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PREVALANCE OF THORACIC BACKPAIN AND HYPERKYPHOSIS BY THE IMPACT OF SCHOOL BAGWEIGHT AMONG CHILDREN IN RURAL AREAS OF COIMBATORE-A SURVEY STUDY

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ABSTRACT

Background of the Study

School children usually use school bags to carry their school materials. Carrying heavy school bags can cause several problems such as musculoskeletal problems, postural variations etc. High and increasing prevalence of back pain in children and adolescent is matter of concern. Regular use of heavy school bags and inappropriate carrying methods can put children at the risk of musculoskeletal pain and changes in body posture. Heavy backpack is one of the important underlying causes and adolescent spine is in critical stage of development in the age group of 10 to 14 years. Traditional school bags place the backpack load closer to the body's center of mass resulting in changes in gait as well as energy expenditure, while carrying such backpacks the body leans in anterior forward direction where it has to balance upper body, head, skull, weight of the backpack and causes alteration in COG and BOS. This study set out to determine the prevalence of thoracic back pain and hyperkyphosis by the impact of school bags weight among school children in rural areas of Coimbatore.

Methodology

The study was survey study and 200 school children were selected based on the selection criteria aged between 10-14 years. The purposive sampling technique was used for the study. School children with back pack weight >10% of their body weight was noted and were assessed with self-marked content of thoracic back pain using Revised Oswestry Thoracic Backpain Disability Questionnaire and hyperkyphosis was measured using Debrunner Kyphometer.

Result

In analysis of Revised Oswestry Thoracic Backpain Disability Questionnaire, the resultwere found, in total 200 school children 180 were responded to thoracic backpain with 70(38.8%) mild pain,65(36.1%) moderate pain, 30(16.6%) severe pain and 15(8.3%) complete. Increased kyphotic angle was measured using Debrunner Kyphometer.

Conclusion

The study concluded that there was a significant prevalence of thoracic backpain by theimpact of school bag weight in school children and it provides insights into future preventive measures and therapeutic strategies for framing treatment goals for thoracic back pain.

KEYWORDS: *School bags, Thoracic back pain, Hyperkyphosis, Revised Oswestry Thoracic Backpain Disability Questionnaire, Debrunner Kyphometer.*

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