

### Need of Postural Awareness in School-going Children

Posture refers to the position a person assumes while sitting, standing, or lying down. Our skeleton is formulated to support our body without spending much energy even with the pull of gravity. If we adopt poor posture, our muscles have to carry out the job of skeleton. When this overload remains for hours or days, we habitually develop some movement-related problems which hamper us at both, workplace and home. Postural problems in children are more concerning because heavy backpacks are badly affecting school-going children. Growth rate of appendicular skeletal system halts around 16 years of age for females and 18 years for males. Secondary ossification of vertebrae stops in mid-twenties. Therefore, spine is vulnerable to injury for longer time period. Various risk factors like inadequate ergonomic conditions, improper school bags, classroom's furniture, prolonged poor sitting posture, repetitive tasks, sedentary lifestyle, and absence of exercise are hampering children on daily basis in terms of developing musculoskeletal disorders including shoulder, upper & lower back and knee pain. In rural areas of Pakistan, children are used to sit on floor for prolonged period in schools due to unavailability of furniture, prolong sitting period which leads to many musculoskeletal disorders and eventually may cause spinal curvature to be poorly affected. American Occupational Therapy Association (AOTA) recommends that students should carry backpacks no more than 15% of their body weight. A bill has passed by Khyber Pakhtunkhwa government that bag weights shouldn't be more than 7kg. Other provinces should also enact similar laws to protect children from postural problems. An international study found that carrying 10-kg backpack on one shoulder brought about asymmetric gait which meant selecting bags with two- straps and

hanging it on both shoulders can prevent the gait kinetics to be disturbed<sup>1</sup>. A study conducted in Pakistan on school going children, analyzed 54.61% children with low back pain due to poor posture<sup>2</sup>. According to educational statistics 2016-17, in Pakistan, there are around 28.68 million school-going children which portrays that a significant number of population, due to unawareness, no ergonomic measures in classrooms, no postural adaptations, is at a greater risk for developing posture-related musculoskeletal disorders and in near future, disability. It is the need of hour to promote postural education in Pakistan as a strategy to mitigate high prevalence of musculoskeletal problems in school-going children. There is low awareness among parents and teachers about school bag weight limit, accurate carrying method, and proper posture. Many school administrations are acquainted with problems related to carrying heavy backpacks, but they pay no heed, so conducting seminars only isn't enough, the implementation and adaptation of correct posture in school is pivotal. There should be exercise session for 30 minutes per day to train bodies to prevent pain onset and to improve body stance. Take into consideration that consuming proper diet alone is not enough to stay healthy, good posture equally matters for staying physically stable in long run.

#### References:

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- 2- Adnan ikram aa, sadia khalid, osama khalil, wajiha javed, rabiya noor. Prevalance Of Postural Related Low Back Pain In Children. Asian J Allied Health Sci. 2018;3(3):29-32.

**Prof. Dr. Syed Amir Gilani**  
Editor in chief  
Pakistan Journal of Physical Therapy