Anxiety and Depression: screening among family health strategy professionals in the Amazon

Ansiedade e Depressão: rastreio entre profissionais da estratégia de saúde da família na Amazônia

Ansiedad y Depresión: tamizaje entre profesionales de estrategias de salud familiar en la Amazonía

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RESUMO

Objetivo: realizar rastreamento de depressão e transtorno de ansiedade generalizada entre profissionais da Estratégia de Saúde da Família em um município no interior da Amazônia. **Método:** estudo transversal desenvolvido com 63 profissionais atuantes em 12 equipes de ESF na cidade de Santarém, Pará, Brasil. Foram utilizadas ferramentas validadas e adaptadas transculturalmente: o Patient´s Health Questionaire – 9 e o Generalizes Anxiety Disorder – 7. Os dados foram analisados a partir de ferramentas da estatística descritiva (frequências absolutas e relativas) a partir do software Microsoft Excel 2018. **Resultados:** Houve predomínio de indivíduos do sexo feminino, na idade de 40 a 44 anos e raça/cor pardo. O estado civil predominante foi casado, a categoria profissional mais representada na amostra foram os agentes comunitários de saúde e o a maioria dos participantes possuía nível superior completo. 57.1% tiveram rastreamento positivo para depressão e 42.1% para ansiedade. **Conclusão:** Observou-se elevada frequência de ansiedade e depressão entre os profissionais incluídos na amostra. Nossos dados reforçam a necessidade de ações preventivas na área de saúde mental visando reduzir os impactos dos fatores de risco. Além disso, é fundamental a realização de grandes estudos voltados à investigação dos fatores associados à saúde mental dos trabalhadores da saúde no Brasil.
Descritores: Epidemiologia; Transtorno Depressivo Maior; Transtorno de Ansiedade Generalizada; Atenção Primária à Saúde.

ABSTRACT

Objective: To screen for depression and generalized anxiety disorder among Family Health Strategy professionals in a municipality in the interior of the Amazon. **Method:** A cross-sectional study was carried out with 63 professionals working in 12 FHS teams in the city of Santarém, Pará, Brazil. Cross-culturally adapted and validated tools were used: the Patient's Health Questionnaire - 9 and the Generalized Anxiety Disorder - 7. The data was analyzed using descriptive statistics tools (absolute and relative frequencies) using Microsoft Excel 2018 software. **Results:** There was a predominance of females, aged between 40 and 44 and of brown race/color. The predominant marital status was married, the most represented professional category in the sample were community health agents and the majority of participants had completed higher education. 57.1% were screened positive for depression and 42.1% for anxiety. **Conclusion:** There was a high frequency of anxiety and depression among the professionals included in the sample. Our data reinforces the need for preventive action in the area of mental health in order to reduce the impact of risk factors. In addition, it is essential to carry out large-scale studies investigating the factors associated with the mental health of health workers in Brazil.
Descriptors: Epidemiology; Major Depressive Disorder; Generalised Anxiety Disorder; Primary Health Care.

RESUMEN

Objetivo: Detectar depresión y ansiedad generalizada en profesionales de la Estrategia Salud de la Familia de un municipio del interior de la Amazonia. **Método:** Se realizó un estudio transversal con 63 profesionales que trabajan en 12 equipos de la ESF en la ciudad de Santarém, Pará, Brasil. Se utilizaron instrumentos validados y adaptados transculturalmente: el Cuestionario de Salud del Paciente - 9 y el Trastorno de Ansiedad Generalizada - 7. Los datos se analizaron mediante herramientas de estadística descriptiva (frecuencias absolutas y relativas) utilizando el software Microsoft Excel 2018. **Resultados:** Hubo un predominio de mujeres, con edades comprendidas entre 40 y 44 años y de raza/color moreno. El estado civil predominante fue casado, la categoría profesional más representada en la muestra fue la de agentes de salud comunitarios y la mayoría de los participantes habían completado estudios superiores. El 57,1% dieron positivo en depresión y el 42,1% en ansiedad. **Conclusión:** Hubo una elevada frecuencia de ansiedad y depresión entre los profesionales incluidos en la muestra. Nuestros datos refuerzan la necesidad de acciones preventivas en el área de la salud mental para reducir el impacto de los factores de riesgo. Además, es fundamental la realización de grandes estudios dirigidos a investigar los factores asociados a la salud mental de los trabajadores de la salud en Brasil.
Descriptores: Epidemiología; Trastorno Depresivo Mayor; Trastorno de Ansiedad Generalizada; Atención Primaria de Salud

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ORIGINAL

Introduction

In December 2019, in the city of Wuhan, China, a group of patients presenting symptoms of pneumonia of unknown origin was identified. By performing analyses on samples from patients affected by this pneumonia, a new type of virus was identified. Initially, the disease was named 2019-nCoV or COVID-19 (Coronavirus Disease - 2019). Subsequently, the virus was classified as Sars-Cov-2. On February 11, 2020, the World Health Organization (WHO) officially declared the coronavirus pandemic. [1,2]

In the context of a pandemic, it is expected that between one-third and one-half of the population will manifest a psychopathological symptom. Due to the lack of certainty about the future, there are commonly signs of alertness, worry, confusion, anguish, sadness, stress and a feeling of helplessness in the face of events. The most frequent reactions are fear of infection of oneself or a loved one, fear of death, experience of financial crises, and social exclusion due to contamination by the virus. [3]

In epidemic situations, the risk of depression is higher due to the loneliness that social isolation imposes. Thus, there may be worsening of already established depressive conditions or the appearance of symptoms. The inaccuracies experienced in the epidemic context and association with other psychological sufferings such as anxiety are pointed out in the literature. A study conducted with the general population in China highlighted a prevalence of 20.1% of depressive symptoms in respondents. Young people and health professionals were the most affected and had the highest risks of mental disorder.[4]

In major depressive conditions, symptoms such as sad mood, loss of interest or pleasure, significant weight loss or gain, insomnia for several nights, psychomotor agitation or retardation, feelings of worthlessness or guilt, fatigue or loss of energy, decreased decision-making capacity and concentration, indecision, and recurrent thoughts of death are reported. Clinical diagnosis is based on the patient's history. [5]

Anxiety is defined as an anticipation of a future threat, with the occurrence of physiological responses related to muscle tension, wakefulness to prepare defense, and care and prevention behaviors to actual or potential dangers. Anxiety disorders can be classified into several types that are differentiated by differential diagnosis. In general, anxiety disorders are related to persistent and exacerbated restlessness in various areas. In addition, it can be presented with an impact on sleep quality, fatigue, concentration problems, muscle tension, and restlessness.[5]

The pandemic has generated a growing need to strengthen mental health care systems in most countries. After analyzing 73 studies on major depressive disorder and anxiety, it was found that women faced a more pronounced impact of the pandemic than men, both with regard to major depressive disorder and anxiety disorders. Younger age groups experienced a more significant impact than older age groups. Additionally, the COVID-19 pandemic is estimated to have contributed to an increase of 53.2 million cases of major depressive disorder globally and an additional 76.2 million cases of anxiety disorders worldwide. [6]

It is essential that laws and policies aimed at improving mental health address all areas. Governments invest only 2% of health investments in mental health care. During the COVID-19 pandemic, in one year, increases of 28% in cases of major depressive disorders and 26% in cases of anxiety disorders were reported. Thus, it is necessary that mental health be prioritized and protected, with prevention and universal access to quality care for full participation in society. 7 The objective of this study is to screen for depression and generalized anxiety disorder (GAD) among FHS professionals in a municipality in the interior of the Amazon.

Method

Study design

This is a cross-sectional and descriptive study developed from data collected among health professionals working in the FHS in a municipality located in the interior of the Amazon. The research was developed based on the STROBE guidelines for cross-sectional studies. 8 All procedures involved in data collection and analysis were previously approved by the Research Ethics Committee of the State University of Pará (CAAE: 58832622.6.0000.5168, Opinion number: 5.589.149). Consent to participate was obtained through the application of the Free and Informed Consent Form (ICF).

Place of study

Data collection was carried out in 12 FHS teams in the municipality of Santarém, Pará, Brazil, based on previously scheduled visits with service management in the period from September 2022 to June 2023. The municipal population is approximately 331,937 inhabitants spread over an area of 17,838 km², with a Human Development Index of 0.691. 9,10 At the time of the research, Santarém had 59 FHS teams working in its territory. 11

Participants

The professionals working in the 12 FHS teams selected for the research were included, comprising the professional categories defined by the Ministry of Health: physician; nurse; nursing assistant/technician; community health agent (CHA); dental surgeon and oral health assistant/technician12. During the visits to the teams, the informed consent form was applied, and individuals who refused to participate after signing the term were excluded, as well as those who were not found during the data collection period and/or on professional leave.

Variables

Data were collected in interviews conducted in a private place, with a questionnaire containing sociodemographic information and the instrument for screening depression, previously validated for the Brazilian population, Patient's Health Questionnaire – 9 (PHQ-9). 13 The PHQ-9 is composed of items, scored from 0 to 3 based on the frequency reported by the individual, based on the symptoms of major depressive disorder defined by the DSM-5. 14,15 The outcome adopted in this study was the positivity of the screening instrument, defined as a score ≥ 10, which offers 85% specificity and sensitivity according to a recent

meta-analysis.[7] The data collection instrument also included a score already validated for Brazilians, the Generalized Anxiety Disorder – 7 (GAD-7), a tool developed for GAD screening considering symptoms reported in the last two weeks.[16] For this study, a GAD-7 with a score ≥ 10 was considered positive, offering 89% sensitivity and 82% specificity.[16] The sociodemographic data collected were: gender, age group, race/color, marital status, schooling, and professional performance.

Risk of bias

The main risk of bias in this research derives from the possible inadequate application of the data collection instrument, which was mitigated by training for the use of the collection means based on the appropriate ethical and scientific criteria. In addition, the frequency measured by PHQ-9 and GAD-7 may be underestimated due to the omission of information from the participants.

Study size

The 12 FHS teams were selected by lottery. Based on the public data provided by the city hall, a sample of 98 health professionals (17) was estimated. During the visits, 25 professionals who were on leave and/or could not be found were excluded. 73 individuals were invited to participate in the study through the application of the informed consent form and 10 refused. The final sample consisted of 63 health professionals.

Statistical analysis

The data were tabulated using descriptive statistical tools, using absolute and relative frequencies. The tabulation was performed in the Microsoft Excel 2016 program.

Results

A total of 63 individuals were included for the final analysis. Most of the sample was composed of women (N = 56, 88.88%), aged 40-44 years (N = 14, 22.22%) and brown (N = 45, 71.42%). Most were married (N = 31, 49.20%) and had a higher education level (N = 24, 38.09%). Regarding professional performance, a significant portion were CHWs (N = 31, 49.20%). The sociodemographic characterization of the sample is described in Table 1.

Table 1- Sociodemographic characterization of members of the Family Health Strategy selected for the study, Santarém, Pará State, Brazil, 2023.

Variable	N, %
Sex	
Female	56, 88.88%
Male	7, 11.11%
Age group	
20 - 24 years old	3, 4.76%
25 - 29 years old	3, 4.76%
30 - 34 years old	12, 19.04%

35 – 39 years old	7, 11.11%
40 – 44 years old	14, 22.22%
45 – 49 years old	11, 17.46%
50 – 54 years old	6, 9.52%
55 – 59 years old	4, 6.34%
60 – 64 years old	3, 4.76%
Ethnicity	
Brown	45, 71.42%
White	8, 12.69%
Black	6, 9.52%
Yellow	1, 1.58%
Indigenous	3, 4.76%
Marital Status	
Single	21, 33.33%
Married	31, 49.20%
Stable union	8, 12.69%
Divorced	2, 3.17%
Widower	1, 1.58%
Education	
Completed high school	20, 31.74%
Technical level	10, 15.87%
Upper level	24, 38.09%
Postgraduate studies	9, 14.28%
Professional category	
Nurse	11, 17.46%
Doctor	6, 9.52%
Dentist	3, 4.76%
Tech. MSc in Nursing	11, 17.46%
Tech. in Oral Health	1, 1.58%
Community Health Worker	31, 49.20%
Total	**63, 100%**

Regarding depression screening, 36 (57.1%) individuals obtained a PHQ-9 score compatible with the pathology. Although in absolute numbers women had a higher frequency, men had a higher prevalence. The age groups of 35 to 44 years were the most affected. Caucasian individuals had a lower percentage of depression. Regarding schooling, a higher rate was obtained among those with complete high school education. CHAs were the most affected professional category, both in absolute numbers and in percentage terms.

Regarding GAD screening, 26 (41.2%) obtained a GAD-7 score ≥ 10. The percentage involvement was higher in men and in individuals aged 35 to 39 years. Those of white race/color had a lower frequency of GAD. In the schooling variable, a higher percentage was observed among those with complete secondary education. In the professional category, CHAs were the most affected by the pathology and, considering marital status, it was noted that married individuals were less affected. A detailed description of the frequencies of depression and GAD by sociodemographic characteristics is shown in Table 2.

Table 2- Frequency of depression and generalized anxiety disorder (GAD) according to the sociodemographic characteristics of members of the Family Health Strategy in Santarém, Pará State, Brazil, 2023.

Variável	Depression Frequency (%)	GAD frequency (%)
Sex		
Feminino	55.3%	38.2%
Masculino	71.4%	57.1%
Age group		
20 - 24 years old	66.6%	33.3%
25 - 29 years old	66.6%	66.6%
30 - 34 years old	58.3%	33.3%
35 – 39 years old	71.4%	85.7%
40 – 44 years old	71.4%	50%
45 – 49 years old	45.5%	18.1%
50 – 54 years old	33.3%	33.3%
55 – 59 years old	100%	25%
60 – 64 years old	66,6%	33.3%
Race		
Brown	62.2%	44.4%
White	37.5%	25%
Black	50%	33.3%
Yellow	100%	100%
Indigenous	100%	33.3%
Marital status		
Single	61.9%	38%
Married	45.1%	32.2%
Stable union	75%	62.5%
Divorced	100%	100%
Widower	100%	100%
Education		
Completed high school	95%	65%
Technical level	50%	40%
Upper level	37.5%	20.8%
Postgraduate studies	33.3%	44.4%
Professional category		
Nurse	27.2%	18.1%
Doctor	50%	33.3%
Dentist	66.6%	33.3%
Tech. MSc in Nursing	63.6%	45.4%
Tech. in Oral Health	0%	0%
Community Health Worker	67.7%	51.6%

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Discussion

The pandemic caused by COVID-19 has had important consequences on the general population, with a special impact on the population composed of health professionals. Several studies were carried out to measure the effect on this group, but with a greater focus on the subgroup composed of professionals working in the hospital context, recognized as frontline professionals in coping with the pandemic. Within the context of this subgroup, it was possible to perceive alarming rates of conditions such as depression and anxiety, with studies pointing to occurrence in values higher than 40% of the population, in both conditions. The involvement is more related to nursing professionals and young people, who remained in social isolation and who reported excessive working hours. [18-21]

Despite the distancing of care in the hospital context and intensive care for patients, primary care professionals deserve attention due to the possible effects of the pandemic on their mental health. Stressors and uncertainty marked the return of professional activities after social isolation of this population, taking into account that primary care professionals are the first point of contact for patients, being involved in various activities that allow contact with the pathogen and/or infected patients, such as the care of patients in basic health units and, especially in the scope of home visits to infected patients. [22]

In the present study, it was possible to perceive results compatible with depression and anxiety, especially in males in percentage values and females in absolute values, aged 35 years and over and with a higher occurrence in CHWs. Pioneering results in the analysis of the impact on primary care agents, since there are no published studies that consider all professionals working in this category.

Thus, the comparison with other studies allowed us to detect that 30% of the medical population working in primary care, in the context of the Japanese population, was affected by burnout, anxiety and insomnia, with a correlated 15% rate of depression.[23,24] Comparatively, higher rates were identified in the population studied, with a frequency of anxiety of 50% and depression of 30%, in the same social stratum. [23, 24] The measurement of the impact on the medical population can be carried out through the intention of 40% of this group to abandon their work in primary care or change professions, in addition to an increase in the suicide rate. [23, 24] Other studies have pointed out some risk factors for the occurrence of conditions related to anxiety, such as marital status, being single/divorced. [23, 25] The presence of a partner can help with mental health by offering the possibility of communication and emotional support, as well as help in activities that may not be supported by the professional. Other important factors are age, perception of discrimination, financial status, and resilience. [23, 25]

Analyses aimed at primary care professionals allow us to determine factors that can help control the mental health of this population of professionals, such as the adoption of prevention measures, especially related to the provision of personal protective equipment, teamwork with equitable divisions among professionals, in addition to the effective performance of supervisors, related to the recognition of the performance of primary care agents, through letters of appreciation and financial encouragement.[26-28] These measures can be adopted

as a policy for mental health prevention, by providing a reduction in fear and stress associated with the agents' actions. [26-28]

The analysis of public actions of governments around the world allowed the identification of measures that have a reported impact, but without yet presenting a measurement of the positive effects.[22] Such as the construction of psychological counseling networks by mental health professionals, experienced by the Pakistani government.[22] However, the proper model lacks an expansion of scope and studies that evaluate its beneficial potential for primary care professionals. [22]

Thus, it is possible to perceive a great impact on the population of primary care professionals, with an increased risk for the occurrence of mental and psychological disorders, especially caused by the deterioration of working conditions caused by the COVID-19 pandemic. Within the scope of the deterioration of working conditions, the aggressiveness of the population served stands out, associated with its own high rate of mental disorders caused by the risk of infection experienced, as well as by social isolation. [24, 29-31]

Conclusion

Based on the screening tools, a high prevalence of depression and anxiety was observed among the workers of the FHS teams included in this study. In addition, it was observed that the pathologies affect the different sociodemographic and professional groups analyzed in a heterogeneous way. Larger-scale and more in-depth studies are needed to understand the other factors related to the emergence of mental health pathologies among FHS members, especially considering the impacts of the covid-19 pandemic, enabling the planning of interventions for the prevention and early diagnosis of these diseases.

Acknowledgment

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