy sankar the estimated prevalence as high as 10% in school-aged children. The children motor skill impairment interferes with activities of daily living skills and negatively impacts a child ability to participate in school activities, work, leisure, and play leads to diagnosis of DCD[5] .Research found that root cause of developmental coordination disorder is unknown. This condition is also researched from a dynamic systems perspective, which combines biological systems theory and ecological psychology, results shows that a DCD disorder results from an interaction between person or individual, taskoriented and environmental factors. Various researchers found that DCD children has problem in rhythmic coordination and timing as well as lack of executive functioning that affect working memory, inhibition and attention. Due to these problems some of the researchers misinterpret that dysfunction in these areas similar to Attention Deficit Hyperactivity Disorder[6].Developmental Coordination Disorder is not diagnosed before age of 5 years due to variation in the age at which children develop their motor skills. Children must rule out the possibility of a physical medical condition or learning disability. The prevalence of DCD is high among school going children and research found that there is atleast one child have DCD problem in every

classrooms. Ganapathy Sankar & Saritha found that prevalence of DCD at kattankulathur village in Tamilnadu [7]

II. METHODOLOGY

Stress is unavoidable for the children with DCD and it will definitely affect all aspects of life. For children stress at school during exam time and during other competitive skills at some level is considered to be the natural one and it will not affect their performance and these children were not in the facet of chronic stress disorder. During the developmental part stress will be experienced by everybody but it should not affect the ADL and adaptation to a changing environment. Complications of stress in children is innumerable and it varies from one to another according to the impact and level of persistence. Stress in children with developmental coordination disorder that is prolonged and managed poorly can result in negative physical, mental, and cognitive outcomes. Experiencing high levels of chronic stress can lead to poor physical health by increasing the likelihood of a weakened immune system, heart disease, obesity, and diabetes. Other negative outcomes include anxiety, depression, poor memory and language skills, and lower academic achievement. Environmental factors play a major role in building up stress. Children will be having a negative social attitude and increased suicidal tendency as they have increased demand from the physical environment that surrounds him or her. PSS-4 has been given to the children and ask to score it in 5 point scale after baseline examination using MABC criteria's of DCD. A total of 10 children were given a self reported questionnaire on PSS-4 as these children recruited for the study belongs to standard 8 and they were regularly exposed to the environmental stress. The study has been carried out after obtaining informed consent signed. [8]

III. DISCUSSION

Children with DCD needs maximal attention as they face difficulty to complete simple activities of daily living task, like opening a box and taking things out without spilling. Physical activity is totally avoided by these children as they have in-coordination in completing the desired motor task. impact of stress on DCD children is innumerable and that stress is achieved in a major proportion by external environment issues as they compare themselves with the peer group subjects and experience a feeling of loneliness and dependency on others to complete a simple activity of daily living and majority of children have negative socialistic activity as they experience a negative attitude from their peer group subjects

Children with DCD is identified to be affected with mental health difficulties as teachers identified children in school with DCD is left with few friends and always isolated in their physical education classes. Social contacts and friendship development with peer group is difficult for them and they experience negative self esteem.

Several research studies have shown that children with DCD have lower levels of participation in Sports than their peers. Poor motor coordination is evident behind poor physical activity and sports performance. They experience frustration engaging in dressing and engaging in school oriented activities and have less confidence in their ability to play with other children, mainly due to their motor coordination problems.

CONCLUSION

There are many limitations in the studies that stress level of children with DCD. Further research is needed to establish several co morbid factors of this disorder. Assessment of increase in obesity and decrease in physical activity in children with DCD is needed to rule out any additional factors that is influencing stress in children.

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