Depressive symptoms in users attended in a Matrix Health Unit
Sintomatología depresiva en usuarios atendidos por una Unidad Matricial de Salud

Luiza Elena Casaburi¹
Sueli Aparecida Frari Galera²
Luan Augusto Alves García³
Lúcia Aparecida Ferreira⁴

This study aimed at conducting a survey about the depressive symptoms of users in the Matrix health service. This was an descriptive and exploratory study, developed in a Matrix Health Unit in a municipality in the countryside of the Triângulo Mineiro region, MG, Brazil, from July to November, 2013. The sample was made up of 282 users of the health service. A sociodemographic characterization instrument was used, together with Beck’s Depression Inventory to screen for depressive symptoms. Most participants were male, from 18 to 59 years of age, married and with up to 8 years of study. 11.0% of participants presented with dysphoria and approximately 31.0% presented a score that indicated depression. These symptoms were most common among elders (p=0.028). Single, divorced and widow persons also presented statistically relevant correlations to scores that indicate depression (p=0.042). Mental health is still a neglected by the Primary Health, and the professionals who work in the field must improve their work practices, valuing the many ways to investigate the depressive symptoms and their associated factors.

Descriptors: Depression; Family Health Strategy; Primary health care; Mental health.

O presente estudo teve como objetivo realizar um levantamento da sintomatologia depressiva em usuários do serviço Matricial de saúde. Tratou-se de estudo exploratório descritivo, desenvolvido em uma Unidade de Matricial em Saú­de em um município do interior do Triângulo Mineiro, durante o período de Julho a Novembro de 2013. A amostra foi composta por 282 usuários do serviço de saúde. Foram utilizados um instrumento de caracterização sociodemográfica e o Inventário de Depressão de Beck para rastreamento de sintomatologia depressiva. A maioria dos participantes eram do sexo masculino, com faixa etária entre 18 e 59 anos, casados e com escolaridade até 8 anos. Apresentaram disforia 11.0% dos participantes e cerca de 31.0% apresentaram pontuação indicativa de depressão, sendo mais prevalentes tais sintomas em idosos (p=0.028). A situação conjugal de solteiros, divorciados e viúvos também apresentou relação estatística significativa com pontuações indicativas de depressão (p=0.042). A saúde mental ainda é problema negligenciado pela Atenção Primária, cabendo a tais profissionais aprimorar suas práticas de trabalho, valorizando as diversas formas de investigação da sintomatologia depressiva, depressão e seus fatores associados.

Descritores: Depressão; Estratégia Saúde da Família; Atenção primária à saúde; Saúde mental.

El presente estudio tuvo como objetivo realizar un levantamiento de la sintomatología depresiva en usuarios del servicio Matricial de salud. Se trató de un estudio exploratorio descritivo, desarrollado en una Unidad de Matricial en Salud en un municipio del interior del Triángulo Mineiro, MG, Brasil, durante el periodo de julio a noviembre de 2013. La muestra estuvo compuesta por 282 usuarios del servicio de salud. Fue utilizado un instrumento de caracterización sociodemográfica e Inventario de Depresión de Beck para rastreo de sintomatología depressiva. La mayoría de los participantes eran del sexo masculino, con grupo etario entre 18 y 59 años, casados y con escolaridad hasta 8 años. Presentaban disforia 11.0% de los participantes y cerca de 31.0% presentaron puntuación indicativa de depresión, siendo más prevalentes tales síntomas en ancianos (p=0.028). Situación conjugal solteros, divorciados y viudos también presentó relación estadística significativa con puntuaciones indicativas de depresión (p=0.042). La salud mental aún es un problema descuidado por la Atención Primaria, cabiendo a tales profesionales mejorar sus prácticas de trabajo, valorizando las diversas formas de investigación de la sintomatología depresiva, depresión y sus factores asociados.

Descritores: Depresión; Estrategia de Salud Familiar; Atención primaria de salud; Salud mental.

1. RN. MS in Psychiatric Nursing, Professor at the Nursing Graduation Course at the Universidade de Uberaba (UNIUBE), Uberaba, MG, Brasil. ORCID: 0000-0001-8722-1372 E-mail: luiza.casaburi@hotmail.com
2. RN. Post-Doctoral student. Full Professor of the Psychiatric Nursing and Human Sciences Department of the Nursing School of Ribeirão Preto of the Universidade de São Paulo, Brazil. ORCID: 0000-0001-7974-9214 E-mail: sugalera@eerp.usp.br
3. RN. MS in Health Care. PhD student in Health Care at the Universidade Federal do Triângulo Mineiro (UFTM), Uberaba, MG, Brazil. ORCID: 0000-0003-0984-2688 E-mail: luangarciatpc@yahoo.com.br
4. RN. PhD in Nursing. Associate Professor at UFTM, Uberaba, MG, Brazil. ORCID: 0000-0001-6469-5444 E-mail: lap2ferreira@yahoo.com.br
INTRODUCTION

The Major Depressive Disorder (MDD) strongly impacts the lives of its victims and their family members, significantly compromising social, occupational, physical and mental aspects, and even having a substantial economic impact\(^1,2\).

Initially, the individual may verbalize sadness, melancholy, feelings of a "heavy heart", anguish, distress, anxiety, pessimism and preoccupation\(^3\), being that the individual, during childhood or adolescence, is more irritable, when compared to adults.

As the symptoms evolve, gradual changes can be seen in the individual, such as: changes in appetite and weight, insomnia, restlessness or psychomotor retardation, tiredness, feelings of uselessness, low capacity of focusing and making decisions, recurring suicidal thoughts and planned suicide attempts. As seen, the MDD has a complex semiotic framework, that needs at least two weeks to be diagnosed and can include signs and symptoms that, due to their nature, can severely compromise the well-being in a short period of time\(^4\).

According to the World Health Organization (WHO), in 2010, nearly 350 million people in the world suffered from mental disorders, and from these, 40.5% suffered from depressive disorders\(^5\). The WHO estimates that nearly 80% of patients with mental disorders do not present signs and symptoms that justify their referral to specialized attention, and can be treated in the Primary Health Care (PHC)\(^6\). This corroborates to validate the data of the organization, according to which the third most common reason for consultations in the PHC is MDD\(^7\).

A study with worldwide projection has indicated depression as the fourth greater cause of disabilities, and that it will be the main morbidity in 2020\(^1\). The epidemiological context of mental health suggests that incidence and prevalence are underevaluated due to an increased demand. In Brazil, in primary care, routinely, 56% of the family health strategy teams have to execute some intervention regarding mental health, in most cases dealing with MDD\(^8\).

According to the Ministry of Social Security, in 2011, mental and behavioral disorders were the third most common cause for the concession of sick pay due to work inability, something that is also in the fifth Chapter of the International Classification of Diseases (ICD-10)\(^9\).

A study\(^10\) conducted in 18 countries reports that depression is the most common case of occupational disability in the age group from 15 to 44 years of age in the world. The total prevalence of depression found in Brazil (18.4%) is higher than that of countries with a medium GDP\(^10\).

Therefore, it can be noticed that, even with distinct variables to analyze what the MDD affects or can cause, it is a public health problem and there is a growing demand in primary health care, since it is the gateway for the current Brazilian health network.

In a study with 18,560 50-year old or older non-institutionalized people, the connection between depressive symptoms and the use of health services was made clear. The presence of these symptoms was estimated for 28.2% of participants, and there was a high index of use of health services such as: consultations, medication, hospitalization, surgeries and home visits, leading to high social costs in health\(^11\).

A retrospective analysis, which analyzed 5,801 patients, organized by the New York State Psychiatry Institute, highlighted the elevated costs patients who are resistant or not to MDD treatment have to the system. The per capita cost for resistant patients with MDD is around 35,276 reais, and for non-resistant ones, it is of 29,303 reais, for the first year of treatment with prescribed antidepressant medication\(^12\).

Despite their high prevalence, depressive mood changes are underdiagnosed in primary health care, and as a consequence are not the target of interventions.

The WHO and the Ministry of Health estimate that nearly 80% of patients with some form of mental disorder, since they do not present clear pathology symptoms, when attended by primary care, are referred to specialists, which should not happen\(^8\). That is
because these services should care for them and be resolutive, as the Unified Health System prescribes.

A research conducted in the United States makes that clear, since it showed that 50% of the depressed patients who seek help in the primary care are not diagnosed and do not receive treatment\textsuperscript{13}.

In Brazil, a similar study pictured a similar situation, in which 29.5% of depressed patients who seek the PHC do not receive any type of intervention\textsuperscript{14}. In Spain, on the other hand, the PHC network is better structured, and only 9.6% of patients did not receive interventions\textsuperscript{11}.

Another study conducted with 148 patients with a diagnostic of depression and anxiety, showed that general practitioners fail in the detection of this disorder in more than 50% of cases, and offer treatment for only one third of them\textsuperscript{13}.

The management and treatment of mental disorders in the context of primary health care services are an essential step to make sure that a higher number of people have access to services to manage this mental suffering. Among the patients for whom the disorder was not diagnosed or is not-treated, the evolution was found to be worse\textsuperscript{15,16}.

According to the WHO, depressive symptoms nowadays reach nearly 151 million people in the world. The early detection of mental disorder cases in the community and the promotion of mental health are thus important goals in the context of the PHC, so that mental health policies can be implemented\textsuperscript{11}. Therefore, this study aimed at conducting a survey about the depressive symptoms of users in the Matrix health service.

**METHOD**

This was a descriptive and exploratory study, developed in a Matrix Health Unit in the city of Uberaba, Minas Gerais, from July to November, 2013.

The inclusion criteria for the study were: being 18 years old or older (people from 18 to 59 years of age were considered as adults, and those 60 years old or older, as elders), having looked for the health services for consultations or some nursing procedure in the morning shift (during the period of the study) and not having a previous medical diagnostic of depression or any other psychiatric diagnostic. To increase the reliability of the information, the medical record of the participants were verified to confirm that they did not have previous diagnostics of depression.

For sample calculations, the mean of 2400 adults and elders attended in a month was considered, according to the Information System for Primary Health (SIAB) of the unit. Considering a 5.5% sampling error and a 95% confidence index, a sample of 280 individuals was calculated. The number of patients asked to participate in the study was 316. From these, 14 were excluded because they did not agree to participate (mostly mentioning the lack of type and the need to leave quickly after consultation for work as a reason), 3 because they were minors, and 17 because they had a previously established depression diagnostic. The consequent sample was comprised of 282 subjects, all of which signed a Free and Informed Consent Form.

Initially, the sociodemographic questionnaire was applied, including questions about age, sex, educational level and marital status.

To evaluate the depressive symptoms, Beck's Depression Inventory (BDI) was used. The inventory is a tool to screen for the presence of depressive symptoms and aid in the medical diagnostic of affective disorders\textsuperscript{17}.

The BDI is one of the most commonly used instruments in clinical practice. It is made up of 21 items that evaluate depressive attitudes and symptoms that reflect the current state of the patient. It evaluates feelings of: sadness, discouragement, failure, loss of satisfaction, guilt, being punished, disappointment with oneself, self-accusation, suicidal thoughts, crying bouts, irritability, social isolation, indecision, bodily image distortions, and of inability to work\textsuperscript{17}.

The choice of the cut off point depends on the nature of the sample and on the objectives of the study. To samples for patients with the medical diagnostic of some affective disorder, the "Center for Cognitive
Therapy” recommends that the Beck’s Depression Inventory should be used according to the following classification: 1) not depressed: 0-9 points; 2) mild depressive state: 10-20 points; 3) moderate depression: 21-30 points; and 4) severe depression: more than 30 points\textsuperscript{17}.

However, for samples with no medical diagnostic of any mood disturbances (which is the case of the subjects of this study) the categories are defined differently. Scores above 15 indicate dysphoria (sudden and transitory changes in the affective state, generating feelings of sadness, pity or anguish, for instance), and depression is indicated by symptoms whose score is superior to 20\textsuperscript{18}.

After data collection, a database in the Microsoft Excel® program was created, and its data was later imported to the SPSS 16.0 software, where statistical descriptive analyses and the Chi-square tests were conducted to compare the proportions. The decision-making rule was of rejecting the null hypothesis for the p-value (p) when inferior to the significance level of 5%.

The research was approved by the Ethics Committee for Researches with Human Beings in the Universidade Federal do Triângulo Mineiro (UFTM), respecting Resolution 466/12 (protocol nº 2467).

RESULTS

282 users participated in the study. 61 were male (21.6%) and 221 were female (78.4%). Most participants were from 18 to 59 years of age (74.8%), married (42.9%) and had up to 8 years of study (incomplete elementary school - 34.0%). Regarding the proportion of adults and elders, there were 71 elders (25.2%) and 211 adults (74.8%), according to Table 1.

Table 1. Sociodemographic data of users in a Matrix Health Unit. Uberaba, 2013.

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>61</td>
<td>21.6</td>
</tr>
<tr>
<td>Male</td>
<td>221</td>
<td>78.4</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>59 years of age</td>
<td>211</td>
</tr>
<tr>
<td>60 years or more</td>
<td>71</td>
<td>25.2</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>77</td>
<td>27.3</td>
</tr>
<tr>
<td>Married</td>
<td>121</td>
<td>42.9</td>
</tr>
<tr>
<td>Stable union</td>
<td>25</td>
<td>8.9</td>
</tr>
<tr>
<td>Divorced</td>
<td>22</td>
<td>7.8</td>
</tr>
<tr>
<td>Widower</td>
<td>37</td>
<td>13.1</td>
</tr>
<tr>
<td>Educational level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incomplete elementary school</td>
<td>96</td>
<td>34.0</td>
</tr>
<tr>
<td>Complete elementary school</td>
<td>31</td>
<td>11.0</td>
</tr>
<tr>
<td>Incomplete high school</td>
<td>68</td>
<td>24.1</td>
</tr>
<tr>
<td>Complete high school</td>
<td>22</td>
<td>7.8</td>
</tr>
<tr>
<td>Technical education</td>
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<tr>
<td>Incomplete higher education</td>
<td>15</td>
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<tr>
<td>Complete higher education</td>
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<td>6.4</td>
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<tr>
<td>Post-graduation</td>
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<td>2.1</td>
</tr>
<tr>
<td>Illiterate</td>
<td>13</td>
<td>4.6</td>
</tr>
</tbody>
</table>

Regarding the evaluation of depressive symptoms according to the BDI, 163 (57.8%) patients presented a non-significant score (below 15), 31 (11%) presented dysphoria (from 16 to 20 points) and 88 (31.2%) presented a score that indicated depression (21 points or more). These data are in Chart 1.
The presence of dysphoria and of depression indexes was more prevalent among the elderly population, as shown in chart 2. The age has statistically significant (p=0.028) correlations, meaning that the elderly population had higher depression indexes.

**Discussion**

In this study, the number of participants with depression indexes is expressive (31.2%). This proportion is higher than the one found in other studies when it comes to the prevalence of depressive disorders, since these found rates of about 16%\(^\text{19,20}\). Beck's Depression Inventory, when used as a screening device, can overestimate the number of cases. This is common in screening tools that are developed to be highly sensitive (as to show few false negatives) but have as a negative consequence low sensitivity (resulting in many false positives).

Considering that this study excluded patients with previous depressive disorder diagnostics, a selection bias was to be expected. Considering that depressed patients were excluded, the rest of the population was expected to have low depression levels.

That, however, was not the case, and there were high levels of dysphoria and depression indexes. Such a situation indicates that depressive disorders are underdiagnosed in the studied population. This finding corroborates international literature, that indicates that general practitioners and physicians in the primary health care
frequently do not diagnose and treat mental disorders. For some scholars, the fact that the professionals do not have the time to perform more thorough consultations, which would be necessary for a psychological diagnosis, as well as a lack of scientific knowledge on the theme, contribute for them to be insecure regarding the diagnosis.

However, when comparing the clinical detection of mental disorders to the results found through the use of screening instruments, one must be careful to consider the actions of the clinical professional. Frequently, primary care professionals, when dealing with patients who present psychic changes, do not relate these to mental disorders.

These "deviant" behaviors are attributed to "poly-complaints", "tantrums" and "hysteria". The reasons that lead to this are not within the scope of this research. However, other works show, as main justifications for the non-detection of mental disorders, the lack of time and of technical knowledge from the team.

Marital status and age group are related to the depression indexes. The result found in the study regarding the marital status indicates that single, widow, and divorced patients have higher depression index, in accordance to other studies, which point out that living with a partner and having social support protect against depression. Researches point out that the prevalence of depressive symptoms is high in the elderly population, which is in accordance to the results found in this study.

The lack of correlation of the results with the sex of the patients is surprising, since depression is usually prevalent among women. Not to mention that an opposite result (albeit with no statistical significance) was found, according to which the male population had higher depression levels.

Despite the high amount of instruments for the screening of depressive symptoms, this condition is still underdiagnosed, and in the country, the inclusion of these tools in the Primary Health Care services is a strategy that is not used very often. The shortcoming in the use of these instruments may be associated to the lack of professional training or to the great amount of activities in the scope of the work of these professionals.

The tendency to resort to medications is another important issue. A study conducted in five Family Health Units in the city of Florianópolis (SC) showed a strong tendency to medicate in order to manage depressive symptoms.

CONCLUSION
The results of this study showed a 31.2% prevalence of depression in the studied population, with expressive results among the elders. In addition to the age group, the single, widow and divorced marital states were also related to the presence of depressive symptoms.

Considering that, the results suggest that the mental health issues are still neglected by the PHC, which indicates a need for improving the quality of the primary health care network, when it comes to the integral effectiveness of care.

The health professionals, especially those in the PHC, must improve their work practices, valuing the many ways to investigate depression and depressive symptoms, as well as their associated factors.

Some limitations of this study might be related to the choice of the instrument to assess the depressive symptoms. The use of Beck's Depression Inventory instead of the non-conduction of the formal clinical diagnostic are estimates of the proportion of depressive symptoms, and not an exact value to indicate how many patients were according to the criteria for the diagnostic.

Despite that, and that the studied population included only one health unit which contemplates three ESF teams, the results can contribute to the understanding of how depression may be underdiagnosed in the PHC, leading to new questions to be asked by other studies and contributing for the state of the art on the theme, considering that previously conducted researches indicate the different levels of lack of preparation of the PHC teams when it comes to mental health.
REFERENCES


CONTRIBUTIONS

Luiza Elena Casaburi took part in the conception of the study, data collection and analyses, and writing. Lúcia Aparecida Ferreira took part in the conception of the study and in its revision. Sueli Aparecida Frari Galera and Luan Augusto Alves Garcia contributed to the writing and to the critical revision.