Evaluation of the Degree of Dental Anxiety in a Lot of Patients Altered in Young Adults

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The study aims at identifying and highlighting dental anxiety in a group of young adults, analyzing patients' concerns about the main dental treatment procedures, and establishing statistical relationships between anxiety and gender, the background, level of education, socio-economic status and knowledge of habits of care and hygiene of oral cavity characteristic of the studied group. The study group consists of 150 female (50%) and male (50%) patients aged between 20 and 40 years. The inclusion criteria in the batch were those related to the age range of 20 to 40 years. Two respondents (Corah's Dental Anxiety Scale, Revised (DAS-R)) were given two questionnaires (Corah's Dental Anxiety Scale, DAS-R), and the second questionnaire contained 7 questions about the habits dental care. Most patients' concerns about the main procedures of dental treatment / other concerns are: dental extraction, material expenses, possibility of treatments and shame she felt oppressed health of the oral cavity. Regardless of the level of dental anxiety, the oral cavity hygiene habits are not properly performed by patients, with an increased tendency for them to be disregarded by patients with severe dental anxiety.

Keywords: dental anxiety, anxiety, pain

Regularly received professional dental care can provide an opportunity for early prevention, diagnosis and treatment of oral and craniofacial diseases and disorders. People seeking regular preventive care have better oral health than those who do not want or who seek care only when needed. Dental anxiety is a determining factor if people do regular dental visits.

Dental anxiety is defined as a patient's response to stress-specific dental conditions [1]. A study by Stouthard and Hoogstraten showed that more than 50% of the industrialized nation's population was worried while presenting to the dentist, while 15% avoided dental care because of their anxiety [2]. Furthermore, Gatchell et al. showed that 70% of patients presenting to the dentist exhibit fears and 15% have avoided presenting to the dentist due to their anxiety [3].

Most people recognize the importance of dental health, but a significant proportion of the population finds that dental procedures are so stressful that they have drawn attention from both medical and psychological investigations. Agras et al., for example, asked people to identify common situations of fear [4]. Dental anxiety ranked fifth in all the most feared situations in the study. Although there have been many findings on dental anxiety, there are still many gaps in knowledge. Studies have indicated the possibility of a relationship between dental anxiety and social anxiety, as well as physical perception of oneself [5].

In her studies of dental anxiety in the 1960s, her appearance was attributed to several factors: the personality characteristic, traumatic or painful experiences in childhood (conditioning experience); attitudes towards dental services that cause fears from anxious family members or their peers; perception of body image; feelings of blood fever; coping styles (vigilant, avoidant and emotional); and reactivity to pain [6].

Experimental part

Material and method

The study group consists of 150 male and 50% female patients aged between 20 and 40 years who presented themselves at the Voronca Hilarion Clinic within the Faculty of Dental Medicine Ovidius University in Constanța during 1.10.2017 - 30.05.2018. The inclusion criteria in the batch were those related to the age range of 20 to 40 years.

The first step in the present study was data collection by administering two questionnaires: the first questionnaire was Corah's Dental Anxiety Scale (DAS-R), revised (DAS-R) and the second questionnaire contained 7 questions related to dental care habits. Also, in order to evaluate the level of concern specific to the group studied with regard to the main procedures characteristic of a dental therapist, a list of dental procedures was administered in which the persons questioned ranked the concern after a proposed scale. This list of the level of concern regarding the main dental procedures was attached to the first questionnaire. The collected data were centralized and their processing and comparative analysis was performed using descriptive and analytical statistical methods. Data processing was done using Ms Office Excel 2016.

Results and discussions

Percentage distribution of the batch studied by age classes is the following: patients aged between 20 and 25 were 8%; those aged between 25 and 30 years accounted for 24%; the age range of 30 to 35 years represented 28% of all patients studied, and the age range of 35 to 40 years was 40%. 70% of study participants come from urban areas, and 30% of patients come from rural areas.

In the level of education, distribution percent of the study group is as follows: 34% represents the percentage recorded in patients with secondary, and 66% is the percentage recorded in the patients with higher degree.

Dental anxiety is a major obstacle when it comes to seek advice early on oral and dental problems. Although in most literature articles there are studies showing that women have a higher level of dental anxiety than men, the study in this paper highlights the fact that 38% of women surveyed have an increased degree of anxiety in compared to men, which is 52%. It was also noticed that the men surveyed had a level of severe anxiety / phobia of 8%, while women did not record any results.

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As far as the environment of origin is concerned, the surveyed patients coming from rural areas recorded 6% of the severity of dental anxiety compared to 3% of the urban population. It was also noticed that rural patients showed a higher percentage of moderate dental anxiety than urban patients - 67% compared to 29%. Elevated levels of dental anxiety were highlighted in urban patients - 68%, compared with 27% in rural areas.

According to the present study, the questioned patients who have graduated from higher education have shown an increased level of dental anxiety lower than those who have secondary education - 9% and 59% respectively, and those who have experienced a high level of dental anxiety / phobia have were patients only from the group of patients with secondary education. Also, a moderate level of dental anxiety was registered in a higher percentage in the group of those with higher education than those in the medium-education group - 91% compared to 12%. In this respect, the literature abounds in studies that support the fact that the level of education influences the level of dental anxiety [7,8].

Regarding the professional status, only 3% of patients who are employed / in the labor market have experienced a severe level of dental anxiety, compared to those who are not employed, who have registered 8% of this. A moderate level of increased percentage of anxiousness was also observed in patients employed with the unemployed - 66% versus 34%. A higher percentage of an increased level of dental anxiety was seen in non-employed patients than in those employed - 58% and 31%, respectively.

In analyzing the level of dental anxiety according to the monthly income, it was observed that those with monthly income lower than the average income recorded an increased percentage of severe dental anxiety - 20% and those with a monthly income equal to the average income - 3% and those with a monthly income higher than the average income for the economy - 0%. However, the highest percentage representing a high level of dental anxiety was seen among patients with a monthly income higher than the median economic income - 67%, compared to 47% in patients with a income monthly compared to the average for the economy and against 40% - the percentage established after data processing for patients with a monthly income lower than the average income for the economy.

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In the analysis of patient concerns about the main dental treatment / other concerns, high rates of concern were recorded for dental extraction (50%), material costs of possible treatments (40%) and shame on the health of the oral cavity (48%). Much of the moderate levels of concern were observed as the vibration of the dental cut (44%), the anesthetic injection (70%), the sensation of suffocation during fingerprinting (60%), the painful feeling caused by cold air (60%), the number of necessary schedules (50%). Low levels of patient concerns about the main dental treatment / other concerns were recorded in raised percentages for endodontic treatments (50%) and for dental cabinet smells (60%).

Regarding the dental care habits of the patients in question, it was observed that, in the case of the time elapsed since the last dental examination, 100% was found in patients with severe dental anxiety who chose the last answer, that is, I do not remember when they did the last dental consultation.

Patients in the group of those with severe dental anxiety began early dental care in adolescence - 50% or nearly 30 years - 50%, compared with those who had moderate dental anxiety who started their first dental care at almost 20 years - 67%, and at almost 30 years only 10%.

Small percentages were recorded for responses that targeted brushing 3 times a day, regardless of dental anxiety level (13.33%, 5.56 and 0%). The highest percentages were found for dental brushing once a day: 100% in patients with severe dental anxiety / phobias, 70% in moderately dental anxious patients. Patients in the category of those with high dental anxieties recorded 55.56% of the responses to dental brushing twice a day.

Table 1

<table>
<thead>
<tr>
<th>Answer options</th>
<th>Moderate degree of dental anxiety</th>
<th>High degree of dental anxiety</th>
<th>Degree of severe dental anxiety / phobia</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Less than 3 months ago</td>
<td>10%</td>
<td>27.78%</td>
<td>0%</td>
</tr>
<tr>
<td>b. Less than 3-6 months ago</td>
<td>17%</td>
<td>27.78%</td>
<td>0%</td>
</tr>
<tr>
<td>c. 1 year ago</td>
<td>33%</td>
<td>27.78%</td>
<td>0%</td>
</tr>
<tr>
<td>d. I do not remember</td>
<td>40%</td>
<td>16.67%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 2

<table>
<thead>
<tr>
<th>Answer options</th>
<th>Moderate degree of dental anxiety</th>
<th>High degree of dental anxiety</th>
<th>Degree of severe dental anxiety / phobia</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Adolescence</td>
<td>20%</td>
<td>27.78%</td>
<td>50%</td>
</tr>
<tr>
<td>b. Nearly 20 years</td>
<td>67%</td>
<td>44.44%</td>
<td>0%</td>
</tr>
<tr>
<td>c. Nearly 30 years</td>
<td>10%</td>
<td>22.22%</td>
<td>50%</td>
</tr>
<tr>
<td>d. After 30 years</td>
<td>3%</td>
<td>5.56%</td>
<td>0%</td>
</tr>
</tbody>
</table>
With regard to the use of mouthwash, patients in the moderate dental anxious group recorded the highest percentage of 86.67%. According to the study, patients in the group with severe dental anxiety/phobia do not use dental floss at 100%, it was also observed that most of the patients who had a moderate degree of dental anxiety did not use dental floss as an ancillary oral hygiene agent - 73.33%. Patients in the group of those with severe dental anxiety give dental brushing about 50% for about 1 minute, and 50% of them do not know how much they devote to dental brushing. Small percentages have been recorded for the dental brush allocation over 2 minutes regardless of the level of dental anxiety. Patients in the moderate dental anxious group give approximately 2 minutes to dental brushing in 73.33%, and those in the group characterized by an increased level of dental anxiety do this in a percentage of 44.44%.

**Conclusions**

Urban patients have elevated levels of dental anxiety over rural patients. Low educational levels can lead to increased levels of dental anxiety. Most patients' concerns about the main dental treatment / other concerns are: dental extraction, material costs of possible treatments, and perceived shame over the health of the oral cavity. Regardless of the level of dental anxiety, the oral cavity hygiene habits are not properly performed by patients, with an increased tendency for them to be disregarded by patients with severe dental anxiety.

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