Prevalence of Neck Pain in Heightened Students of Rawalpindi and Islamabad

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ABSTRACT:

Background: Neck pain is very common in Pakistani population and students are at risk neck pain because of change in life style. The aim was to determine the prevalence of neck pain in Rawalpindi and Islamabad.

Objective: This survey was conducted to find out the prevalence of neck pain in heighted students of Rawalpindi and Islamabad.

Methodology: A cross sectional study was used to determine the prevalence of neck pain in heighted students of Rawalpindi and Islamabad. A sample size of 250 was selected from 15th February 2013 to 15th April 2013. A self-constructed questionnaire comprising of 16 questions was used to collect data regarding the prevalence of neck pain in heighted students. Data was analyzed on SPSS 19.

Results: Out of 250 students 93 students reported that they have neck pain which shows 37.2% (F=24.8%, M=12.4%) prevalence of neck pain in heighted students. Out of 93 students, 41.9% showed neck pain aggravating on prolonged sitting. Among 93 respondents there are 67.7% reported that on lying down supine the symptoms were relieved. There are 56.9% out of 93 suffered students stated that they do not have comfortable setup. There are 88.17% students out of 93 who have pain did not go for the treatment of neck pain.

Conclusion: Most of the heighted students had no neck pain. The students suffering from neck pain were mostly females ranging from height 5.6-5.7 and then the males of height 5.10-5.11. Maximum number of students reported neck pain due to prolonged sitting and lying down supine being a relieving factor. The study also clearly throws an impact on the setup of a community. Most of the students having neck pain did not go for any treatment.

Key Words: Height, Neck Pain, Students

INTRODUCTION:

Neck pain is pain perceived in a region bounded superiorly by the superior nuchal line, laterally by the lateral margins of the neck, and inferiorly by an imaginary transverse line through the T1 spinous process.1 Postural stress is one of the most common causes of neck pain. Poor posture stresses your neck, ligaments; muscles tired and joints and nerves are put under pressure. It's easy to get into bad posture habits without even realizing it. Poor posture can contribute to movement dysfunctions that can cause deterioration in daily activities. The main function of the muscles is to hold the head up, maintaining normal posture, supporting and moving the neck2. Heightened people comparatively suffer more. The reason being they have to modify their posture even more to do daily activities resulting in faulty posture. Abnormalities in position of head posture are often associated with the development and persistence of neck pain.3

It is very important for us to improve our sitting posture because any poor posture will cause muscle imbalance leading to further faulty posture. While sitting use a low back pillow to support your upper back. Avoid poor prolonged studying positions. Always keep in mind that while using your laptop, make sure that it is at an eye level. It is better to use a keyboard and a mouse as well. Always keep your

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elbows/forearms supported on chair armrests or to help relax the neck and shoulder muscles.

Avoid placing the computer keyboard too far from you. Your elbows should be close to your body in order to avoid strain on the upper back. Some shoulder shrugs, squeezes, and rolls while studying to prevent the shoulders from creeping up. Never lie flat while watching TV or studying. Always use a wedge-pillow to support to your neck.

MATERIALS AND METHODS:

A Cross sectional study was conducted. It will take 6 months to complete the study. January 2013 to June 2013. The sample size chosen is of 250 students to get the idea of prevalence of neck pain. The data was collected from most of the universities of Rawalpindi and Islamabad so that the most of the students falling in the inclusion criteria would be represented equally. Non probability convenient sampling technique was used. Data collection tool was a structured questionnaire. The questionnaire included 16 questions. Questions regarding the BMI and pain scales were given so that the prevalence of neck pain in heightened students could be analyzed properly. There were also questions regarding posture, its types and if any student has taken treatment from a physical therapist regarding neck pain.

RESULTS:

Out of 250 students 93 students reported that they have neck pain which shows 37.2% (F=24.8%, M=12.4%) prevalence of neck pain in heighted students. Out of 93 students, 41.9% showed neck pain aggravating on prolonged sitting. Among 93 respondents there are 67.7% reported that on laying down supine the symptoms was relieved. There are 56.9% out of 93 suffered students stated that they do not have comfortable setup. There are 88.17% students out of 93 who have pain did not go for the treatment of neck pain.

DISCUSSION:

A lot of research has been done in the domain of neck pain but there has not been much evidence on the relationship of height with neck pain. This negligence compelled us to find out if there exists a relationship between height and neck pain.

Posture has always been a significant factor in causing neck pain and a lot of studies prove it also. Sylvia, A.G, Punt and colleagues stated that abnormalities in position of head posture are often linked with the development and persistence of neck pain4. A study presented by Haugie, Laura .J and their colleagues supports the belief that a relationship of forward head posture and cervical backward bending to neck pain. As the lordotic curve decreases, the muscles have to overcome this posture resulting in pain and spasm in the neck. This causes an imbalance and the vicious cycle of pain continues5. Wang WTJ, Olson SL, Campbell AH, Hanten WP, Gleeson PB state that patient with neck pain may also present a posture imbalance resulting from shortening and increased activation of suboccipital, sternocleidomastoid, upper trapezius, pectoralis, and rotator cuff muscles6. Chris Ho Ting Yip, Thomas Tai Wing Chiu, Anthony Tung Kuen Poon propose a study done on the CV angle in neck which is done to check the forward neck posture is measured via the craniovertebral (CV) angle by using the Head Posture Spinal Curvature Instrument (HPSCI). The CV angle in subjects with neck pain is significantly smaller than that in normal subjects. There is moderate negative correlation between CV angle and neck disability. Patients with small CV angle have a greater forward head posture, and the greater the forward head posture, the greater the disability7.E.S Davis states many people find comfort on lying down in a supine position where the neck is flexed at 15 degree. In this position comfort level is maximum in the neck as well as the back8. This study also proved that pain was more common among girls and older group fellows. The more the people are having a sedentary lifestyle, the more they are prone to pain9. A proper setup is very important

in avoiding poor posture and has a considerable effect in reducing the neck pain which is very prevalent among the people who maintain a prolonged static posture be it schools, universities or else workplaces10. Psychological factors like stress, anxiety, depression have a profound effect on neck and back pain11.

CONCLUSION:

A survey on neck pain was conducted on 250 heightened students. Among these were 115 were males and 135 were females. Results show that out of 250 sample size, 93 had neck pain and 157 had no neck pain. This indicates that majority of them had no neck pain. Most of the students who suffered from neck pain were females ranging from height 5.6-5.7. Maximum number of students reported neck pain due to prolonged sitting and lying down supine being a relieving factor. The study also clearly throws an impact on the setup of a community. The more the lifestyle of students was sedentary, the more they had pain.

RECOMMENDATIONS:

A lot research data is available in the literature review and the survey done on the prevalence of neck pain has put forward a lot of recommendations. Further work needs to be done to obtain results that are as minimal as possible affected by the biases that were observed during data collection from the subjects.

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