Factors Associated with Neck Pain among the Selected Population (Lawyers)

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Abstract:

**Purpose:** To find out what are the factors associated with neck pain among the selected population (Lawyers) in a selected area of Dhaka City. **Objectives:** To find out the factors associated with neck pain among the selected population (lawyers) in a selected area of Dhaka city, Bangladesh, to find out the male female ratio of neck pain, to find out the most affected age group of neck pain, to identify the risk factors of neck pain among the lawyers in court. **Methodology:** The study design was cross sectional. Total 128 samples were selected by purposive sampling from the Supreme Court, Dhaka. Data was collected by mixed type self administered questionnaire. Descriptive statistics were used for data analysis which focused Table (mean, Standard deviation), histogram, pie chart and bar chart. **Result:** The factors association shows that about 91.41 % participants have pain on neck last 12 months. Through working experience neck pain increase the common years are 5-10 years and involvement is 31.25 %. Also association neck pain with physical exertion 75 % (occasional) In case of dress up duration there is strong association among 5 to 8 or more hours 75 % and psychological stress during work 78.12 % among the participants. **Conclusion:** The findings of this study suggest that neck pain is common among lawyers in the Supreme Court, Dhaka, Bangladesh and this may be associated with the professional experience, physical or mental exertion, dress-up and the psychological stress factors.
INTRODUCTION

Neck pain is one of the most common causes of musculoskeletal disorders related to work status and condition. Donald R. Gore, MD, Medical College of Wisconsin, pain is a common Milwaukee, neck problem in our society and, at any given time, affects about 10% of the general population. The Pan American Health Organization with WHO identified neck pain as one of the occupational health problems in the Americans. Health care is most important sector of every country. Neck pain is one of the common musculoskeletal disorders in both men and women (Schlossberg et al 2004). Pain that present in the neck region with or without referred up to upper limb defined as neck pain. Work-related musculoskeletal disorders are common and increasing in the United States (Bureau of labor 1993), between 1982 and 1992, the reported number of musculoskeletal disorders of the upper extremity has steadily increased, accounting e estimated to exceed $20 billion annually (Webster and Snook-1994).n for these disorders all disorders are responsible for growing costs as evidenced by increases in worker’s compensation coast, as well as escalating costs of diagnosis and treatment. Total compensable costs to the nation 1992 for more than 60% of all occupational illness(Bureau of labor motion and weakness in the job, these disorders may cause pain, restricted motion and weakness in the hands, arms, shoulders, neck, back and lower limbs .coupled with the human cost in suffering and lost wages, work related musculoskeletal It is caused due to various factors such as degeneration, trauma and mechanical causes and a variety of occupational factors such as prolonged sitting, standing, lifting, bending and heavy manual work, optics users, emotional stress, long time desk
work and faulty postures. Neck pain is common. About 2 in 3 people develop a bout of neck pain at some time in their lives. One survey done in the UK found that, of adults aged 45-75 years, about 1 in 4 women and about 1 in 5 men had current neck pain.

Palmer et al. investigated the prevalence of neck pain and its association with occupational activities, at a population leveling England, Scotland and Wales, and observed that neck pains were more associated with headaches and stress than with the occupational activity.

Work related musculoskeletal disorders can result in direct cost, such compensation and medical expenditure, as well as direct costs such as disruption in productivity and quality, worker replacement costs, training and absence costs. It has become a major concern because of the negative impact on the health and productivity of employees and is therefore a significant problem for employers and workers (professionals) to pay attention to (Putz-Anderson 1988).

Literature has shown that men employed in heavy manual jobs have a higher incidence of neck pain and a higher rate of absenteeism than sedentary workers. Sedentary workers involve people working in banks, shops, travel agencies, post-offices or any other office jobs who maintain a static sitting position for a long time. Some studies have indicated that workers with jobs that require prolonged sitting have an increased risk of neck and low back pain. Functions of the upper back or neck region include structural support, movement, and protection of certain body tissues. Pain in the neck can relate to the bony cervical spine, discs between the vertebrae, ligaments around the spine and discs, spinal cord and nerves, muscles of the neck region, carotid artery, and the skin covering the neck.

Mechanical neck and back pain implies the source of pain is in the spine and/or its supporting structure. This occurs when one of the joints in the spine loses its normal joint play.
Factors Associated with Neck Pain among the Selected Population (Lawyers)

(resiliency and shock absorption). Treatment of Neck pain is optimally directed toward a diagnosed or suspected specific cause. For acute neck pain, use of a home remedy or rest initially can be beneficial. The first step to understanding neck pain is appreciating the normal design (anatomy) of the tissues of this area of the body. Continuous forward bending can lead to neck muscle discomfort and the changing the curvature of the neck, because the around the neck the muscle are too short to do prolong activity against gravity. Those who are involving in advocacy profession they have to work on desk for a long period of time, they have to write or filling the case on table for longer period. They use very congested space for doing chamber in the Supreme Court region. They have to argued in front of the Judge for a prolong time, they are always well dressed with ties .so very tight fitting of the daily court and dress make them very discomfort and tired .although they have to work though their mental stress, so with optical use and the strenuous job they are mainly getting the neck pain in their common work place may be due to faulty chair table setup. “One would have thought by now that the problem of diagnosis and treatment would have been solved, but the issue remains mysterious and clouded with uncertainty.” (Rosomoff HL, Rosomoff RS.1999).

Research suggest that increased neck and shoulder flexion increases the biomechanical load on surrounding body structures which lead to pain, discomfort, ache and developing musculoskeletal disorders(McPhee1990).

METHODOLOGY

Cross-sectional study design has used to identify the factors association with neck pain among the lawyers in selected area of Dhaka city, Bangladesh. People were selected at a point in time without follow-up. This study was provided base line information and further research hypothesis was developed from the finding of this study. This is a survey on factors
association with neck pain among the lawyers in the selected area of Dhaka city. The study site is selected the Supreme Court premises of Dhaka, Bangladesh. Sample will be selected according to the inclusion criteria. The study was conducted for a period from April to September 2014. Those people are engaged in Advocacy profession (Lawyer), are practicing regularly and those have experienced neck pain recently without other pathology or contributing factors which are not related to other then the Mechanical neck pain. I have taken data from among the lawyer in the Supreme Court area in Dhaka city who were interested to being a part of this study and those who have neck pain and age between 30-60 years. Through a purposive sampling technique was following or employed to select the sample. n=128 participants were selected through random sampling technique from the Supreme Court. Who were willing to participate in face to face questioner session and asked to participate in the study. I developed self-administered structured questionnaire after studying or reviewing literature and used visual analogue scale (VAS) to find out the pain level. On the basis of the inclusion and exclusion criteria questions were asked. In the questioner participants demographic information including age, sex, marital status, level of education, work experience, duration of work and relation to sitting, dress fitting and tie/band fitting, mental satisfaction and the working environments related data were collected. Quantitative data was analyzed by using SPSS-16 software. Descriptive statistics were used for data analysis. Data were numerically coded and captured in SPSS-16.0 version software program for analyze the data as descriptive statistics. I collected the descriptive data and calculated as descriptive statistics as percentages and presented by using both histograms, bar and pie charts.

For conducting this study ethics committee were checked the proposal and allowed to carry out the research project. The formal permission was taken from the Register of
the Supreme Court to collect the data. Data collection was started and completed within the allocate time frame. All the data were review in strict secure and maintained confidentiality. The assessment file was strictly secured and it was not opened in front others without researcher.

RESULTS

Socio-demographic characteristics:

Distribution of the respondents by Age
Among the total respondents (n=128), 18% were included between the age ranges of 40-50 years. Their mean and SD were 45 years (±6.689) respectively.

Distribution of the respondents by Sex:
Among the total study population (n=128) majority of the respondents were male, where the male and female proportion were 75% (n=96) and 25% (n=32) accordingly.

Table-1. Distribution of the respondents by Sex:

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>No</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>96</td>
<td>75.0</td>
</tr>
<tr>
<td>Female</td>
<td>32</td>
<td>25.0</td>
</tr>
<tr>
<td>Total</td>
<td>128</td>
<td>100</td>
</tr>
</tbody>
</table>

Figure -1- Distribution of the respondents by Age.
Distribution of the respondents by Religion:
Among the total study population (n=128) majority of the respondents were 85.2.0 % (n=109) Islam, 13.3 % (n=17) Hindu and 1.6 % (n=2) Christian accordingly.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>No</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Islam</td>
<td>109</td>
<td>85.2</td>
</tr>
<tr>
<td>Hindu</td>
<td>17</td>
<td>13.3</td>
</tr>
<tr>
<td>Christian</td>
<td>2</td>
<td>1.6</td>
</tr>
<tr>
<td>Total</td>
<td>128</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Distribution of the respondents by Marital status
Among the total study population 128.majority of participant’s are 94.5. % (n=121) Married, 3.9 % (n=5) Unmarried and 1.6 % (n=2) Divorce respectfully.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>No</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>121</td>
<td>94.5</td>
</tr>
<tr>
<td>Unmarried</td>
<td>5</td>
<td>3.9</td>
</tr>
<tr>
<td>Divorced</td>
<td>2</td>
<td>1.6</td>
</tr>
<tr>
<td>Total</td>
<td>128</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Distribution of the respondents by Professional Experience-
This bar diagram shows the professional experience among the Lawyers in the court. Here majority percentage of experience is 31.25 % (n=40) participants are 5-10 years experience. 24.22 % (n=31) participants, 23.44 % (n=30) participants 18.75 % (n=24) participants and 2.34 % (n=3) participants.
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Distribution of the respondents by Knowledge about Neck pain
Among the Study population 128, only 44.53% (n=57) participants have the knowledge about the neck pain others 55.47 % (n=71) participants do not have the knowledge. Here the pie chart shows the knowledge level of the participant about the neck pain.

Distribution of the respondents by Pain or discomfort during last year or 12 months
Here the bar diagram shows 91.41% (n=117) participants have pain on last 12 months and 8.59% (n=11) participants do not feel pain or discomfort last year.
Figure-4-Distribution of the respondents by Pain or discomfort during last year.

Distribution of the respondents by Visual Analogue Scale

Among the study population 128, this bar diagram shows 53.91 % (n=69) pain is mainly Mild pain (VAS-1-3). 35.16 % (n=45) pain is moderate pain (VAS-4-7), 8.59 % (n=11) pain is severe pain (VAS-8-10) and only 2.34 % (n=03) pain is no pain. (VAS-0)

Figure-5- Distribution of the respondents by Visual analogue Scale.
Distribution of the respondents by Factors contributed to neck pain:
Among the study population 128, this pie diagram shows 36.72% (n=47) neck pain is related to working in awkward or cramped position. 35.16% (n=45) neck pain is related to bend or twist neck in an awkward way. 12.50% (n=16) neck pain is related to position for long time standing, bend over sitting. 10.16% (n=13) pain is related to perform the same task over and over. 5.47% (n=7) cases are related to performing manual work.

Distribution of the respondents by work disturbance due to pain:-
Among the study population 128, here the table shows about 75% (n=96) participants have disturbed in work due to neck pain and only 25% (n=32) participants do not have that.
Tabel-4- Distribution of the respondents by work disturbance due to pain.

**Distribution of the respondents by their leisure disturbance due to pain**
Here the table shows among the study population 128, about 61.72% (n=79) participants says they have leisure problem during neck pain and about 38.28 % (n=49) participant do not have leisure problem during neck pain.

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>96</td>
</tr>
<tr>
<td>No</td>
<td>32</td>
</tr>
<tr>
<td>Total</td>
<td>128</td>
</tr>
</tbody>
</table>

Table-5- Distribution of the respondents by their leisure disturbance due to pain

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>79</td>
</tr>
<tr>
<td>No</td>
<td>49</td>
</tr>
<tr>
<td>Total</td>
<td>128</td>
</tr>
</tbody>
</table>

**Distribution of the respondents by Types of treatments**
Here this bar diagram shows among the study population 128, about 54.33% (n=69) participants getting medicine for pain, 42.73% (n=53) participants getting physiotherapy and rest of 3.94% (n=6) participants have taken others treatment facilities.
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Figure-7 - Distribution of the respondents by Types of treatments

Distribution of the respondents by Type of chair use:
This bar diagram shows the type of chair use is common among the lawyers (n=128) in the court. 42.19% (n=54) - wooden, 24.22% (n=31) - revolving chair, 17.97% (n=23) not adjusted, 14.84% (n=19) - adjusted and 0.78% (n=1) others type.

Figure-8 - Distribution of the respondents by Type of chair use.

Distribution of the respondents by Duration of chair use.
This bar diagram shows the duration of chair use is common among the lawyers (n=128) in the court. 44.53% (n=57) participants use 5 to 8 hours, 29.69% (n=38) participants use >
8 hours, 21.88% (n=28) participants use 3 to 5 hours. 3.91% (n=5) participants use <3 hours.

![Figure-9- Distribution of the respondents by Duration of chair use.](image)

**Distribution of the respondents by Duration of Dress-Up**
This bar diagram shows the most common duration of dress-Up among the lawyers (n=128) in the court, 46.88% (n=60) participants dressed 5 to 8 hours, 28.12% (n=36) participants dressed >8 hours, 23.44% (n=30) participants dressed 3 to 5 hours and 1.56% (n=2) participants dressed <3 hours.

![Figure-10- Distribution of the respondents by Duration of Dress-Up](image)

**Distribution of the respondents by Duration of tie/band use**
This bar diagram shows the most common duration of tie/band use among the lawyers in the court. 47.66% 5 to 8 hours (n=61),
25.00% - >8 hours (n=32), 24.22%, 3 to 5 hours (n=31) and 3.12% <3 hours (n=4)

**Figure-11** - Distribution of the respondents by Duration of tie/band use.

**Distribution of the respondents by Social support**
This Pie chart shows that among the sample population (n=128) 65.62% (n=84) participants social support is satisfactory. 31.25% (n=40) participants social support good and only 3.12% (n=4) participant’s social support is bad.

**Figure-12** - Distribution of the respondents by social support
Association between Visual analogue Scale & professional experience

Analysis showed that n=72 participants out of n=128 participants who have mild pain on Visual analysis scale. n= 56 participants have severe pain. Among them n=67 participants have <1 to 10 years experience and n= 61 participants have 10> years experience. There is close significant relationship between visual analogue scales with professional experiences because $\chi^2 = 22.526$ and $< p = 0.05$.

Table 6- Association between Visual analogue Scale & professional experience

<table>
<thead>
<tr>
<th>Professional Experience</th>
<th>VAS</th>
<th>$\chi^2$ test</th>
<th>df</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1 to 10 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 to 3-Mild pain</td>
<td>48</td>
<td>22.526</td>
<td>12</td>
<td>0.032</td>
</tr>
<tr>
<td>4 to 10- Severe pain</td>
<td>19</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 &gt; years</td>
<td>24</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>22.526</td>
<td>12</td>
<td>0.032</td>
<td></td>
</tr>
</tbody>
</table>

Association between Visual analogue Scale & physical exertion

Analysis showed that n=72 participants out of n=128 participants who have mild pain on Visual analysis scale. n=56 participants have severe pain. Among them n=96 participants have occasional physical exertion and n=32 participants have often physical exertion. There is close significant relationship between visual analogue scales with physical exertion because $\chi^2= 41.674$ and $< p = 0.05$.

Table 7-Association between Visual analogue Scale & physical exertion

<table>
<thead>
<tr>
<th>Physical exertion</th>
<th>Occasional</th>
<th>Often</th>
<th>$\chi^2$ test</th>
<th>df</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 3-Mild pain</td>
<td>55</td>
<td>17</td>
<td>41.674</td>
<td>6</td>
<td>0.032</td>
</tr>
<tr>
<td>4 to 10- Severe pain</td>
<td>41</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Factors Associated with Neck Pain among the Selected Population (Lawyers)

Association between visual analogue scale & factors of neck pain

Analysis showed that n=72 participants out of n=128 participants who have mild pain on Visual analysis scale. n=56 participants have severe pain. Among them n=67 participants performing same work in awkward position and n=61 participants performing neck twisting and long time walking position. There is no significant relationship between visual analogue scales with table’s factors because $\chi^2 = 15.847$ and $p > 0.05$.

Table-8- Association between visual analogue scale & factors of neck pain

<table>
<thead>
<tr>
<th>Factors of neck pain</th>
<th>VAS</th>
<th>$\chi^2$ test</th>
<th>df</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performing same work in awkward position</td>
<td>0   to 3-Mild pain</td>
<td>45</td>
<td>27</td>
<td>15.847a</td>
</tr>
<tr>
<td>Performing neck twisting and long time walking position</td>
<td>4 to 10-Severe pain</td>
<td>22</td>
<td>34</td>
<td></td>
</tr>
</tbody>
</table>

Association between VAS & Duration of Dress-Up

Analysis showed that n=72 participants out of n=128 participants who have mild pain on Visual analysis scale. n=56 participants have severe pain. Among them n=32 participants dress-up for < 3 to 5 hours and n=96 participants dress-up for 5 to 8 > hours. There is significant relationship between visual analogue scales with duration of dress-up because $\chi^2 = 24.351$ and $p < 0.05$.

Table-9- Association between VAS & Duration of Dress-Up.

<table>
<thead>
<tr>
<th>Duration of Dress-Up</th>
<th>VAS</th>
<th>$\chi^2$ test</th>
<th>df</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;3to 5 hours</td>
<td>0 to 3-Mild pain</td>
<td>24</td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>5 to 8&gt; hours</td>
<td>4 to 10-Severe pain</td>
<td>8</td>
<td>48</td>
<td></td>
</tr>
</tbody>
</table>

$\chi^2 = 24.351$ 9 .004
Association between Visual Analogue Scale & Psychological stress

Analysis showed that n=72 participants out of n=128 participants who have mild pain on Visual analysis scale. n=56 participants have severe pain. Among them n=100 participants have psychological stress for working environment and n=28 participants have psychological stress for working environment. There is significant relationship between visual analogue scales with psychological stress for working environment because $\chi^2 = 14.404$ and $p = 0.05$.

Table -10- Association between Visual Analogue Scale & Psychological stress

<table>
<thead>
<tr>
<th>Psychological stress</th>
<th>$\chi^2$ test</th>
<th>df</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>yes</td>
<td>no</td>
<td></td>
</tr>
<tr>
<td>0 to 3 - mild pain</td>
<td>51</td>
<td>21</td>
<td>14.404a</td>
</tr>
<tr>
<td>4 to 10 - Severe pain</td>
<td>49</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

DISCUSSION

This study examined the factors of neck pain among the lawyers in Court of Dhaka city. This study found that among the total sample population is n =128. Among them age histogram shows the age limit is 30 to 60 which indicating the mechanical pain age. 45 to 50 years age percentage is more (18 %). The neck pain increase with age and also with the professional experience. This result is comparable to Bernard’s et al, 2006.

Sex Mean (SD) 1.25 (± 0.435) most are male then female,
Religion Mean (SD) 1.16(±0.412)-here most people are Muslim.
Marriage Mean (SD) 1.07(±0.312)-most people are married.

Professional experience is indicating the increase in experience, the increase in neck pain. Here most common percentage of
experience is 31.25% (n=40) 5-10 years experience. 24.22% (n=31) more than 15 years and 23.44% (n=30) 10-15 years experience. This result indicating the Côté, 2012; and Leboeuf-Yde- 2004, findings which adding the personal risk factors (e.g. age, gender, experience) that related to neck pain. Association between Visual analogue Scale (VAS) & professional experience show n=72 participants out of n=128 participants who have mild pain on VAS. n=56 participants have severe pain. Among them n=67 participants have <1 to 10 years experience and n=61 participants have >10 years experience. There is close significant relationship between visual analogue scales with professional experiences because $\chi^2 = 22.526$ and $< p = 0.05$.

In the study only 44.53% (n=57) participants have the knowledge about the neck pain on the other hands 55.47% (n=71) participants do not have the knowledge about neck pain. The participants do not have proper knowledge about the neck pain.

In the study 91.41% (n=117) participants have pain on last 12 months and only 8.59% (n=11) participants do not feel pain or discomfort last year. This result is comparable to Hogg-Johnson S, van der Velde G, Carroll L, Holm L, Cassidy D, Guzman J, Côté P, Carragee E, Hurwitz E, Nordin M, Spine, 2008: vol. 33, no. 45, pp. S39-S51 study.

Among the study population (n=128), In Visual Analogue Scale (VAS)-shows participants have 53.91% (n=69) pain is mainly Mild pain (VAS-1-3).35.16% (n=45) pain is moderate pain (VAS-4-7), 8.59% (n=11) pain is severe pain (VAS-8-10) and only 2.34% (n=03) pain is no pain. (VAS-0).

Among the participants (n= 128), According to some defined factors 36.72%(n=47) neck pain is related to work in awkward or cramped position.35.16% (n=45) neck pain is related to bend or twist neck in an awkward way.12.50% (n=16)neck pain is related to position for long time standing, bend over sitting.10.16% (n=13) pain is related to perform the same task over and over.5.47% (n=7)cases are related to
performing manual work. This study related to Côté et al., 2008; Palmer & Smedley, 2007; van Rijn et al., 2010 and P. Coenen I., Kingma C.R. Boot M. Douwes P.M. Bongers J.H. van Dieën Ergonomics, 2012, 55(11):1373-1381.) Study on ‘the repetitive handling, extreme body postures (e.g. upper arm flexion and neck flexion), high forces or a combination of these factors are associated with neck and shoulder pain.’ Association between visual analogue scale (VAS) & factors of neck pain show (n=67) participants performing same works in awkward position and n=61 participants perform neck twisting and long time walking position. There is no significant relationship between visual analogue scales with table’s factors because $\chi^2 = 15.847$ and $p > 0.05$ ($p=0.198$) and also the sample size is small, in case of large sample size it can be measured or find out the more satisfactory result.

Due to neck pain, 75% (n=96) participants have disturbed in work and only 25% (n=32) participants do not have that 61.72% (n=79) participants say they have leisure problem during neck pain and about 38.28% (n=49) participants do not have leisure problem during neck pain. This result is comparable to J H Andersen, A Kaergaard, S Mikkelsen, U F Jensen, P Frost, J P Bonde, N Fallentin, J F Thomsen-Occup Environ Med 2003;60:649–654) study. Associations between Visual analogue Scale (VAS) & physical exertion show n=96 participants have occasional physical exertion and (n=32) participants have often physical exertion. There is close significant relationship between visual analogue scales with occasional physical exertion because $\chi^2 = 41.674$ and $p < 0.05$.

Duration of duration of dress-Up among the lawyers in the court. 46.88% (n=60) -5 to 8 hours, 28.12% (n=36) - >8 hours, 23.44% (n=30) -3 to 5 hours and 1.56% (n=2) <3 hours. Many of them are used 5 to 8 hours of dress up, which included tight tie or band use and have close association with the neck pain among the participants’. Association between VAS & Duration of Dress-Up show (n=32) participants dress-up for <3 to 5
hours and (n=96) participants dress-up for 5 to 8 hours. There is significant relationship between visual analogue scales with duration of dress-up because $\chi^2 = 24.351$ and $p = 0.05$. They are using tight and well fitted gowns for long time, that may cause neck pain among them, study show there is good association of this factor.

Visual Analogue Scale & Psychological stress for working environment show (n=100) participants have psychological stress for working environment and (n=28) participants do not have psychological stress for working environment. There is significant relationship between visual analogue scales with Psychological stress for working environment because $\chi^2 = 14.404$ and $p = 0.05$. This study is comparable to Farideh Sadeghian, Mehdi Raei, Georgia Ntani, David Coggon mail, (Published: February 28, 2013) and Harcombe H, McBride D, Derrett S, Gray A.-(Inj Prev. 2010)’s studies.

CONCLUSION

The findings of this study suggested that neck pain was common among lawyers in the Supreme Court, Dhaka, Bangladesh. In this study had found 30 to 60 years are commonly associated with mechanical neck pain. The results showed that about 91.41 % (n=117) participants had neck pain during last year or 12 months. Neck pain was associated with the professional experience where 31.25% (n=70) 5 to 10 years experience, physical exertion 75% (n=72) of the participants present, duration of dress-up common 75% (n=72) of participants 5 to 8 hours and the psychological stress factors presented about 78.1% (n=100) of participants. Numbers of factors are related to neck pain and have great impact causing severe long term pain, physical disability and give rise to huge
costs for the society. It is important to develop research and evidence based study in this Area. There are no or rare studies on Lawyer’s neck pain. These cannot cover all aspect of the vast area. Only professional experience, physical and mental exertion, dress-up and psychological stress have found association on neck pain among the lawyer in the Supreme Court in Dhaka city. Others important factors may not found any association, like some defining factors, duration on chair use and room environment. The large sample size can bring fruitful assumption about the association. So the next generation of MPH student should continue study regarding this area which will include large sample size and participants form different Court area of Bangladesh. Conduct study on other medical related problems among the lawyers will be possible.

RECOMMENDATION

This study shows that the professional experience, physical, dress up and psychological stress factors have good association with neck pain.

- They should avoid long time desk work. They have to take rest every 30 hours.
- They should avoid physical exertion by taking proper rest and exercise.
- They have to avoid tight fitting dress code (e.g.- tie/band/guan).
- They have to maintain proper sitting posture and free space in their working area.
- They should avoid psychological stress through self actualization.
- They have to get knowledge about their problem and take proper treatment.
REFERENCES


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