# The impact of socio-demographic factors on depression and anxiety in the context of quality of life

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## ABSTRACT

In the current conditions of life, the analysis of mental illness must be defined through the lens of human relationships with environmental, social, cultural, and dynamic factors that substantially impact human mental balance. The study aims to analyze the correlations between depression and anxiety and different socio-demographic factors such as age, sex, background, occupation, identification of the medical impact (number of hospitalizations and number of days of hospitalization), presence of comorbidities and different methods of therapy, from the point of view of the therapeutic response. All these bio-psycho-social indicators translate relevant aspects of the disease on the population's quality of life.

**Keywords:** depression, quality of life, anxiety, socio-demographic factors

## INTRODUCTION

Starting from the concept of normality, it can also be seen through the lens of the subject's ability to survive independently, with his powers, to have a positive social role, to have discernment, to do good, and most importantly, to be free. The content of the concept of mental illness does not originate only in the errors of biological mechanisms [1,2]. However, it must also be determined by the quality of the relationship between man, as an existential, biological, and psychic unit, and the environment. Thus, in the current conditions of life, the analysis of mental illness must be defined through the lens of human relationships with environmental, social, cultural, and dynamic factors that substantially impact human mental balance [3].

The estimated total number of people living with depression increased by 18.4% between 2005 and 2015; this reflects the overall increase in the global population and the proportional increase in the age groups in which depression is more prevalent [4].

According to the World Health Organization declaration, depression is in third place at the international level in 2020, reaching the first position in the causes of disability [4]. Thus, depression is not only an exciting and challenging topic for research and debate but also a medical, psychosocial, family, economic, and so on [5,6].

The study aims to analyze the correlations between depression and anxiety and different socio-demographic factors such as age, sex, background, occupation, identification of the medical impact (number of hospitalizations and number of days of hospitalization), presence of comorbidities and different methods of therapy, from the point of view of the therapeutic response. All these bio-psycho-social indicators translate relevant aspects of the disease on the population's quality of life.

## MATERIALS AND METHODS

The study group included 60 subjects, of which 48 were women (80%) and 12 were men (20%) The selected cases were among the patients admitted to the Psychiatry Department of the Clinical Psychiatry Hospital "Professor Doctor Alexandru Obregia," Bucharest, between October 2020 and June 2021.

The inclusion criteria were: people with depression or anxiety proven by clinical data, accurate and complete data, but also people with the diagnosis of recurrent depressive disorder (F33.9), mixed anxiety and depressive disorder (F41.2), and Mood disorders (affective) organic (F06.3).

The methods used were observation sheets of the patients in the studied group. The information was obtained by studying people with anxiety or depression, preserving the subjects' anonymity.

The data obtained were processed in Office Word 2007, following the parameters specified in Table 1.

**TABLE 1.** The monitored parameters

| Parameter | Specification |
|---|---|
| Sex | Male/ female |
| Age | → 34-39 years; |
| | → 42-49 years; |
| | → 51-58 years; |
| | → 62-68 years; |
| Patient's condition | Behaviour and suicidal ideation, panic attacks and anxiety |
| Residential environment | → Urban |
| | → Rural |
| Level of education | |
| Marital status | |
| Profession | |
| Comorbidity | → Somatic |
| | → psychiatric |
| Symptoms | |
| Recurrent depressive disorder | |
| Number of hospitalisation | |
| During hospitalization | |
| Degree measurement | → anxiety |
| | → depression |
| Therapeutic responses | |

Diagnosis groups related to depression and anxiety were organized after a mild depressive episode, recurrent depressive episode, mixed anxious and depressive disorder, mood disorders, and panic disorder.

In close connection with the above diagnostic data, the existence and persistence of the most common symptoms and signs of depression and anxiety were traced. The number of days of hospitalization, the number of hospitalizations in the psychiatric clinic, and the response to the therapeutic strategy were also analyzed. After the psychiatric analysis, a somatic evaluation of all the patients in the studied group was also carried out.

All patients benefited from paraclinical explorations consisting of the collection and dosing of the usual tests: complete blood count, ESR, urea, creatinine, blood glucose, transaminases (GPT, GOT), urinalysis.

## RESULTS

Regarding the distribution of depression by gender, 80% of the subjects were female, the male sex having a lower share, namely only 20%. This result correlates with data from the literature that show the frequency of depression among the female population. The age of the subjects is between 34 and 68 years according to Figure 1.
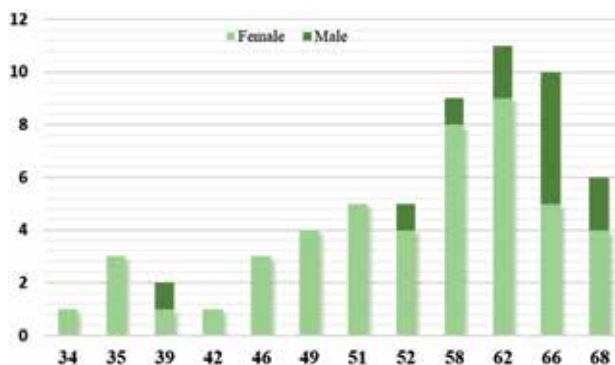


**FIGURE 1.** Age distribution

Male individuals have two peaks in incidence, at 39 and 66 years of age, while females have three peaks of incidence, first at 35 years old, then 51 years old, followed by 62 years, maximum.

A simple and yet sad explanation, which triggers an alarm on the prolonged resonance of depression, lies in the non-recognition of the symptomatology, denial of its existence, or the association of other factors responsible for it.

The results demonstrate the importance of a stable relationship, highlighting that 43% of those included in the study were divorced, 27% married, 17% unmarried, and 13% widowed. This indicator is frequently correlated with a high hospitalization rate, which proves that most relapses are found in nonmarried, divorced, or widowed persons.

The urban residency environment was highlighted in 33% of the study participants and the rural residency environment at 67%. The study of observation sheets showed that men with stable jobs mainly were in rural areas, with a medium and high level of education. Regarding job distribution, 38% were retired, 35% were without occupation, and 27% were employees. In 80% of patients, the severity of the depressive picture was identified. The distribution of psychiatric comorbidities associated with depression is given in Figure 2.

Suicidal ideation was recognized in 31 of the patients, suicidal behavior in 8 of the patients, panic attacks in 38, and anxiety in 52 patients. The somatic comorbidities associated with depression are shown in Figure 3. A total of 6 patients did not have any associated conditions.

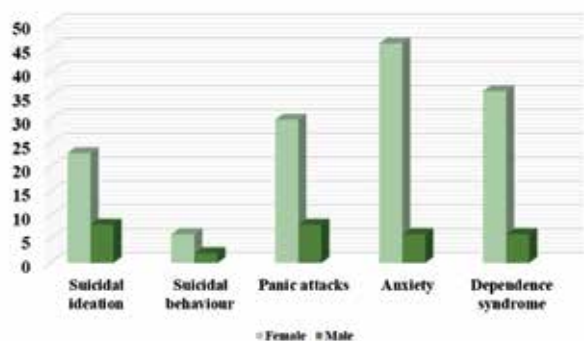Among the main symptoms of depression, the depressive mood was the first to be discovered in all

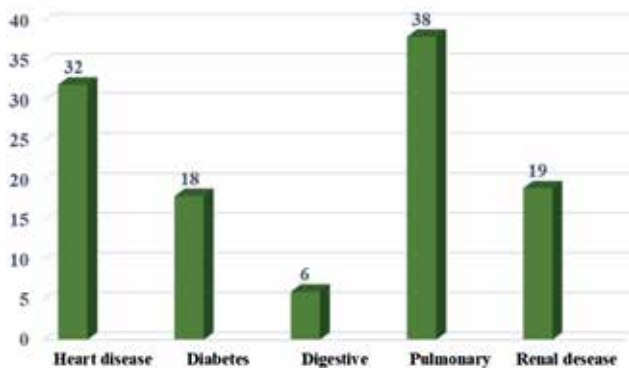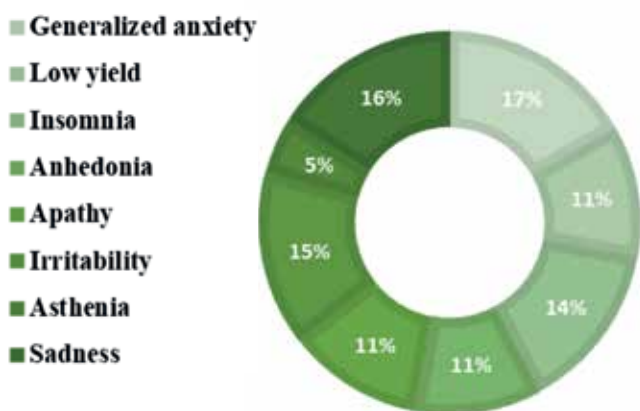**FIGURA 2.** Psychiatric comorbidity



**FIGURE 3.** Somatic comorbidities associated with depression

subjects. The distribution of the main symptoms of depression analyzed by sex is shown in Figure 4.

8 of the 12 male subjects returned with a recurrent depressive episode and 2 with a mild depressive episode. 2 subjects presented mixed depressive-anxious disorders and other disorders. 38 of the women presented recurrent depressive episodes, six women had mild depressive episodes, and four women had mixed depressive-anxious disorders, depressive disorders, or other disorders.

A small number of subjects were at their first hospitalization (21 patients), 28 of the patients already had between 2 and 4 admissions, and 11 pa-

tients had between 5 and 12 admissions, being old cases. In most cases, these frequent relapses resulted in the subjects' familial, social, and professional disintegration.

In terms of the duration of hospitalization due to anxiety and depression, the fewest were day hospitalizations lasting less than 12 hours; 23 cases presented hospitalizations of 2-3 days, 15 patients had hospitalizations of 8 days, and 11 patients had hospitalizations lasting more than ten days.

The measurement of depression was applied to all subjects in the studied group (Figure 5). The Hamilton scales for anxiety and depression were used to measure these conditions' severity from the patient's symptomatology perspective.
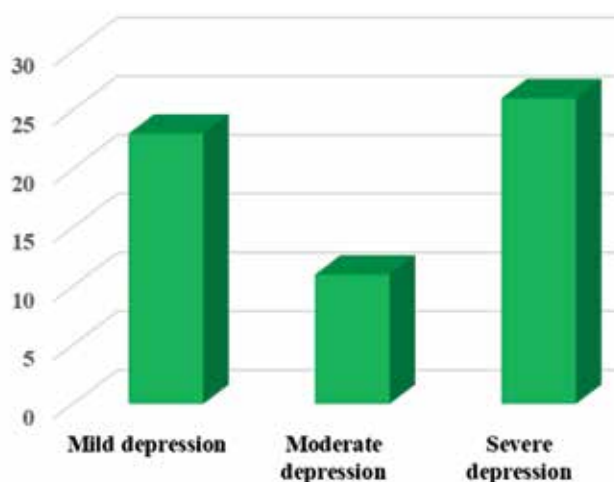


**FIGURE 5.** Depression assessment

Anxiety measurement* scale was applied to all subjects in the studied group (Figure 6). The Hamilton scale was used for anxiety, and the results obtained were entered in the accompanying table.

According to the measurement results of both depression and anxiety, it is observed that severe depression, which is most common among the study



a. for female



b. for male

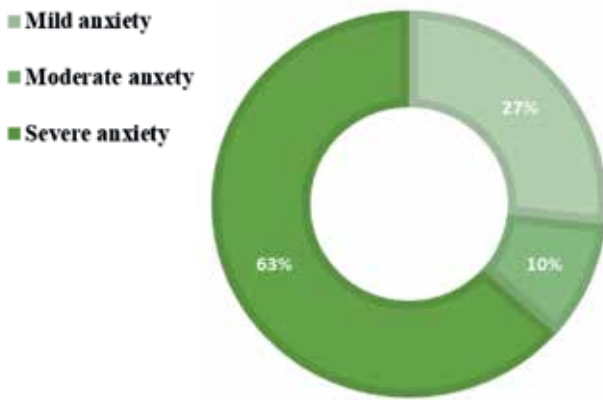**FIGURE 4.** Distribution of the symptoms by sex
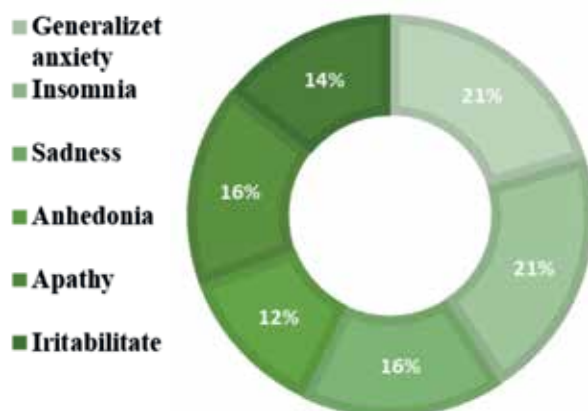
**FIGURE 6.** Measuring anxiety

subjects, is associated with a severe score (over 25 points) corresponding to the anxiety scale.

The main classes of antidepressants used in the therapeutic strategy are shown in table 2.

**TABEL 2.** Classes of Antidepressants used

| Medication | Number of patients |
|---|---|
| Carbamazepine | 46 |
| Selective serotonin reuptake inhibitors | 48 |
| Serotonin and norepinephrine reuptake inhibitors | 29 |
| Sodium valproate | 28 |

Only in isolated cases has it been shown that a single class is effective (14% of patients); in most cases (86% of patients), therapeutic formulas were created by associating several antidepressants or improving the scheme with an anxiolytic (Figure 7 a, b). In most cases, the addition to the therapeutic scheme of an anxiolytic (18 cases) and a thermostabilized (16 cases) demonstrated a very good therapeutic response.
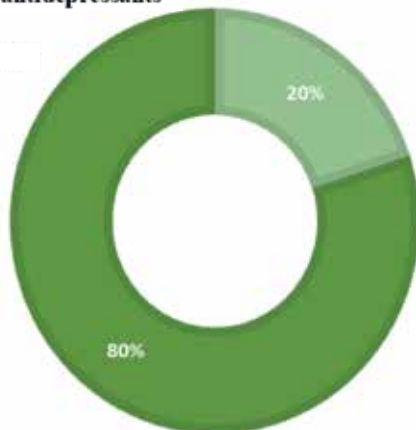


a

**FIGURE 7.** Therapeutic strategies

Of the 39 patients, who had hospitalizations for more than a day, 41% did not respond to the therapeutic scheme, requiring an improvement or even its total change. 59% of these patients experienced side effects of the type: sexual dysfunction, gastrointestinal disorders, weight gain, headache, and so on.

Some of the patients received encouraging results from treatment – the effectiveness and remission of symptoms induced by depression and anxiety. However, it has been observed that in some cases, the patient has partial compliance (64%) or even total lack (36%), stopping the voluntary treatment without consulting with the specialist doctor.

## DISCUSSION

A large number of patients have comorbidities of the type: behavior and suicidal ideation, panic attacks, and addiction syndrome. Many studies have documented solid relationships between depression and hopelessness and subsequent suicidal thoughts and behaviors; however, much weaker and insignificant effects have also been reported [7,8].

Multimorbidity, the presence of two or more chronic conditions, is increasingly common and complicates the evaluation and management of depression. Depression is two to three times more likely in people with multimorbidity than those without multimorbidity or those without chronic physical conditions. Greater knowledge of this risk supports the identification and management of depression [9].

The clinical picture is dominated, in most cases, by generalized anxiety, low yield, mixed insomnia, anhedonia, apathy, asthenia, irritability, asthenia, sad mood, mixed insomnia, bizarre behavior, slowness of flow and ideo-verbal rhythm, low tonal voice, postural changes with depressive, mimic and sad gestic aspect [10].
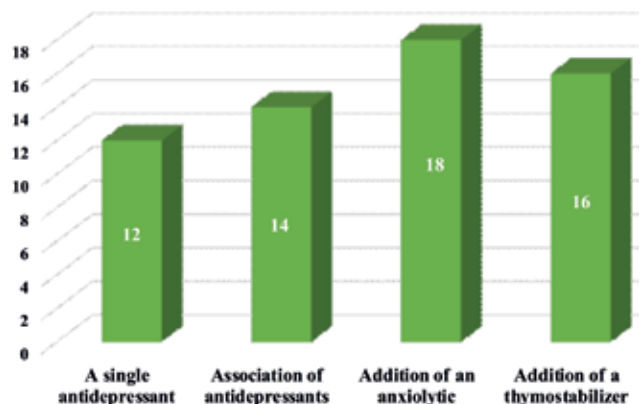


b

Depression can take the form of a single depressive episode or several depressive episodes. A single depressive episode can last up to two years or more, and three out of four patients may have recurrent episodes throughout their lives [11].

Patients with multiple admissions, such as the one with more than five admissions, showed resistance to treatment in addition to the recurrent and chronicling character of depression. Thus, several treatment schemes have been tried, currently being discharged with favorable evolution. With the numerous hospitalizations, in the case of some patients, the effects of some comorbidities already present have improved, but the accentuation or appearance of others [12].

Following the measurement of depression, with the help of the Hamilton Scale showed the presence, in most cases, of the severe depressive episode. An Arabic study of the Hamilton Scale has good psychometric properties, making it an excellent tool to diagnose patients with depression. Recognition of depression and treatment in general practice to improve patient outcomes and reduce health care expenses are justified [11].

According to the results of the measurement of anxiety, it has been observed that severe depression is associated with a severe score, corresponding to the anxiety scale. Thus, the information in the literature confirms that the two pathological entities coexist, in most cases, isolated, with depression with pure symptomatology, without anxiety. All patients received etiological and symptomatic treatment specific to the diagnosis and existing comorbidities. The patient's brain condition, cognition, and compliance were considered in all cases.

Selective serotonin reuptake inhibitors are the first-line treatment for depression in children and adolescents. For treatment-resistant depression, switching to an alternative SSRI is recommended before studying other antidepressants [13]. Adding

a thermostabilized and an anxiolytic has benefited the therapeutic response.

In the case of some patients, it was necessary to change the therapeutic strategy several times, either because of the side effects or because they gave up the medication on their initiative. A high percentage showed partial compliance, which again proves the foundation in the literature in which the reluctance of patients with this pathology is discussed.

Due to poor therapeutic compliance, the course is usually favorable but still with muted response to specialized treatment. Family support is generally modest, with a family experiencing conflicting feelings, or misunderstanding the behavior of the sick person, lacking in most cases empathy and acceptance of the existence of a disease. Complete interdisciplinary collaboration between family doctors, internists, and psychiatrists is required to adopt the best therapeutic strategy with optimal results and minimal risk of relapse.

It is challenging to create the picture of a depressed patient admitted to the Psychiatric Ward with anxiety. However, it can be said that a specific profile would be a woman over 50, married, retired, from rural areas, with 2-4 hospitalizations, with higher or elementary education. The hypothetical patient would have depressive and anxious symptoms, cardio-vascular comorbidities, and associated psychiatric pathologies.

## CONCLUSIONS

Based on the analysis of the study results, it can be concluded that depression and anxiety were more common in female subjects aged 50 years, with 2-4 hospitalizations, and cardiovascular comorbidities and associated psychiatric pathologies were revealed. More studies are needed to create the profile of the patient with depression and anxiety.

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