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School Backpack Carrying: It Is more than Just an Injurie

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Authors

Mohammad Hossein Navabian Ghamsari* *MD candidate*

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Islamic Azad University Tehran Medical University (IAUTMU), Tehran , Iran.

* *Correspondence*
Address: Islamic Azad University Tehran Medical University (IAUTMU), Tehran, Iran.
Tel: 0098 21 77488191
Fax: 0098 2188840896
P.O.Box: 1738983387
Email: M.navvabian16@ gmail.com

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Backpacking has become a habit among people from preschool to college and even beyond. But unfortunately, the appearance of the bags is more important than their efficiency [1]. The motor activities of children and adolescents are of special importance because they go through the period of physical development with greater speed and adaptation. In the meantime, carrying a backpack should be given special attention due to its prevalence and prevalence, because various studies indicate its negative consequences [2-4]. Backpack carrying, type, weight of backpack and duration of carrying these bags are issues that have attracted the attention of physician, parents, teachers, especially teachers and health education specialists as trustees of students' health and well-being[5].

Research shows that backpacks make up a significant percentage of students' weight, and carrying a backpack if it weighs more than 10% of body's weight can put significant strain on the metabolic system and also to the cardiovascular system[6-7]. Moreover, long sitting and carrying school backpacks have been reported as main and common factors of back pain. Since back pain in childhood and adolescence is known as an important cause of back pain in adulthood, it is very important to prevent it through investigating its' risk factors [6].

Injuries caused by carrying heavy bags in the wrong way have increased. A heavy backpack can lead to muscle strain, deformed spinal arches, and uneven shoulder complication. Furthermore, long-term use of backpacks can lead to negative changes in students' physical situation and eventually back pain and physical pain[8].

Studies show that carrying extra supplies, bulky books and teaching aids are among the factors that contribute to the weight of children's backpacks [9]. It has been argued that when a student carries a backpack, he / she will experience numbness of the shoulder girdle, which is called backpack paralysis. Although this is temporary paralysis, standardizing a backpack can prevent this damage[8].

According to research, improper carrying of backpacks, use of one- backpack strap when it is too heavy, long time carrying of backpacks, distance traveled with backpacks, improper weight distribution and improper

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placement of equipment in backpacks can be effective risk factors for health problem such as fatigue, hyper lordosis, lateral spinal deviation, musculoskeletal pain, especially in the lower back and shoulders [10]. When the backpack is heavy, the student bends the back too much or bending the head forward to be able to bear the pressure of the bag weight on the muscles of the neck and back that causes excessive fatigue and injury. In conclusion parents, teachers and health workers must give needed training to students about carrying the bags and backpacks . Furthermore allocating enough spaces to public schools and sufficient funds to build book closets and shelves to avoid carrying extra weight backpack to schools, as well as training the teachers for controlling the books and supplies students carry every day to the school, should be considered in this regard.

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