WEIGHT OF KNOWLEDGE – A CONCERN FOR THE ADOLESCENT

Knowledge empowers man to attain success, power and position in life and it enables one to find the difference between right and wrong, good and bad. It helps to overcome the weakness and faults, face dangers and difficulties with courage and confidence. It also gives mental, moral and spiritual advancement. There is no doubt that knowledge is a key to success but physical strength and well being is essential to enjoy the achievement.

Is knowledge over the cost of physical health worth it? Books that enclose this knowledge are the main reasons behind the excessive weight of the school bags that the children carry on their back. Hence, it is comprehensible that the weight of knowledge is a nationwide concern, especially for the adolescents that needs to be addressed. A growing number of adolescents have begun to complain of musculoskeletal problem which is a result of their sedentary lifestyle, heavy school bags, bad posture and poor ergonomics at their schools and homes. Unfortunately, our schooling system has failed to understand the short and long term harmful effects of this practice such as making the young children carry heavy bags. Another dilemma that we face today is that the teachers are not specific regarding their daily class work which makes the child carry all the text and note books to school every day. According to international standards, the weight of a school bag must be approximately 10% of the carrier's body weight. For instance if a child weighs about 80 pounds, the back pack should not weigh more than 8 to 12 pounds.

When a back pack is too heavy, it tends to put extra pressure on the shoulders which may forcefully pull a child backward or bend forward. In both conditions, the child will alter his/her posture at the level of hips or arch of back to compensate the undue load that causes unnatural compression of the spine. Bones of adolescents contain growth plates which consist of multiplying cartilage cells that grow in length, and then change into hard, mineralized bone. Poor postures and over load on the spine is resulting in modification of the spinal curvature as well as several other musculoskeletal problems including scoliosis, kyphosis, shoulder, neck and back pain/spasms.

In a countrywide survey conducted by the Associated Chambers of Commerce and Industry of India (ASSOCHAM) in 2012 on "heavy school bags causing children severe back pain" has revealed that nearly 58% of children below the age of 10 are suffering from mild back pain, which can develop into chronic pain and later into kyphosis. Apart from this, many other researchers have revealed strong correlation between school bag weight and physical problems among all students which can result in serious consequences in the future.

Therefore, the American Academy of Pediatrics (AAP) recommends a light weight bag with two wide padded shoulder straps for the children that will help them maintain their correct posture without adding excessive load on their spine. To reduce the weight of the bags carried by children, internationally almost all schools provide them with cabinets and lockers where they can keep the extra books and maintain a lighter school bag.

Children spend over almost 30% of their time at school which may include sessions of prolonged sittings. Therefore, the classroom furniture where these children spend most of their time writing or studying should be designed according to the ergonomic standards to ensure that they do not experience back pain or any other musculoskeletal disorders.

Students should be taught about the posture while sitting and working on their desk as well as how to carry their bags. Every effort should be made to ensure that young children do not experience back pain and other musculoskeletal disorders due to heavy school bags and inadequately designed classroom furniture.

As 'with great powers comes great responsibility' so it is essential we have the power to highlight concerning issues and bring awareness in our society through literature, media and social networking. It is time to take the responsibility and bring the change. This is just an effort to propose a methodology and guideline for the awareness of the consequences of heavy school bags carried by children and the extreme cost which may not be felt at this time but serious damage may be seen in a longer run.

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ROLE OF PHYSIOTHERAPY IN BURN REHABILITATION...ONE OF THE IGNORED ISSUES IN PAKISTAN

To the Editor,

Burn wounds are categorized among the most severe injuries an individual can experience¹. These are a health problems worldwide. Even in case of small burn it causes high economic burden on the family and the early recovery is considered as an integral part of the treatment, which is not in terms of healing wound only, process retrieval including physical activities, decreasing psychological problems and focus on cosmetic that treatment must begin immediately after the injury and last up to months or even years². Lack of emphasis on rehabilitation of burns patient is a source of concern and here I would like to draw your attention to the proper rehabilitation does not commence.

In Pakistan, most of the patients experience burn injuries due to domestic violence, lack of firefighting system activities. According to an estimate 195000 deaths are reported every year due to burns in which majority of low socioeconomic class of our country³. Limited epidemiological studies data is available on burns patients been documented on the aspect of rehabilitation.

Plastic surgeon plays a major role in treating the burn patient but unfortunately team work is not given its significance again an important milestone of burn management. Internationally, management of burn patient is a phases. An interdisciplinary team approach including Physical and Occupational Therapist involvement is a phases of rehabilitation⁴. Different methods can be used like stretching, mobility, ongoing skin assessment, education, balance, endurance, Range of Motion (ROM) and stretching with techniques, positioning and monitoring by the rehabilitation team members to resume the patients in their normal daily activities.

Lack of awareness and improper handling is one of the major constraint experienced by almost every tolerated in Pakistan. Lot of efforts are required to address the complications like failure of grafts, contractures, scar formation and cardiopulmonary issues of burn patients to provide them better opportunities to live a healthy life, and to the normal living. It is necessary that every tertiary care hospital should focus on the above mentioned rehabilitation. Physiotherapy should be given due importance as it plays a vital role in rehabilitation of the burn patient.

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REFERENCE

- [1] Lloyd JR, Imamoglu K. Thermal injuries. In: Watt AJ, Wilson RF. Editors. Management of Trauma: Pitfalls and Philadelphia: Lea and Febiger, 2005:438-59.
- [2] Sovemirno GOA. Burn injuries in Lagos: Burns 2002;9:280-83
- [3] Burns Fact sheet № 365 May 2012. Available from: <http://www.who.int/mediacentre/factsheets/fs365/en/>
- [4] Burn in Children: Encyclopedia. Brigham and Women's Hospital, Department of Rehabilitation Services. Philadelphia: P 2013 Available from: <http://healthlibrary.bighamandwomens.org/Library/Encyclopedia/90.P01887>