Stress and Neck Pain in Pakistani Population

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ABSTRACT
The study was conducted to investigate if the stress and neck pain affects more women than men in Pakistani population. The study is based on a large representative of 200 samples. Random samples of male and female both were included. The causes of neck pain, were determined an attempt was made to decrease pain and disability in women and men with neck pain.

Keywords:
Pain, chronic neck pain syndrome, stretching

Introduction
Neck pain (NP) is a significant health Problem not only in adults but also in the young individual¹. It has emerged as one of the most common pain symptoms and the most persistent musculoskeletal pain symptoms²,³. NP in children has been associated with early puberty, high intensity of physical exercise and smoking.⁴ female genders, stress, and depressive symptoms⁴,⁵. There is an evidence of a relationship between musculoskeletal disorders in the neck, shoulder, physical and psychosocial factors at work. These include biomechanical factors, such as posture and static loading of muscles, vibrations, and frequency, duration, and force of repetitive movements⁶-⁹. Administrative factors, such as job control, organizational and psychological job demands, are also important factors¹⁰,¹¹. Some studies were focused on only one or a few risk factors. Many of these studies concerned jobs (construction, dentistry, forestry, nursing, office jobs) without measures of psychosocial factors¹²,¹³. Neck pain originating from the upper trapezius muscle (trapezius myalgia) is common in female office workers and occurs in other occupations that involve repetitive and monotonous work tasks¹⁴,¹⁶. Sustained activity of low-threshold motor units of the trapezius muscle day after day leads to disturbances in the muscle, and myalgia often develops¹⁷,¹⁹. A high level of activation of the painful muscles (i.e., a high training intensity) plays an important role in the rehabilitation process. Based on functional anatomy of the neck/shoulder complex, it is likely that isolated shoulder elevation (“shrugs”) is the most specific exercise for the upper trapezius muscle²⁰. Shrug exercises, is therefore, frequently recommended to effectively target the trapezius muscle during rehabilitation²¹,²². Postural stress caused by poor workstation ergonomics, such as inappropriate location of the screen, keyboard, or mouse, have been associated with musculoskeletal problems²³-²⁸. Among individual factors, female gender and older age have been found to be associated with a more frequent report of neck pain²⁹,³⁰. By ergonomic interventions, such as supporting the forearm on the tabletop, a reduction of postural load, thirty discomfort,³²,³³ or neck pain has been achieved. Work organizational factors, such as increasing work pressure or hurry and lack of job security or decision making opportunities, as well as problems in work atmosphere, may contribute to an increased occurrence of work related musculoskeletal complaints³⁴-³⁶.

Methodology
The study is based on a large representative samples consisting of 200 respondents. The survey procedure was to collect the data using questionnaire. Male/female both were included having an age of above 20 Years.

Result
200 participants of both genders were included in the study and the following analysis is based on their answers.

Analysis
The questionnaire was used to collect the data and for analysis
Table: 1

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Sample</th>
<th>Number</th>
<th>Neck Pain Male Female Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>M/F 60M &amp; 140 F</td>
<td>200</td>
<td>30% 70%</td>
</tr>
<tr>
<td>2</td>
<td>Education level M/F 100M AND 100F</td>
<td>200</td>
<td>50% 50%</td>
</tr>
<tr>
<td>3</td>
<td>Computer use per day/h M/F 13OM &amp; 70F</td>
<td>200</td>
<td>65% 35%</td>
</tr>
<tr>
<td>4</td>
<td>Physical activity: M/F 50/150</td>
<td>200</td>
<td>25% 75%</td>
</tr>
<tr>
<td>5</td>
<td>Television watching M/F 99/101</td>
<td>200</td>
<td>49% 51%</td>
</tr>
<tr>
<td>6</td>
<td>Depressive symptoms M/F 90/110</td>
<td>200</td>
<td>45% 55%</td>
</tr>
<tr>
<td>7</td>
<td>Suffering from STRESS M/F 30/170</td>
<td>200</td>
<td>15% 85%</td>
</tr>
</tbody>
</table>

Graph 1

1. No Pain
2. Very Mild Pain
3. Moderate Pain
4. Fairly Severe Pain
5. Very Severe Pain
6. Worst Pain

The result showed that the highest value noted was 84% pain which is moderate at the moment. (Graph1)

Graph 2

1. Much can be read with no pain in the neck.
2. Much can be read with slight pain in the neck.
3. Much can be read with moderate pain in my neck.
4. Not much can be read because of moderate pain.
in the neck.
5. Could not read at all because of severe pain in the neck.
6. Cannot read at all

The result showed that the highest value 59% caused slight pain in neck during reading. (Graph 3)

Discussion
Study emphasizes the multifactorial nature of chronic neck and shoulder pain in the working population. It shows links between age and Chronic neck pain symptoms (CNSP) among workers older than 37 years. Some moderate degeneration effects were observed. However, the relationship between age and CNSP is independent of these effects. The age effect can be explained, firstly by biological changes related to the aging process, for example, degenerative changes of muscles, tendons, ligaments, and joints. It is suggested to contribute to the pathogenesis of musculoskeletal disorders. Secondly, the increasing number of years in service during which aging workers are exposed to harmful work may be associated with an increased risk of disorders. The disorders found in this study may have arisen as a consequence of many years of accumulated workload. Thirdly, a chronic overload for the elderly worker caused by a disruption of the balance between physical workload and physical work capacity with advancing age has also been suggested as a potential cause for the development of musculoskeletal disorders. Increasing age may increase the susceptibility of tissues to physical loads. Our study confirms the relationship between some adverse working conditions and the incidence of CNSP, independent of age. During the past decade, the knowledge of etiological factors and occupational exposures has increased, and work-related factors such as repetitive work, awkward postures, and vibration have been related to neck and shoulder disorders. Earlier studies of psychological factors suggested that low job control and high job demand are positively associated with musculoskeletal symptoms, in particular neck and shoulder disorders.

Chronic neck pain symptoms are known to exhibit seasonal variation, worsening in the autumn & decreasing in the spring. The goal of the training program was to improve neck functions by use of a regular exercise programs which could be performed at home. As well as physical load factors psychological and work organizational factors have been associated with neck disorders and symptoms. Psychological distress and personality factors had some predictive value for neck trouble among a group of male workers, but the associations as complex and occupation specific. In a year follow up study, social relations among men, and work control among the women predicted a change in the disorders of the neck, shoulder, and upper limb. The occurrence of neck pain and neck disorders increases with age until late middle age and decreases thereafter. Inappropriate physical work environment and poor related ergonomics, together with individual factors, such as gender and smoking, predicted neck pain. The employees with higher mental stress and less physical exercise had an especially high risk. This was significantly higher for the women than for the men. The men showed a tendency for increasing neck pain after the age of 40 years. Among the women the youngest (aged 25–43) and the oldest (aged 52–61) workers had higher incidence than the middle aged (44–51) workers. The higher incidence among our oldest group is in line with earlier incidence studies. The high incidence among the youngest group was somewhat unexpected. One could ask whether the youngest workers do the most Monotonous tasks and have the least influence on their work. Concerning leisure time activities, women in this age group are often involved with a considerable amount of homework and child care. Among those whose stress level was higher and who exercised less frequently, the risk for neck pain was especially high. An active role knowing that a rapid return to activity is often the best medicine can get one going forward with a positive outlook. Physical activity will get your blood flowing and your muscles moving. are a great way to relieve tension and an important part of the treatment
for neck pain. “Stretching, movement from side to side and aerobic activity to get the blood flow going are the best treatment.

Conclusion
The conclusion suggests that the neck pain is prevalent more in females rather than in male. The females suffer more in neck disabilities, stress, and depressive symptoms than males.

REFERENCES


