**PSYCHOLOGICAL DISTRESS AND COPING STRATEGIES AMONG PATIENTS WITH TEMPOROMANDIBULAR DISORDERS (TMDS)**

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**ABSTRACT**

**Background:** Temporomandibular disorders (TMDs) comprise a series of dysfunction in the temporomandibular joints. **Aim:** The aim of the study is to assess the psychological and coping strategies among patients with TMDs. **Methods and materials:** A descriptive design using survey method was used. The study was conducted among patients with temporomandibular disorders attending the clinic in the selected hospital. Data was collected from 30 participants using a questionnaire with demographic profile and questionnaire related to psychological distress and coping strategies. Descriptive statistics was used for data analysis. **Results:** There were 16(53.3%) of them have recently felt that they are ill and felt constantly under strain and bad tempered, 22(73.3%) have been getting a feeling of tightness or pressure in their heads and lost much sleep over worry recently. With regards to the coping strategies, 19(63.3%) of them kept themselves busy and occupied, 20(66.7%) of them are satisfied with the way they completed their work/tasks, 23(76.7%) were able to enjoy their normal day to day activities. Less than half 13(43.3%) get involved in any recreational or diversional activities. **Conclusion:** Interventions to improve the coping is very essential to be implemented to improve the behaviour well-being and life style modification of patients with TMDs.

**INTRODUCTION**

Temporomandibular disorders (TMDs) comprise a series of dysfunction in the temporomandibular joints and/or functional alterations of the masticatory system, which represent a significant problem in the area of dental health.[1] Temporomandibular disorder (TMD) is a pathology whose signs and symptoms are associated with pain and functional/structural disturbs of the stomatognathic system, especially those related to the temporomandibular joints (TMJ) and masticatory muscles.[2] Carlsson GE stated that about 93% of the general population shows some kind of temporomandibular disorder, with a range between 5% and 13% exhibiting clinically significant symptoms such as pain or severe dysfunction.[3]

A study conducted by Korszun A, indicated that among the patients diagnosed with Temporomandibular disorders, 42% of them showed high prevalence of “stress associated syndromes”. Patients with Temporomandibular disorders underwent stressful public speaking and mental arithmetic tasks. [4] The results of the previous study conducted by Jaspers et al (1993) show those patients with temporomandibular disorders report higher degree of psychological distress. [5]

Several studies have indicated that approximately 60-70% of people suffer from at least one of the symptoms of temporomandibular disorder (TMD) in their life while only 5% need treatment. Some of evidence has suggested that myofascial pain; functional somatic syndromes are critical conditions of muscle pain which may be resulted from the psychosocial factors.[6]

**Objective**

Patients with temporomandibular disorders complain of orofacial pain, limited jaw opening, and clicking or popping sounds. Although pain is generally the defining characteristics of TMD, patients often report marked degrees of stress and interference in daily life. Hence, this study aims to assess the psychological Distress and Coping Strategies among Patients with Temporomandibular Disorders (TMDs).

**MATERIALS AND METHODS**

A descriptive design using survey method was used to assess the psychological distress and coping strategies among patients with Temporomandibular disorders. Subjects were Indians including men and women with temporomandibular disorders. Convenient sampling technique was used to select the participants. Data was collected using a questionnaire which consists of demographic data (Age, Gender and Educational status) and questionnaire related to psychological
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distress and coping strategies. In this survey, a total of 30 subjects participated. Descriptive statistics was used for data analysis. The results were analysed and presented in tables and figures. Data was obtained from the subjects who volunteered to participate in this study. The study was approved by the Institutional Review Board. Informed consent was obtained from the participants before the data collection.

RESULTS

The demographic data is shown in Figure 1, 2 and 3. The results of the demographic profile show that a majority of the participants were above 50 years old (26.7%). There were 16 (53.3%) males and 14 (46.7%) females who participated in this study. Most of them (73.3%) have completed their high school or below.

![Figure 1 Age of participants (n=30)](image)

![Figure 2 Gender of participants (n=30)](image)

![Figure 3 Educational status of participants (n=30)](image)

Table 1 shows the results of the psychological distress and coping strategies questionnaire. The highest number of them have recently felt that they are ill. A highest number of them have been feeling a sense of tightness or pressure in their heads and lost much sleep recently. More than half of them felt constantly under strain and bad tempered. They were able to enjoy their normal day to day activities, whereas, a majority of them feel hopeless. The numbers of subjects who get involved in any recreational or diversional activities are less than half. More than half of them have the practice of doing some form of exercises. About 20% of them maintain a humorous and positive attitude.

Table 1 shows the results of the psychological distress and coping strategies among participants.

<table>
<thead>
<tr>
<th>Psychological distress and coping strategies</th>
<th>Yes (%)</th>
<th>No (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Have you recently felt that you are ill?</td>
<td>16 (53.3%)</td>
<td>14 (46.7%)</td>
</tr>
<tr>
<td>2. Have you been getting a feeling of tightness or pressure in your head?</td>
<td>22 (73.3%)</td>
<td>8 (26.7%)</td>
</tr>
<tr>
<td>3. Have you lost much sleep over worry recently?</td>
<td>22 (73.3%)</td>
<td>8 (26.7%)</td>
</tr>
<tr>
<td>4. Do you feel constantly under strain and bad tempered?</td>
<td>16 (53.3%)</td>
<td>14 (46.7%)</td>
</tr>
<tr>
<td>5. Are you getting scared or panicky for no good reason recently?</td>
<td>5 (16.7%)</td>
<td>15 (50.0%)</td>
</tr>
<tr>
<td>6. Are you feeling nervous all the time?</td>
<td>7 (23.3%)</td>
<td>23 (76.7%)</td>
</tr>
<tr>
<td>7. Do you keep yourself busy and occupied?</td>
<td>19 (63.3%)</td>
<td>11 (36.7%)</td>
</tr>
<tr>
<td>8. Are you satisfied with the way you complete your work/tasks?</td>
<td>20 (66.7%)</td>
<td>10 (33.3%)</td>
</tr>
<tr>
<td>9. Are you able to enjoy your normal day to day activities?</td>
<td>23 (76.7%)</td>
<td>7 (23.3%)</td>
</tr>
<tr>
<td>10. Have you been thinking yourself as a worthless person?</td>
<td>6 (20.0%)</td>
<td>24 (80.0%)</td>
</tr>
<tr>
<td>11. Do you feel that life is entirely hopeless?</td>
<td>-16.7%</td>
<td>25 (83.3%)</td>
</tr>
<tr>
<td>12. Do you seek social support in times of trouble and worries?</td>
<td>21 (70.0%)</td>
<td>9 (30.0%)</td>
</tr>
<tr>
<td>13. Do you get involved in any recreational or diversional activities?</td>
<td>13 (43.3%)</td>
<td>17 (56.7%)</td>
</tr>
<tr>
<td>14. Do you have the practice of doing any form of exercise?</td>
<td>19 (63.3%)</td>
<td>11 (36.7%)</td>
</tr>
<tr>
<td>15. Do you maintain a humorous and positive attitude?</td>
<td>20 (66.7%)</td>
<td>10 (33.3%)</td>
</tr>
</tbody>
</table>

DISCUSSION

Temporomandibular disorders (TMD) represent a group of orofacial pain conditions that are highly prevalent in the population and are associated with considerable morbidity. Numerous cross-sectional studies demonstrate that people with chronic pain conditions show greater levels of psychological distress, environmental stress, catastrophizing, and somatic symptoms compared with pain-free controls.[7] Rollman GB and Gillespie JM (2000) stated that although pain is generally the defining characteristic of TMD, patients often report marked degrees of stress and interference in daily life.[8]

Although the study results shows that 23 (76.7%) were able to enjoy their normal day to day activities, a majority of them feel worthless and 25 (83.3%) feel hopeless. This shows that the participants are undergoing some form of psychological distress. Only 13 (43.3%) of subjects get involved in some form of recreational or diversional activities, which shows that their coping strategies are very limited. The results from a study conducted by Turner JA in 2001, suggests that for patients with moderate or high levels of TMD pain and dysfunction, beliefs about pain play an important role in physical and psychosocial functioning.[9]

The study results of this study are similar to the findings of the study conducted by Jaspers et al, in the study on Strategies for coping with pain and psychological distress associated
with temporomandibular joint osteoarthrosis and internal derangement, which shows that psychological distress and pain severity were low, and there was little interference by pain with daily life. While none of the coping strategies were frequently used.

**CONCLUSION**

The study results show that patients suffer from some kind of psychological distress and unable to cope with the disorder. Interventions to improve the coping are very essential to be implemented to improve the behavioural well-being and life style modification of patients with temporomandibular disorders. Auerbach SM (2001) and authors concluded in their study that psychological factors play a more pronounced role when pain is of muscular origin. Promising behavioural interventions are available for TMD patients in whom psychological factors appear to be playing a significant role. [10]

**Acknowledgement**

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**References**


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