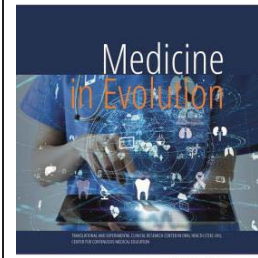


General anxiety level assessment of dentists in the context of the COVID-19 pandemic



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Abstract

Since 2020, since the beginning of the pandemic, in Romania, dentistry has been one of the most affected fields of activity, dentists being one of the risk categories, when we refer to general anxiety, in the context of the COVID-19 pandemic. The aim of this study is represented by the evaluation of the anxiety level of dentists, in the context of the COVID-19 pandemic, using a questionnaire. In this study were used 88 dentists who carry out their professional activity with a frequency of at least 5 days/week, in Timiș County and are between 24 and 65 years old. The study found that female dentists (25%) have a higher level of general anxiety than men (20%) in the context of the COVID-19 pandemic. Consequently, the level of general anxiety is high in 2 out of 5 female dentists, while only 1 in 5 male dentists has a high level of general anxiety in the context of the COVID-19 pandemic.

Keywords: anxiety, fear, COVID-19, dentistry

INTRODUCTION

The difference between fear and anxiety is a matter of gradation and especially of cognition. Both can appear in the psychological picture of the adolescent, having a role in his daily functioning and marking him as a future anxious adult, or calm and balanced. We call fear, that state whose object is rather known to the subject, that is, a state that has an emotional and representative content of its object. In contrast to these situations, the word anxiety is often reserved for cases where the object is poorly differentiated cognitively, but it can also be applied to intense fears or those that are repetitive, chronic or pathological [1,2].

In addition to this anxious expectation that anticipates the possibility of unfortunate events, anxiety may be accompanied by muscle tension, motor inhibition and neurovegetative manifestations. Among these, the most common are: palpitations or tachycardia, dizziness or dizziness, hot flashes or colds, redness and paleness, dry mouth, nausea and sore throat [3].

In situations where anxiety acquires a generalized character, in which the elements listed above are exacerbated and may have a more lasting character, we speak of pathological anxiety. Such cases can lead to the inhibition of the subject's action, to the underestimation of the real personal capacities [4].

At the end of 2019, pneumonia with an uncertain aetiology appeared in the Wuhan region from China [5]. There was a lot of information about a pathogen that was contacted from a fish market or a live animal. Initially, the transmission of the pathogen was from animal to human, later starting a rapid transmission from human to human. The pathogen was named "New Corona Virus 2019 (219-nCoV)", and the disease caused by it, "Corona Virus 2019 Disease (COVID-19)" [6].

The COVID-19 pandemic has had and is having a significant impact on the mental health of the population, therefore, monitoring the mental health of the population during pandemic crises is an immediate priority [7,8].

In the case of pandemics such as Severe Acute Respiratory Syndrome (SARS) there have been a number of stressful situations that threaten the physical health and psychological well-being of the individual and his perception that the transmission of the virus is relative and uncontrollable even if taken measures to prevent contamination (for example, wearing a protective mask and avoiding congestion) [9].

Because dentists perform procedures that create aerosols and make direct contact with saliva and blood, the risk of exposure is high among them. As a result, both the dentist and the entire team are extremely vulnerable, with a high possibility of direct exposure to the virus, which also implies a major negative psychological impact [10].

The COVID-19 pandemic continues to have a negative impact on the work of dentists. Routine dental procedures were suspended for a period of two months due to the risk of cross-infection during treatment. Moreover, the oral mucosa has been recognized as a route of virus entry, limiting dental activity only to treating emergencies, to minimize the generation of drops and aerosols. In addition, both companies operating in the field of dentistry and dental practices have decided to suspend their collaboration with some staff [11].

Aim and objectives

The aim is represented by the evaluation of the anxiety level of the dentists, in the context of the COVID-19 pandemic, using a questionnaire.

MATERIAL AND METHODS

With the onset of the pandemic, one of the most important components of the medical health system, dentistry, faced a total restriction on the practice of routine dental treatments for a period of two months. An acute shortage of rules of application of Government Ordinances, developed in order to prevent and combat the transmission of SARS-CoV-2 virus had a negative influence on the level of general anxiety of dentists.

In this study were included 88 dentists who carry out their professional activity with a frequency of at least 5 days/week, in Timiș County and are between 24 and 65 years old. People retired from professional activity, people with chronic or neuro-mental disorders were excluded from the study.

Of the total number of participants, 45 were male and 43 were female. All participants were informed about the purpose and manner of conducting the study and gave their consent to participate.

To conduct this study, a questionnaire was designed using the Google Forms platform (Table I).

Psychometric test used in the study

Sex:.....

Age:.....

GENERAL ANXIETY LEVEL MEASUREMENT SCALE IN THE CONTEXT OF THE COVID-19 PANDEMIC

Below are a number of statements. In the last 2 weeks (14 days), how often have you been bothered by the following issues:

Table 1. The scale for measuring the level of general anxiety in the context of the COVID-19 pandemic. (Lee S., 2020) [9]

	Never	Rarely	Sometimes	Often	Almost always
I had trouble falling asleep or sleeping because I was thinking about COVID-19.	0	1	2	3	4
I lost my appetite when I thought about it or when I was exposed to information about COVID-19.	0	1	2	3	4
I felt paralyzed or frozen when I thought about it or when I was exposed to information about COVID-19.	0	1	2	3	4
I felt dizzy, confused or weakened when I read or heard news about COVID-19.	0	1	2	3	4
I am an active person who carries out the plans established for me.	0	1	2	3	4

The questionnaire sent consisted of the socio-demographic information part and the measurement scale part.

The questionnaires were sent to the subjects of the sample using the social media platform, Facebook.

Data collection was performed only once / subject, in January 2022.

The following variables were recorded in this study:

- age;
- sex;
- dizziness;
- sleep disorders;
- tonic immobility;
- decreased appetite;
- abdominal discomfort.

Subjects were asked to rate each item on the scale based on how often they faced the condition in the last 14 days (Tab. 1). The scale consisted of a number of five items, each item corresponding to a state. The assessment of each condition was made by the subjects included in the sample by the following assessment:

1. Never
2. Rarely - at least in a day or two
3. Sometimes - in a few days
4. Often - in more than 7 days
5. Almost always - daily

Each answer corresponds to a score, in order to interpret the results, as follows:

1. Never = 0;
2. Rarely = 1;
3. Sometimes = 2;
4. Often = 3;
5. Almost always = 4.

A score ≥ 9 represents a high level of anxiety.

RESULTS

Of the 88 subjects included in the study sample, 51% (45 subjects) were male and 49% (43 subjects) were female, aged between 24 and 65 years.

For greater accuracy and easier data processing, the age of the subjects was divided into five intervals, as follows:

- age less than or equal to 25 years;
- age between 26 and 35 years;
- age between 36 and 45 years;
- age between 46 and 55 years.

Of the total percentage of subjects included in the study, 36% are between 26 and 35 years old, 25% are between 36 and 45 years old, 14% are between 46 and 55 years old and 14% are under 25 years old.

The analysis of the results based on the study criterion was done using the anxiety assessment scale in the context of the COVID-19 pandemic.

Of the total percentage of male subjects, included in the sample, to the statement "I had trouble falling asleep or sleeping because I was thinking about COVID-19", only 23% said they had not once had problems with sleep due to the COVID-19 pandemic, while 77% of them say they had (Fig. 1).

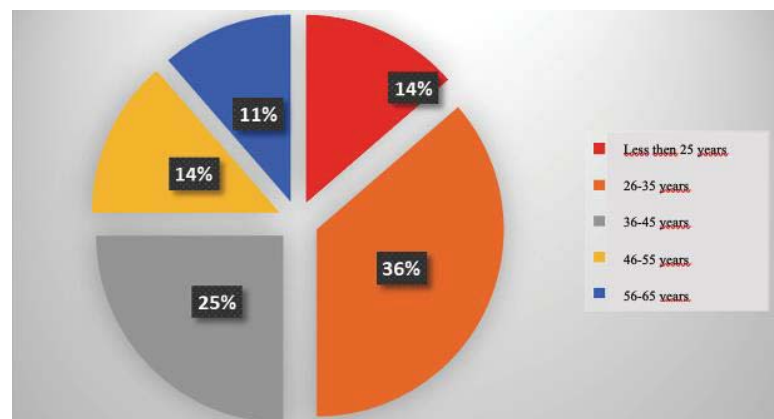


Figure 1. Percentage distribution of subjects based on the answers to item no. 1.

Of the total percentage of subjects included in the sample, in the statement “I lost my appetite when I thought about it or when I was exposed to information about COVID-19”, only 26% stated that they had no problems with appetite, while 74% of them say they had (Fig. 2).

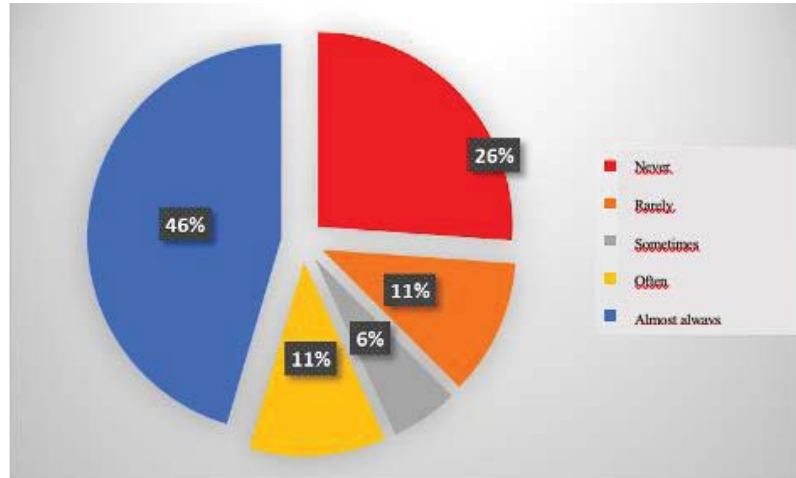


Figure 2. Percentage distribution of subjects based on the answers to item no. 2.

Of the total percentage of subjects included in the sample, in the statement “I felt paralyzed or frozen when I thought or when I was exposed to information about COVID-19”, 77% stated that they were they almost always felt paralyzed or frozen when they thought or were exposed to information about the COVID-19 pandemic, 6% often, 11% sometimes, and 6% rarely (Fig. 3).

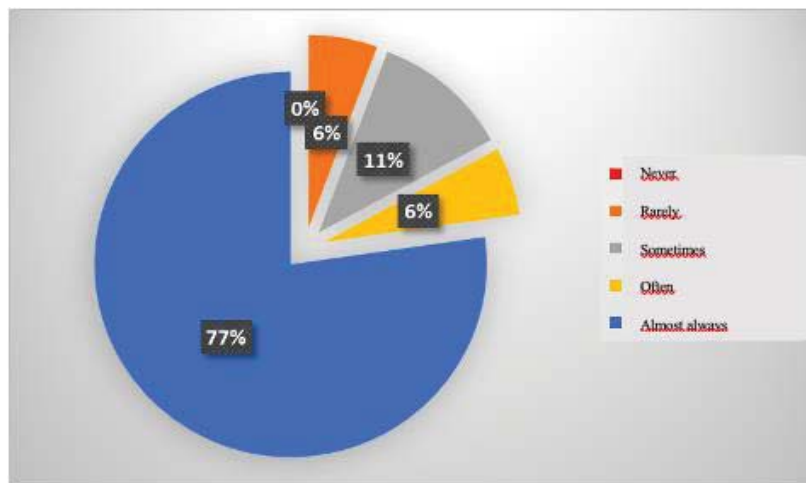


Figure 3. Percentage distribution of subjects based on the answers to item no. 3.

Of the total percentage of subjects included in the sample, for the statement “I felt dizzy, confused or weak when I read or heard news about COVID-19”, 77% said they felt almost always dizzy, confused or weak when I read or heard news about the COVID-19 pandemic, 6% often, 11% sometimes, and 6% rarely (Fig. 4).

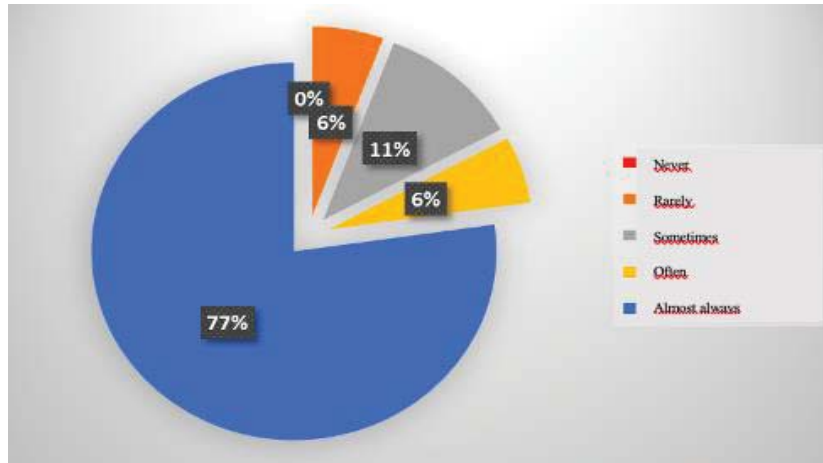


Figure 4. Percentage distribution of subjects based on the answers to item no. 4.

Of the total percentage of subjects included in the sample, the statement “I was nauseous or had a stomach ache when I thought about it or when I was exposed to information about COVID-19”, all remarked at least once the installation of a physical reaction at the time of a mention of the COVID-19 pandemic (Fig. 5).

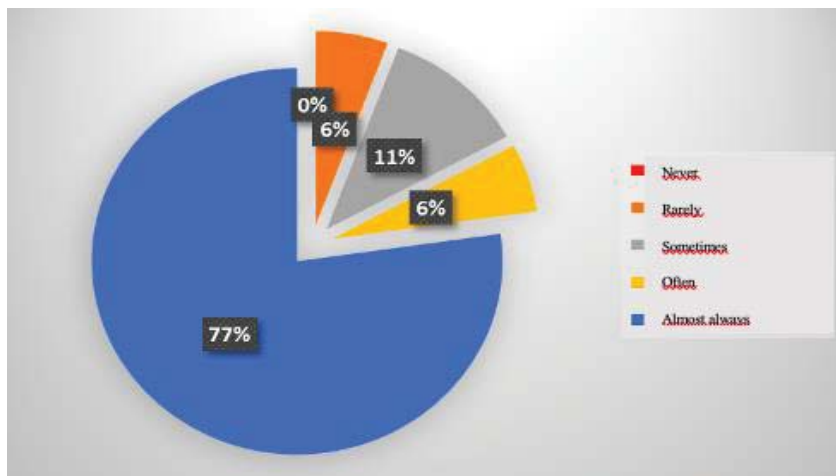


Figure 5. Percentage distribution of subjects based on the answers to item no. 5.

DISCUSSIONS

The results of this study showed that 25% of female subjects (11 subjects) included in the study had a score greater than or equal to 9, while only 20% of male subjects (9 subjects) included in the study had a score greater than or equal to 9.

Subjects with a score greater than or equal to 9 may experience certain conditions: dizziness, sleep disturbance, tonic immobility, loss of appetite, or nausea [4,12].

Dizziness, which is the fourth item on the scale, is a major symptom of panic attacks and an associated feature of generalized anxiety disorder (American Psychiatric Association, 2013) [13,14,15].

Sleep disorder, which is the second item on the scale, is a common symptom of both generalized anxiety disorder and post-traumatic stress disorder (American Psychiatric Association, 2013) [6,7].

Tonic immobility, which is the third item on the scale, is not a major symptom of any psychiatric condition [7,10].

Loss of appetite, which is the fourth item on the scale, is a common symptom of major depressive disorder, a condition that often occurs in conjunction with panic disorder (American Psychiatric Association, 2013). Loss of appetite is also a visible sign of fear, as it reflects the biological process of blood leaving the digestive tract in areas of the body that mobilize the person to deal with an imminent threat [4,12].

Abdominal nausea or distress, which is the last item on the scale, also captures the digestive changes associated with a fear response. Similar to dizziness, nausea and abdominal distress are also major symptoms of panic attacks and are features associated with generalized anxiety disorder (American Psychiatric Association, 2013) [6,12].

Although the scale items focus on reactions related to anxiety and trauma, the fact that they are focused exclusively on stressful bodily symptoms makes them extremely relevant for somatic symptoms and associated disorders (American Psychiatric Association, 2013).

For the age group up to 25 years, no scores higher than 9 were recorded.

For the age category 26 - 35 years, no scores higher than 9 were registered.

For the age category 36 - 45 years, 5 scores higher than 9 were registered, 3 being attributed to the male sex, and 2 to the female sex,

For the age category 45 - 55 years, 6 scores higher than 9 were registered, 4 being attributed to the female sex, and 2 to the male sex.

For the age category 56 - 65 years, 9 scores higher than 9 were registered, 5 being attributed to the female sex, and 4 to the male sex.

The limitations of the study were represented by the small number of subjects included in the study.

CONCLUSIONS

Anxiety is a complex phenomenon, a phenomenon that has both a psycho-social and a physical component. In addition to the problems facing humanity, in 2019 the pandemic COVID-19 began, which has become a risk factor for anxiety.

Following the study, it was found that the level of general anxiety of dentists, in the context of the pandemic with COVID-19 virus, participants in the study, is high, and the quality of sleep, social relationships and psycho-emotional and physical health being all altered due to this pandemic.

The study found that female dentists (25%) have a higher level of general anxiety than men (20%) in the context of the COVID-19 pandemic.

Consequently, the level of general anxiety is high in 2 out of 5 female dentists, while only 1 in 5 male dentists have a high level of general anxiety in the context of the COVID-19 pandemic.

Since the beginning of the pandemic, in 2020, in Romania, dentistry has been one of the most affected fields of activity, dentists being one of the risk categories, when we refer to general anxiety, in the context of the COVID-19 pandemic.

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