INTRODUCTION

With the increase in urbanization, many cities around the world are experiencing a very rapid growth in the number of vehicles which lead to serious traffic congestion problems [1]. To manage mobility within the city is a huge task on the administration that is grappling with traffic congestion and health hazards from pollution [2]. To ensure a steady move on the traffic congestion, the traffic police have to work in the midst of hundreds of noisy and polluting vehicles throughout their working hours. It’s a tough job, which has direct influence on their life as it is found that many traffic police suffer from chronic respiratory problems, high blood pressure and gastric problems due to irregular food habits. Apart from this the major problem they face is stress [3]. Stress is defined as a state of mental or emotional strain or tension resulting from adverse or demanding circumstances [4]. The reasons for stress could be long working hours, irregular eating habits, sleepless nights, poor living conditions, ill treatment by seniors [3]. Stress among policemen would manifest in the form of fatigue, depression, chronic headaches, irritability; swings in appetite or mood, low self-esteem, inability to concentrate and impulsive behavior [3].

The broad objective of the present study is to understand the job-related stress of traffic constables. So that active measure can be taken to prevent work related stress disorders. For this a group of 270 traffic police under Navi Mumbai were randomly selected. Data was collected by using “Copenhagen psychosocial Questionnaire” (medium version).

For this study the medium version questionnaire used. As it is best tool for workplace evaluations, improve communications between researchers& environmental professionals and to make workplace more attractive, sustainable and viable [3].

METHODOLOGY

- Research approach: Cross-sectional survey study
- Study design: The data for this study was collected by the direct interview method with the help Copenhagen psychosocial questionnaire - medium version.
- Study setting: Navi-Mumbai
- Population of study: Navi Mumbai traffic police
- Sample size: 270 subjects
- Inclusion criteria: Traffic police
- Exclusion criteria: Other branch of police, police on sick leave.
Ethical clearance: The study was approved by ethical committee, in D. Y. Patil University, Navi Mumbai.

Procedure
All participating subjects were given informed consent after being acquainted with the purpose of study. Questionnaire have been filled by participants and for accuracy, all participants were informed that their responses would remain confidential. A trained person was present to explain how to complete the questionnaire. The questionnaire was translated to Marathi and then back to English to assess the liability of the instrument. Pilot test was done before the survey. The Copenhagen questionnaire contains 98 items that’s divided into 26 domains. Each item having 5 responses which are rated on 0-100 scale. 0 – corresponds to lowest possible value under investigation and 100 - corresponds to highest possible value under investigation. After this average of 26 domains was obtained and this average was compared with the normative average specified with Copenhagen psychosocial questionnaire. Demographic information was also collected.

Statistical analysis
Descriptive analysis performed including mean and standard deviation.

RESULTS

Table 1: Age distribution

<table>
<thead>
<tr>
<th>Age(years)</th>
<th>No. of people</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-30</td>
<td>56</td>
</tr>
<tr>
<td>31-40</td>
<td>87</td>
</tr>
<tr>
<td>41-50</td>
<td>103</td>
</tr>
<tr>
<td>51-60</td>
<td>24</td>
</tr>
</tbody>
</table>

Table 2: Gender distribution

<table>
<thead>
<tr>
<th>Gender</th>
<th>No. of people</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>266</td>
</tr>
<tr>
<td>Female</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 3: Demands on traffic police

<table>
<thead>
<tr>
<th>Demands</th>
<th>Normative value</th>
<th>Data value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantitative demand</td>
<td>46.5</td>
<td>59.75</td>
</tr>
<tr>
<td>Cognitive demands</td>
<td>62.8</td>
<td>67.5</td>
</tr>
<tr>
<td>Emotional demand</td>
<td>37.8</td>
<td>54.33</td>
</tr>
<tr>
<td>Demands for hiding emotions</td>
<td>30.3</td>
<td>49</td>
</tr>
<tr>
<td>Sensorial demand</td>
<td>62.4</td>
<td>55.75</td>
</tr>
</tbody>
</table>

Table 4: Stress on traffic police

<table>
<thead>
<tr>
<th>Stress</th>
<th>Normative value</th>
<th>Data value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral stress</td>
<td>17.1</td>
<td>46.75</td>
</tr>
<tr>
<td>Somatic stress</td>
<td>19.1</td>
<td>20</td>
</tr>
<tr>
<td>Cognitive stress</td>
<td>20</td>
<td>31.25</td>
</tr>
</tbody>
</table>

Table 5: Influence and development at work

<table>
<thead>
<tr>
<th>Influence at work</th>
<th>Normative value</th>
<th>Data value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree of freedom at work</td>
<td>64.8</td>
<td>21.25</td>
</tr>
<tr>
<td>Possibilities of development</td>
<td>72.4</td>
<td>67.25</td>
</tr>
<tr>
<td>Meaning of work</td>
<td>77.7</td>
<td>84.33</td>
</tr>
<tr>
<td>Workplace commitment</td>
<td>57.1</td>
<td>69.25</td>
</tr>
</tbody>
</table>

Table 6: Interpersonal and Leadership qualities

<table>
<thead>
<tr>
<th>Quality of leadership</th>
<th>Normative value</th>
<th>Data value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predictability</td>
<td>60.4</td>
<td>80.5</td>
</tr>
<tr>
<td>Role clarity</td>
<td>75.7</td>
<td>79.25</td>
</tr>
<tr>
<td>Role conflicts</td>
<td>37.3</td>
<td>46.25</td>
</tr>
<tr>
<td>Quality of leadership</td>
<td>55.5</td>
<td>80.25</td>
</tr>
<tr>
<td>Social support</td>
<td>68.3</td>
<td>83.75</td>
</tr>
<tr>
<td>Feedback at work</td>
<td>39.2</td>
<td>79.5</td>
</tr>
<tr>
<td>Social relation</td>
<td>67.7</td>
<td>58.33</td>
</tr>
<tr>
<td>Sense of community</td>
<td>82</td>
<td>90.66</td>
</tr>
<tr>
<td>Insecurity at work</td>
<td>16.9</td>
<td>47</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>68.2</td>
<td>76.25</td>
</tr>
</tbody>
</table>

Table 7: General well-being

<table>
<thead>
<tr>
<th>General health</th>
<th>Normative value</th>
<th>Data value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental health</td>
<td>79</td>
<td>51.8</td>
</tr>
<tr>
<td>Vitality</td>
<td>64.1</td>
<td>65.5</td>
</tr>
</tbody>
</table>

DISCUSSION
Purpose of this study was to evaluate the psychosocial problems faced by traffic police in Navi Mumbai with the use of Marathi version of the Copenhagen psychosocial questionnaire. To our knowledge, this is one of the first studies assessing the psychosocial problems among the traffic police in India. The Copenhagen psychosocial questionnaire can assess physical, mental, behavioral and cognitive stress. Total 270 traffic police participated in our study. Age group distribution from 20-60yrs comprised 266 males and 4 female i.e. 99% of population was male and only 1% female (Table 1, 2).

Let us now see a detailed explanation of each domain. Traffic police have a high quantitative demand because their workload is of an extent that they have to do overtime, they have a high cognitive demand due to precision requirement of all senses during discharging their duty, and high emotional demands as they are expected to keep their emotions aside while they are working. They feel their work doesn’t put sensorial demands on them. They feel their work is meaningful hence they are very much committed to their workplace but they lack degree of freedom at work and developmental opportunities like getting recruited to higher post are limited. They have a good sense of community at workplace as they often get social support and help from their colleagues as well as senior support and help from their colleagues as well as senior
officers. They lack social relation between colleagues as most of the time they have to work isolated from their colleagues. They are highly satisfied with their job prospectus but are insecure about getting transferred to other job without their consent. According to them their general and mental health are not satisfactory, reason for this could be exposure to fumes, exhaust of vehicles, improper food habits, long working hours. They also at times complain of aggression, nervousness, depression, and mood swings etc. but their vitality is good. Talking about stress, they have high behavioral stress which is why we sometimes find them aggressive, they also have a high cognitive stress hence they sometimes find difficulty in thinking and concentrating. They complain of slight somatic stress in the form of mild back & neck pain, lack of energy, muscle spasm etc.

CONCLUSION

From this study we can conclude that, traffic police have a high cognitive demand, a high level of behavioral stress with a good vitality.

Future prospects of this study

Further experimental study can be designed, which will investigate appropriate solutions for most affected areas like cognitive demand and behavioral stress. Inference of this study can be used to implement modifications, to reduce psychosocial problems in traffic police.

ACKNOWLEDGEMENTS

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REFERENCES