ARTIGO DE REVISÃO

EPIDEMIOLOGIC STUDY ON PATIENTS' MENTAL HEALTH IN NORTHEAST BRAZIL

Revisão Epidemiológica sobre a saúde mental dos pacientes no Nordeste do Brasil

ISSN: 2178-7514 Vol. 15 | N°. 3 | Ano 2023

Guilherme Nobre Nogueira¹; Pedro Robson Costa Passos¹ Maria Tereza de Oliveira Souza²; Rafaela Fernandes Gonçalves³

ABSTRACT

This epidemiological study analyzed mental health in the Northeast region of Brazil from 2011 to 2021. The results reveal complex intersections of socioeconomic, cultural, demographic, and gender factors significantly impacting the prevalence and causes of mental disorders. The use of psychoactive substances emerged as the leading cause of death, especially among men, highlighting a gap in public policies to mitigate high consumption rates. The relationship between low education and mental morbidity, coupled with economic factors, deepens the understanding of regional disparities. A significant gap was observed in promoting accessibility to mental health services for men, reflecting cultural and social influences inhibiting help-seeking. The age between 50 and 59 stood out as a critical period, with 90.54% of deaths related to mental disorders due to psychoactive substance use. Deficiencies in the mental health system, such as inadequate resource distribution, indicate an urgent need for more inclusive and gender-sensitive policies to effectively address the challenges faced by the Northeastern population.

Keywords: Epidemiology, Mental Health, Brazil, Risk Factors

RESUMO

Este estudo epidemiológico analisou a saúde mental na região Nordeste do Brasil de 2011 a 2021. Os resultados revelam interseções complexas de fatores socioeconômicos, culturais, demográficos e de gênero que impactam significativamente a prevalência e as causas dos transtornos mentais. O uso de substâncias psicoativas emergiu como a principal causa de morte, especialmente entre os homens, destacando uma lacuna nas políticas públicas para mitigar altas taxas de consumo. A relação entre baixa escolaridade e morbidade mental, juntamente com fatores econômicos, aprofunda a compreensão das disparidades regionais. Observou-se uma lacuna significativa na promoção da acessibilidade aos serviços de saúde mental para os homens, refletindo influências culturais e sociais que inibem a busca por ajuda. A faixa etária entre 50 e 59 anos destacou-se como um período crítico, com 90,54% das mortes relacionadas a transtornos mentais devido ao uso de substâncias psicoativas. Deficiências no sistema de saúde mental, como distribuição inadequada de recursos, indicam uma necessidade urgente de políticas mais inclusivas e sensíveis ao gênero para enfrentar eficazmente os desafios enfrentados pela população nordestina.

Palavras-chave: Epidemiology, Mental Health, Brazil, Risk Factors

- 1 Universidade Federal do Ceará (UFC)- Fortaleza, CE 2 Universidade Santo Amaro (UNISA) São Paulo, SP
- 3 Faculdade Evangélica Mackenzie do Paraná (FEMPAR)

Autor de correspondência

Guilherme Nobre Nogueira - guiermenobre@gmail.com

DOI: 10.36692/V15N3-70ar

INTRODUCTION

Mental disorders are significant disturbances in an individual's cognition, emotional regulation, or behavior, emerging as protagonists in the context of challenges to contemporary well-being.¹

This theme takes on an even more concerning dimension in scenarios of low and middle-income regions, where common mental disorders such as depression, anxiety, and somatoform disorders present a particularly pronounced debilitating burden. This vulnerability primarily stems from factors such as lack of security, limited access to education, unfavorable geographical conditions, unpredictable social fluctuations, and notably, insufficient support for treatment and prevention systems that fail to adequately meet the needs of economically disadvantaged populations. ²⁻⁵

In Brazil, one of these milestones was the Psychiatric Reform, originated as the Mental Health Workers Movement in the late 1970s and later expanded as the Anti-Asylum Struggle Movement in the second half of the 1980s. These movements, intrinsically linked to the creation of the Unified Health System (SUS), as outlined in the 1988 Constitution, incited a revolution in the approach to psychological disorders in the country, promoting a humane, comprehensive, and respectful approach. ^{6,7}

In the context of the northeastern region of Brazil, covering a densely populated territory inhabited by 54.6 million individuals, the northeast stands out as a vital component, representing about 26.9% of the country's population. In

the intertwining of its rich cultural diversity, socioeconomic challenges, and geographical peculiarities, understanding the epidemiological patterns of mental health becomes crucial, as the development of psychological disorders depends on a complex interaction of social and geographical determinants. ⁸

This review aims to investigate the prevalence, distribution, and characteristics of mental disorders in the northeastern region of Brazil, with the goal of drawing correlations between these manifestations and the distinct factors present in each sub-region. By bringing these aspects to light, we aim to gain a deeper understanding of the impacts of social and geographical determinants on the etiology of mental disorders.

METHODS

This study is a retrospective descriptive epidemiological survey based on secondary data, utilizing the Epidemiological Information System available in the Mortality Information System (SIM) and the Hospital Information System (SIH). The aim is to investigate Mental and Behavioral Disorders in the Northeast region of Brazil, with an analysis that encompasses age group, gender, race/ethnicity, and education, correlating these factors with the quantity of hospitalizations and deaths of patients.

The analysis period spans from January 2011 to December 2021, providing a comprehensive view over a decade. The selection of these information systems aims to gain a comprehensive understanding by combining

mortality and hospital data for a more complete perspective on Mental and Behavioral Disorders in the region.

The analysis will include categorization by age group to identify specific patterns in different age groups. Disaggregation by gender will allow evaluating potential gender disparities in the incidence and impact of mental disorders. Considering race/ethnicity aims to understand possible disparities among different ethnic groups, considering the relevance of cultural diversity in the region.

Furthermore, the analysis of education will explore how the educational level may influence the occurrence and outcome of mental disorders. The intersection of these variables with the quantity of hospitalizations and deaths will offer valuable insights into the severity and outcome of these disorders in the Northeastern population.

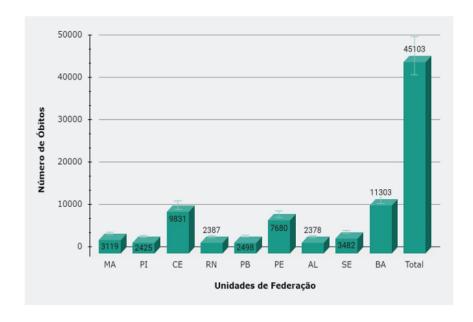
RESULTS

The analysis of previously collected information highlighted some crucial characteristics for outlining the epidemiological profile emerging in the Northeast region of Brazil regarding issues related to the mental health of the local population.

Regarding Mortality:

Secondary data obtained from the Mortality Information System (SIM), part of the TABNET DATASUS, revealed that, during the period 2011-2021, a total of 153,788 deaths due

to mental and behavioral disorders, as previously described in the Ministry of Health databases, were recorded in Brazil. This corresponds to a general mortality rate (MR) of 757.34 deaths per 1 million inhabitants nationwide. Focusing on the regional level, the Northeast region ranks second in deaths in this category, with a total of 45,103 documented deaths, representing 29.32% of deaths due to mental and behavioral disorders in Brazil during the reported period. The mortality rate in the region is 82.53 deaths per 100,000 inhabitants, slightly below the Southeast region with 70,126 records, accounting for 45.59% and a mortality rate of 82.64 deaths per 100,000 inhabitants. With the research objective focused solely on mental health in the Northeast, the distribution of these data was uneven, with three states standing out: Bahia (11,303 deaths) representing 25.06% of the region's deaths, followed by Ceará (9,831 deaths) at 21.79%, and Pernambuco (7,680 deaths) at 17.02% (Graph 1). However, investigating these numbers and mortality rates by comparing them with the populations of their respective states, not the total regional population of the Northeast itself, showed a variation in position: the state of Sergipe had the highest number of deaths relative to its enumerated population, with a mortality rate of 157.58 deaths per 100,000 inhabitants, followed by Ceará with 111.82 deaths per 100,000 inhabitants and Pernambuco with 84.78 deaths per 100,000 inhabitants (Table 1).

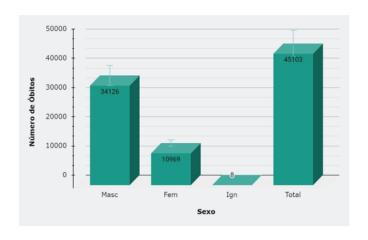


Graph 1 - Deaths from Mental and Behavioral Disorders in the Northeast Region by State, 2011-2021

The observation of the variables proposed in the study design allowed for a more accurate understanding of how these numbers are organized in this society, taking into consideration factors such as sex, race/ethnicity, age group, and level of education. It also aimed to identify which types of mental and behavioral

disorders described in the literature and covered by the database most afflict this population.

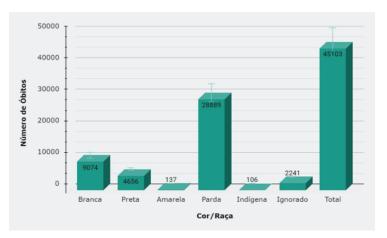
Concerning sex, there was a statistically significant difference, with a total of 34,126 deaths in men, representing 75.66% of deaths in the region, and 10,969 deaths in women, accounting for 24.31% (Graph 2).



Graph 2 - Deaths from Mental Disorders in the Northeast Region by Gender, 2011-2021

The observation of the numerical distribution regarding race/ethnicity revealed that the brown population represents 64.05% of deaths in the region, with a total of 28,889 records. Whites account for 9,074 deaths, reflecting 20.11%, while blacks have 4,656 deaths, representing 10.32%. Yellows and indigenous people together account for 137 and

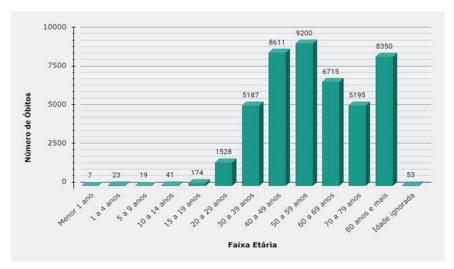
106 documented deaths, or 0.30% and 0.23% of the regional population, respectively. When combined, blacks and browns significantly represent the majority of the Northeastern population succumbing to mental health issues, accounting for 74.37% of deaths and a total of 33,545 cases (Graph 3).



Graph 3 - Deaths from Mental Disorders in the Northeast Region by Race/Ethnicity, 2011-2021

The investigation by age group revealed three age groups that suffered a higher number and percentage of deaths compared to others. The group of individuals aged between 50 to 59 years (9,200 deaths) was the most significant,

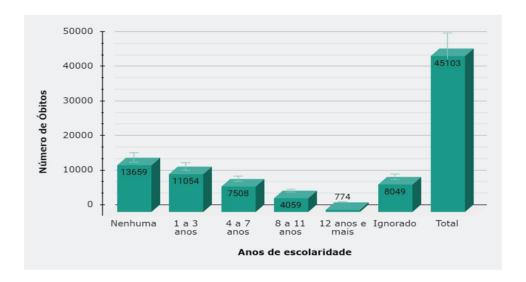
representing 20.39% of deaths from mental disorders in the region. The age group of 40 to 49 years (8,611 deaths) accounted for 19.09%, and the group aged 80 years or older (8,350 deaths) constituted 18.51% (Graph 4).



Graph 4 - Deaths from Mental Disorders in the Northeast Region by Age Group, 2011-2021

Aware of the socio-environmental causes that condition and permeate the illness of the human psyche, the study sought to understand how interconnected factors with aspects of an individual's social, work, and cultural life could influence the number of deaths related to mental health causes. To do so, an attempt was made to estimate this by analyzing the educational attainment, in years, of individuals affected by such conditions in the Northeast region. It was concluded that groups with no education or illiteracy (13,659 deaths) constitute 30.28% of

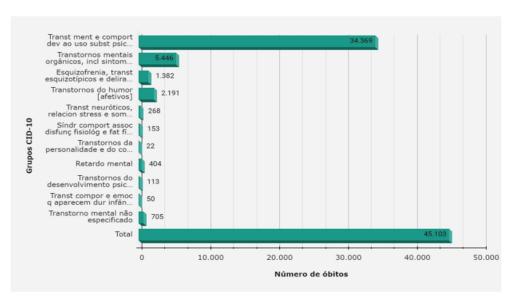
deaths in the region. Populations with 1 to 3 years of education (11,054 deaths) represent 24.50%, and groups with 4 to 7 years of education (7,508 deaths) make up 16.64%. In contrast, populations with 8 to 11 years of education (4,059 deaths) and those with more than 12 years of education (774 deaths) account for 8.99% and 1.71%, respectively (Graph 5). Therefore, individuals in the Northeast with no education or up to 3 years of education statistically demonstrate the influence of this variable, totaling 54.78%.



Graph 5 - Deaths from Mental Disorders in the Northeast Region by Education, 2011-2021

For all the variables presented, the most common cause of death described in the literature and covered by the accessed database was characterized as "Mental and behavioral disorders due to the use of psychoactive substances" (Graph 6), with a total of 34,369 deaths. These deaths represented 76.20% of deaths in the region, comprising 86.25% of the

causes in males, 81.63% in the black and brown racial/ethnic group, 90.54% in individuals aged 50 to 59 years, and 76% in individuals with no education or up to 3 years of education.



Graph 6 - Deaths from Mental Disorders in the Northeast Region by ICD-10 Group, 2011-2021

Regarding the secondary data obtained from the Hospital Information System of the Unified Health System (SIH/SUS), also collected from TABNET DATASUS, it was possible to analyze hospital morbidity rates through the number of hospitalizations for mental and behavioral disorders in the period 2011-2021 in the Northeast region of Brazil. This analysis allowed the establishment of criteria such as prevalence rates and fatality indices for the described group of diseases.

Nationally, the country registered 2,582,192 hospitalization cases during the period due to the diagnosis of mental disorders requiring hospital intervention. This represented a prevalence rate (PR) of 12.71 cases per 1,000 inhabitants, and consequently, it was concluded that the fatality rate (FR), the relationship between

the number of registered deaths and the total number of hospitalizations for the same cause, is 5.95% in the country.

Thus, the Northeast region emerged as the 3rd highest in the number of hospitalizations, with 461,683 cases recorded. This results in a prevalence rate of 8.44 cases per 1,000 inhabitants and a fatality rate of 9.76%. The highlighted state in the region with the highest number of hospitalizations, the state with the highest prevalence rate, and the state with the highest fatality rate are, respectively: Ceará (95,045 hospitalizations), Alagoas with 14.85 cases per 1,000 inhabitants, and Sergipe with 18.06% (Table 1).

Table 1 - Epidemiological indices of Mental Disorders in Brazil/Northeast/State, 2011-2021

	População	Óbitos	Internaçõ es	TM**	TP*	L
Brasil	203.062.512	153.788	2.582.192	757,34***	12,71	5,95%
Nordeste	54.644.582	45.103	461.683	82,53	8,44	9,76%
Alagoas	3.127.511	2.378	46.457	76,03	14,85	5,11%
Bahia	14.136.417	11.303	60.211	79,95	4,25	18,77%
Ceará	8.791.688	9.831	95.045	111,82	10,81	10,34 %
Maranhão	6.775.152	3.119	53.884	46,03	7,95	5,78%
Paraíba	3.974.495	2.498	49.873	62,85	12,54	5%
Pernambuco	9.058.155	7.680	73.966	84,78	8,16	10,38%
Piauí	3.269.200	2.425	29.026	74,17	8,87	8,35%
Rio Grande	3.302.406	2.387	33.989	72,28	10,29	7,02%
do Norte						
Sergipe	2.209.558	3.482	19.272	157,58	8,72	18,06%

^{*}Cases per 1,000 inhabitants; **Deaths per 100,000 inhabitants; ***Deaths per 1 million inhabitants

DISCUSSION

The evident delineations of social and regional determinants found, discerned through the analysis of the prevalence and characteristics of psychiatric disorders in the Northeastern population, reveal crucial aspects in the etiological process of these pathologies and how the contextual environment can influence them. Among the various factors subjected to analysis, the in-depth examination of cases where the patient progresses to death due to psychological disorders revealed a distinctive profile, characterized by being predominantly

male, self-declared as brown ethnicity, limited or absent level of education, in the age group between 50 and 59 years, and with a history of psychoactive substance use.

In the scope of this study, a comprehensive analysis of hospitalization and mortality rates associated with psychological disorders, disaggregated by federative unit, was conducted. It is noteworthy that the state of Alagoas had the highest hospitalization rate, while Sergipe exhibited the highest mortality rate. In the face of this scenario, there emerged the urgent need to undertake an in-depth investigation to

elucidate the possible underlying causes of this phenomenon.

Based on this context, data collection approaches were adopted using the Strategic Management Support Room (SAGE) of the Ministry of Health and the 2022 Demographic Census conducted by the Brazilian Institute of Geography and Statistics. Relevant records were obtained regarding the density of Psychosocial Care Centers (CAPS), both per 100,000 inhabitants and per 1000 km², with these indicators specific

to each federative unit. Additionally, due to the observation of the association between disorders resulting from the use of psychoactive substances and a higher incidence of deaths (76.20% of the total), data collection was carried out for CAPS AD, which are aimed at serving individuals affected by disorders resulting from the use and dependence on psychoactive substances, and were measured per 100,000 inhabitants. The results were summarized in Table 2.

Table 2 - Analysis of the quantity and distribution of CAPS and CAPS AD per federative unit

Unidade Federativa	C1*	C2**	C3***
Maranhão	1,092	0,224	0,103
Piauí	1,835	0,238	0,244
Ceará	1,490	0,879	0,295
Rio Grande do Norte	1,211	0,757	0,211
Pernambuc o	1,170	1,080	0,209
Alagoas	1,822	2,046	0,095
Sergipe	1,810	1,824	0,226
Bahia	1,598	0,400	0,141

^{*}CAPS per 100,000 inhabitants ** CAPS per 1000 km² *** CAPS AD per 100,000 inhabitants

In light of the analysis, it is evident that indicators C1 and C2 do not show a clear relationship with the number of deaths or hospitalizations per federative unit. However, the analysis of C3 allowed the visualization of an interesting pattern: Alagoas, the northeastern

state with the highest hospitalizations per 1000 inhabitants (14.85), is simultaneously the only one with less than 0.1 CAPS AD per 1000 inhabitants. In this sense, although CAPS III AD receives approximately 25% more financial support compared to similar services of another

typology, its per capita allocation does not appear to be adequate to effectively address the needs of the growing population affected by psychological disorders related to the use of psychoactive substances. This suggests a deficiency not so much concentrated in the amount of investment but rather in the planning and distribution process of these resources.9

Considering these findings, a notable gap is identified in the implementation of public policies aimed at effectively mitigating the high levels of psychoactive substance consumption in the target population. Additionally, effective strategies to alleviate this situation, such as taxation, regulation of availability, and restrictions on the marketing of these substances, are not adequately implemented in the Brazilian context, contributing to the persistence of harmful and abusive characteristics associated with psychoactive substance consumption. 2,10

A historical explanation for this neglect, arguing that over time, the impact of psychoactive substance abuse on health has been overlooked due to the legal implications associated with its consumption. In other words, the predominant focus was on the judicial approach to cases of drug misuse, to the detriment of attention to health and treatment of affected individuals. 11

Another prominently highlighted factor in the analysis was the significantly higher death rate from mental disorders among men, representing 75.66% of them, compared to statistics related to the female population. These data become even

more intriguing when highlighting that, in Brazil, according to the Global Burden of Disease (2016), 13.09% of men and 15.78% of women are diagnosed with mental disorders, respectively.

One possible explanation for this gender disparity in the mortality rate from mental disorders can be explained by data found in the study by Bertoni et al. (2014), which analyzed young crack users and found relevant information about differences in drug use and mental health services between men and women. According to the analysis, men, compared to the female population, not only consumed more alcohol (55.7% vs. 25.7%), cannabis (71.5% vs. 51.4%), and cocaine (45.8% vs. 11.4%) but also typically had higher overdose rates (6.5% vs. 2.9%). Additionally, a notable finding was that men gave higher self-assessment scores of their mental health (41.5% vs. 34.3% rating it as "Good" or higher), even though they substantially used fewer psychosocial support services (29.8% vs. 57.1%), diverging from statistics on death rates.

In this prism, it is notable not only the inclination of the male population towards a more pronounced use of highly harmful psychoactive substances but also the tendency to underestimate the condition of their mental health and avoid seeking effective assistance for the mitigation of psychological disorders or obtaining social support. The paradox identified in the more positive self-assessment of mental health by men in contrast to higher mortality rates points to underdiagnosis and underutilization of mental health services by this group.

This can be attributed to a confluence of cultural and social influences, including stigmatization of seeking psychological assistance among males and the predominance of gender norms that promote the suppression of emotional expressions. These influences, amplified by cultural elements, are particularly pronounced in the Northeastern demographic, characterized by the prominent perpetuation of masculinity traits, such as emphasis on physical strength, responsibility, and conformity to heteronormative standards. These data highlight a significant gap in promoting accessibility to mental health services for the male population, revealing the urgent need for more inclusive and gender-sensitive strategies. 12,13

Another finding that aligns with the data found in our analysis is the relationship of education with these determinants. In this study, only 17% of drug users completed elementary education, which converges with the previously displayed data, where Northeastern individuals with no or up to 3 years of education constituted 54.78% of deaths related to psychological disorders. 14

This analysis cannot be dissociated from one of the main reasons for school dropout in the Brazilian territory: the economic factor, representing around 27.1% of these occurrences. This social determinant, even more notable in the Northeast, as, according to the Brazilian Institute of Geography and Statistics, this region has almost half of the entire population in poverty

in Brazil, also communicates with other factors explored in our analysis. 15

For example, black and brown populations, which together represent approximately 74.37% of deaths related to mental disorders in the Northeastern region, have per capita incomes of R\$964 and R\$945, respectively, as presented by the IBGE's Social Indicators Synthesis. In contrast, the white population, which constitutes only 20.11% of deaths, has almost double the per capita income, totaling R\$1,866. This disparity, in addition to directly influencing access to education, as previously discussed, is also correlated with an increase in the incidence of psychoactive substance consumption. 16

Furthermore, it is important to note that the decrease in education levels may not only be a cause but also a consequence of the deterioration of mental health. Data indicate that one of the main reasons why children are unable to enroll in schools or complete elementary education is related to their mental development and health, a trend that has become increasingly common nowadays. 3,17

Other factors that have been proven to influence low school attendance are the context of drug trafficking and disinterest in subjects .In terms of age, the collected data showed that the majority of deaths due to mental disorders in Northeastern individuals occur between 50 and 59 years (20.39%), corroborating the analysis that individuals affected by psychological illnesses have a considerably lower life expectancy, presenting

high physical and morbidity. In our analysis, we also evidenced that among deaths derived from mental and behavioral disorders due to the use of psychoactive substances, including overdoses, drug-related suicides, and complications from pharmacological abuse, 90.54% were of people aged 50 to 59 years.4,18,19

Additionally, the substance with the highest prevalence in lifetime use (89.7%) and in the last month (77.8%) was alcohol, indicating that his substance predominantly constitutes the pattern of substance abuse among the majority of evaluated individuals. This raises again the question of the effectiveness of public policies in discouraging the consumption of psychoactive substances harmful to health, such as alcoholic beverages. Complementing the analysis, the mentioned study, in accordance with our data, outlined a profile of CAPS AD usage predominantly male (80.5%) and with incomplete elementary education (38.4%). 11,19

Among the limitations of our analysis, the main one lies in the use of secondary data for the quantitative study, which may imply possible gaps or inaccuracies in relation to the original records. Additionally, being a retrospective study, it is subject to the inherent limitations of this type of research, including dependence on existing information and lack of direct control over data quality.

Another limitation concerns the temporal scope of the study, covering the period from January 2011 to December 2021. Changes in

health policies, disease classification, or recording practices over this period may influence the results and were not fully considered. Given the aforementioned limitations of the study's design, possible margins of error or underreporting of the data collected in the mentioned database, and the analyses performed, some crucial points can be concluded and commonly envisioned by the general academic public. Firstly, the clinical importance of mental health disorders afflicting the global population and their impact on the quality of life, cognition, emotional regulation, and behavior of individuals is recognized as an important contemporary public health issue to be widely discussed and addressed on a global scale. This premise aligns with the Brazilian situation through the numbers of hospitalizations and deaths from mental and behavioral disorders recorded by the Ministry of Health over a period of 10 years, with a prevalence of 12.71 per 1,000 inhabitants, mortality of 757.34 deaths per 1 million inhabitants, and a lethality of 5.95% due to the described cause. The scenario observed in the Northeastern region of the country, the focus and subject of this study, aligns with what has been seen at the national level, with a prevalence of 8.44 per 1,000 inhabitants, mortality of 82.53 per 100,000 inhabitants, and lethality higher than the national average, totaling 9.76%.

CONCLUSION

Thus, it was possible to analyze and delineate an epidemiological profile of the mental health of the Northeastern population and the distribution of its deficiencies in the local population based on the variables described in the study's methodology. Through findings in the relevant literature, a grounded discussion was conducted on the likely reasons behind these results. The aim is to propose future interventions and the implementation of effective public policies in the region based on the principles of Evidence-Based Medicine.

As a consequence of the findings in the databases and literature, the existence of socioeconomic, cultural, environmental, demographic, age-related, ethnic/racial, and gender-related factors influencing, to varying degrees, the mental illness of the population became evident. Considering that the leading cause of death was characterized by the use of psychoactive substances across all variables, the impact of these conditions on the clinical outcomes found is observable. This is particularly evident in the relationship established with low levels of education, driven by economic conditions. These conditions are historically and socially connected to the black or brown racial/ethnic group, a racial factor negatively impacting their per capita income, and the number of deaths due to the aforementioned cause. Consequently, there is an interconnection between financial motivations

leading to school dropout, resulting in low levels of education among the analyzed Northeastern population. This is associated with the influence of black or brown ethnicity on family per capita income, its relation to mental illness and limited access to support networks, and the statistically relevant number of deaths in the population with no education or up to 3 years of education (54.78% of deaths in the region) and the black or brown population (74.37% of deaths in the region) due to mental illness related to the use of psychoactive substances, accounting for 76% of deaths in the former and 81.63% in the latter.

Regarding age, it was evident that individuals with psychiatric or psychological illnesses have a lower life expectancy. The highest number of deaths in this variable among Northeastern individuals occurred in the age groups between 50 and 59 years (20.39%), with 90.54% of cases also motivated by mental disorders linked to the consumption of psychoactive substances. This aligns with the user profile of Substance Abuse Psychosocial Care Centers (CAPS AD), as described in the literature, assuming that 45.8% of users are between 41 and 60 years old. In terms of gender, the interference of gender factors in the health-disease process related to psychological pathologies was concluded. This is evident from the statistically higher number of deaths in males (75.66%), where the primary cause, once again, was substance abuse (86.25% of cases). Males also represent 80.5% of the audience requiring the use of CAPS AD, given that 38.4% of this audience has incomplete primary education.

Therefore, there is a gap in the implementation of public policies aimed at effectively mitigating the high levels of psychoactive substance consumption in the target population. This is considering the high mortality rates due to mental disorders related to their use in all analyzed groups described in this study. It is emphasized that the deficiency is not concentrated so much in the amount of investment, but rather in the planning and distribution process of these resources aimed at mitigating the growth of the population affected by psychological disorders related to the use of psychoactive substances. This has been neglected due to the judicial approach to cases of drug misuse, prioritizing legal matters over health and treatment for affected individuals. Thus, with the completion of this work, there is a proposal to understand the epidemiological conditions shaping the mental health of the Northeastern population, emphasizing the urgency in creating better public health policies focused and developed to address and alleviate the occurrences of the aforementioned illnesses. This includes a greater focus on the population psychologically affected by the use of psychoactive substances, while also proposing more inclusive and gendersensitive strategies related to education, race/ ethnicity, and age.

REFERÊNCIAS

- World Health Organization. Mental disorders [Internet]. World Health Organization. 2022. Available from: https://www.who.int/news-room/fact-sheets/detail/mentaldisorders
- LUND, C. et al. Poverty and common mental disorders in low and middle income countries: A systematic review Social Science & Medicine, v. 71, n. 3, p. 517–528, ago.
- 3. PATEL, Vikram; KLEINMAN, Arthur. Poverty and common mental disorders in developing countries. Bulletin of the World Health Organization, v. 81, p. 609-615,
- 4. EATON, J. et al. Scale up of services for mental health in low-income and middle-income countries. The Lancet, v. 378, n. 9802, p. 1592-1603, out. 2011.
- 5. ALLEN, J. et al. Social determinants of mental health. International Review of Psychiatry, v. 26, n. 4, p. 392– 407, ago. 2014.
- 6. LIMA, R. C. The rise of the Psychiatric Counter-Reform in Brazil. Physis: Revista de Saúde Coletiva, v. 29, n. 1, 2019.
- 7. ONOCKO-CAMPOS, R. T.; ONOCKO-CAMPOS, R. T. Mental health in Brazil:strides, setbacks, and challenges. Cadernos de Saúde Pública, v. 35, n. 11, 2019.
- SILVA, Manuela; LOUREIRO, CARDOSO, Graça. Social determinants of mental health: a review of the evidence. Eur. J. Psychiat., Zaragoza , v. 30, n. 4, p.259-292, dic. 2016.
- D. TRAPE, T. L.; CAMPOS, R. O. The mental health care model in Brazil: analyses of the funding, governance processes, and mechanisms of assessment. Revista de Saúde Pública, v. 51, n. 0, 2017
- 10. GREGORIO, G. et al. Setting Priorities for Mental Health Research in Brazil. Revista Brasileira de Psiquiatria, v.
- 34, n. 4, p. 434–439, dez. 2012. 11. MACÉDO, C.; ANDRADE, F. Mental disorders in northeastern Brazil: variations and disparities of mortality and morbidity from 2007 to 2016. O Mundo da Saúde, v. 44, p. 338–348, 1 jan. 2020.

 12. KUPERS, T. A. Toxic masculinity as a barrier
- to mental health treatment in prison. Journal of Clinical Psychology, v. 61, n. 6, p. 713–724, 2005.

 13. NERI, Marcelo Cortês. Tempo de permanência na escola e as motivações dos sem-escola. Rio de Janeiro: FGV/
- 14. DE MEDEIROS, Luciana Fernandes; DE ALBUQUERQUE CABRAL, Andrew Luis. Ser homem: um estudo sobre as masculinidades no interior do Nordeste brasileiro. CIAIQ2019, v. 2, p. 559-568, 2019.
- 15. BERTONI, N. et al. Exploring sex differences in drug use, health and service use characteristics among young urban crack users in Brazil. International Journal for Equity in
- Health, v. 13, n. 1, 28 ago. 2014.

 16. LAWRENCE, K. C.; ADEBOWALE, T. A. Adolescence dropout risk predictors: Family structure, mental health, and self esteem. Journal of Community Psychology,
- SILVA FILHO, R. B.; ARAÚJO, R. M. D. L. Evasão e abandono escolar na educação básica no Brasil: fatores, causas e possíveis consequências. Educação Por Escrito, v. 8, n. 1, p. 35, 29 jun. 2017.
- LUCIANO, M. et al. Editorial: Mortality of people with severe mental illness: Causes and ways of its reduction. Frontiers in Psychiatry, v. 13, 18 ago. 2022.

 19. TREVISAN, E. R.; CASTRO, S. DE S. Centros de
- Atenção Psicossocial álcool e drogas: perfil dos usuários. Saúde em Debate, v. 43, n. 121, p. 450–463, abr. 2019.

Observação: os/(as) autores/(as) declaram não existir conflitos de interesses de qualquer natureza.