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Mental disorders in northeastern Brazil: variations and disparities of mortality and morbidity from 2007 to 2016

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Abstract

Mental disorders have increased in recent years, having a major impact on the quality of life of Northeastern Brazilians. From the point of view of health problems in society, mood disorders and other mental and behavioral disorders are currently considered to be major public health problems. Thus, the present study aimed to evaluate the morbidity and mortality indicators in the Northeast region of Brazil in relation to mood disorders and other mental and behavioral disorders in the period from 2007 to 2016 in northeastern Brazil. This is a retrospective, exploratory study, which used information from northeastern Brazil, produced by DATASUS. The dependent variable was the morbidity and mortality rate, and the age range, sex, education, and marital status were considered independent variables, considering a 95% confidence interval. It was found that the average mortality rate of both diseases showed a general decreasing tendency; however, there were some points of increase, such as in the period between 2007 and 2008 for other mental and behavioral disorders as well as between 2009 and 2010 for mood disorders. The data indicated that the most vulnerable populations are children and the elderly, as well as an increase in the use of alcohol. This makes adjusting and restructuring health actions to prevent mental illness indispensable, through the strengthening of substitute services and Primary Care for receiving users of the community.

Keywords: Mental health. Mental Disorders. Mortality. Morbidity. Health Evaluation.

INTRODUCTION

In the mid-1970s, the Mental Health Workers Movement (MTSM) was started in Brazil, consisting of workers in the field, professionals in the health movement, and users, among others1. It is in this context of struggles that a period of complaining against the violence spread in asylums and in psychiatry began, damaging the collective construction of a new model of mental health policy[1].

In the second half of the 1980s, the desire to change the treatment with patients affected by mental disorders grew, based on substitutive models and the construction of alternative practices inspired by anti-asylum principles[2]. The movement's ideas and practices were opposed to the forms of barbarism present in various types of relationships, especially institutionalized ones, while proposing a transformation of Brazil's psychiatric system[3].

Still in the 1980s, there was a growth in the anti-asylum proposal, which had at its peak the First National Congress of Mental Health

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Workers, in 1978. Another decisive landmark for the increase in public mental health policies was the proclamation of the Federal Constitution of 1988, which expanded the concept of health considering the social determination of diseases and pointing out the need for a new care model aimed at the social production of health and a new management model anchored in the decentralized, democratic, and participative management of the Unified Health System (SUS)[4].

It is noteworthy that the substitutive services to the hospital-centered model were created with the aim that the sick subject could be seen from other perspectives, such as that of psychosocial rehabilitation, which is understood as an expanded service and considers life in its different areas with the objective of reintegrating the user into society[5].

From the point of view of the disease in society, mood disorders and other mental and behavioral disorders are public health problems of great relevance and affect people of all ages, sex, and social classes, although each group has its specificities[6]. These problems are more evident every day and are characterized by prompting feelings of social isolation and sadness, which often trigger suicide[7].

The cases of Mental Disorders (MD) in Brazil are much higher than those recorded[8]. Only about 5% of the total expected cases are included in the Primary Care Information System (PCIS). In 2014, the equivalent of 2.5 million people with MD were not recorded[8]. Despite the high numbers of clinical populations, mental suffering is still underdiagnosed or mistakenly addressed[8].

The presence of this type of disease can also aggravate several factors related to the health of clinical patients, especially elderly patients with chronic clinical diseases, who have less adherence to medical recommendations, and have difficulties in self-care[9].

In fact, this epidemiological reality can contribute to a negative impact on public health, leading to an overload of the work process for SUS workers, in community-based health services, due to the worsening of underlying diseases and underdiagnosis, as evidenced previously.

In this context, the present study aims to evaluate the indicators of morbidity and mortality in the northeastern region of Brazil in relation to mood disorders and other mental and behavioral disorders in the period from 2007 to 2016 in northeastern Brazil.

METHOD

This was an ecological, retrospective, and exploratory study that addresses mood disorders and other mental and behavioral disorders, whether or not resulting from hospitalization in Northeast Brazil. It should be noted that the choice for the ecological study was due to the possibility of comparing the indicators, in relation to the exposure to which the population is submitted.

Northeast Brazil was chosen for the study site, a region formed by 1,794 municipalities distributed in the following states: Alagoas (AL), Ceará (CE), Bahia (BA), Maranhão (MA), Paraíba (PB), Pernambuco (PE), Piauí (PI), Rio Grande do Norte (RN), and Sergipe (SE). Information regarding deaths, for calculating mortality rates, was extracted from the SUS Department of Informatics (DATASUS) portal, through the Mortality Information System (SIM).

Concerning SIM, it is important to note that it was created with the aim of regulating data on mortality in the country. From its creation, it was possible to capture information on mortality and subsidize the different management areas in public health[10].

The time series of a decade was studied by understanding the years 2007 to 2016, using secondary data obtained from the DATASUS portal and the SIM system. The International Classification Diseases (ICDs) from F30 to F39

were selected, referring to mood disorders and from F00 to F99, for other mental and behavioral disorders.

The dependent variable for the study is hospital admission and deaths from mood disorders and other mental and behavioral disorders (OMBD). For data analysis, the *Statistical Package for the Social Science* (SPSS), version 22.0 with serial number 10101141047 was used. The mortality and morbidity rates were calculated using descriptive data to calculate the mean, median, and deviation standard, and Student's t test was used for cases of normality of the quantitative variable, as well as absolute and relative frequencies.

RESULTS

The data in table 1 revealed that the hospitalization rate had a different average in each state analyzed, in addition to showing different trends and variations between them. Bahia was the state with the lowest numbers of hospitalizations and mortality due to mood disorders, as well as having the smallest variation over the studied decade (2007 to 2016). It also demonstrated an increasing trend of hospitalizations between the years 2010 and 2012 which, soon after, decreased. Rio Grande do Norte, on the other hand, had the highest hospitalization values, however, with decreasing tendency over the years. Its mortality rate remained low, with little variation, its peak reached 0.5% mortality in 2015.

Regarding the mortality rate, the numbers were up to three times less than those concerning hospitalization, yet behave in a similar way and, in general, with little variation during the decade. The highest numbers are from the State of Sergipe and the lowest from Maranhão. Through the t test, statistical significance was identified in the diseases studied, since $p \leq 0.05$.

In Table 2, the data refer to hospitalization and mortality rates due to OMBD. Thus, regarding the hospitalization rate, the highest values of the decade were reached by Pernambuco and the lowest by Maranhão. State rates have not changed significantly over the years, maintaining an average across the decade. Regarding the mortality rate, the lowest numbers are from the State of Ceará, while the highest ones belong to Sergipe. The average for all states also remained with little variation over the decade.

Comparing data on hospitalization rates for mood disorders and other mental and behavioral disorders, it is observed that mood disorders have values reaching up to three times greater than those of other mental and behavioral disorders. Mortality rates are higher in numbers, when it comes to other mental and behavioral disorders, when compared to mood disorders. Over the decade, it is observed that there was an increase from 2012 to 2013 in the mortality rate of other mental and behavioral disorders and from 2014 to 2015 in the case of mood disorders. Through the t test, statistical significance was identified in the diseases studied, where $p \leq 0.05$.

According to figure 1, on Potential Years of Life Lost, the greatest concentration of these values was observed in the age groups of those less than one year and those over 80 years old. Meanwhile the smallest was observed in the age group of 30 to 39 years. During the decade, the occurrence of deaths behaved in a similar way between both diseases; however, a disparity was observed beginning from the age of 59 years old, when the numbers referring to mood disorders demonstrated a significantly greater loss of years of life.

Table 3, which illustrates data from the Northeastern states between 2006 and 2017, shows that the main hospitalization problems do not coincide with those of mortality. For hospitalizations, Schizophrenia (F20) was the highest aggravator of the list, followed by mental and behavioral disorders due to the use of alcohol (F10). For mortality, mental and behavioral disorders due to the use of alcohol

(F10) and mental and behavioral disorders due to the use of tobacco (F17) stand out. In the list of hospitalizations and mortality, the values of the first disease stand out from those of the second, to the point that the first ones represent more than four times the value of the second.

Figure 2 shows the rate of hospitalization and mortality, geographically, according to each mental disorder. In figure 2A, the spatial autocorrelation maps on the hospitalization rate caused by other mental and behavioral disorders reveal the distribution of this indicator in the states of the Northeastern region of Brazil, with a 0.38 Moran Index and p = 0.08. Thus, in figure 2A(a), it is observed that the autocorrelation obtained a positive area representation, where highest rates are concentrated in the states of PB and PE. Moreover, the same analysis in figure 2A(b) revealed high-high rates in the states of RN, PB, PE, AL and SE and a low-high autocorrelation in MA.

In Figure 2B, the spatial autocorrelation maps on the mortality rate caused by other mental and behavioral disorders, points to the distribution of this indicator through the states of the Northeast region of Brazil, with a 0.59 Moran Index and p = 0.02. In figure 2B(a), the autocorrelation obtained a positive area representation, the highest rates of which are concentrated in the state of SE, followed by CE and PI, PB, RN, BA, PE and AL. Figure 2B(b) shows a high-high autocorrelation in all states in the region.

Regarding figure 2C, the maps of spatial self-correlation on the rate of hospitalization caused by mood disorders show the spatial analysis of the distribution of this indicator in the Northeastern region of Brazil, with a 0.60 Moran Index and p = 0.01. In the meantime, in figure 2C(a), it can be seen that the autocorrelation obtained a positive area representation with the highest rates concentrated in the states of PI and RN, followed by CE and SE, MA and AL, PB, PE, and BA. Figure 2C(b) shows high-high autocorrelation between the nine states in the Northeast.

Figure 2D figure reveals autocorrelation maps on the distribution of mortality rate due to mood disorders in the states of the Northeastern region of Brazil with a 0.69 Moran Index and p = 0.02. In this sense, figure 2D(a) shows that the autocorrelation obtained a positive area representation, with the highest rates in Sergipe, followed by CE, PI, BA, AL, PB, RN and PE. In figure 2D(b), a high-high autocorrelation was observed in the nine states of the Brazilian NE.

Table 1 – Hospitalization and mortality rate due to mood disorders, Northeast, Brazil, 2018.

HOSPITALIZATION RATE FOR MOOD DISORDERS										MORTALITY RATE FOR MOOD DISORDERS								
Year	MA	PI	CE	RN	PB	PE	AL	SE	BA	MA	PI	CE	RN	PB	PE	AL	SE	BA
2007	1.55	2.49	1.68	3.03	1.12	0.99	2.12	2.01	0.74	MA	PI	CE	RN	PB	PE	AL	SE	BA
2008	1.84	2.67	1.30	3.03	0.96	1.01	1.92	2.07	0.76	0.02	0.05	0.06	0.02	0.03	0.02	0.03	0.06	0.03
2009	1.90	2.66	1.51	2.65	0.81	1.08	1.61	1.68	0.66	0.01	0.04	0.05	0.01	0.03	0.02	0.02	0.05	0.03
2010	2.51	2.52	1.52	2.60	0.83	1.01	1.55	1.54	0.78	0.01	0.04	0.06	0.04	0.03	0.02	0.03	0.04	0.02
2011	1.76	2.06	1.47	2.24	0.98	0.95	1.78	1.50	0.79	0.03	0.04	0.03	0.01	0.04	0.02	0.04	0.10	0.03
2012	1.54	2.01	1.72	2.24	1.03	0.93	1.33	1.39	0.82	0.02	0.04	0.06	0.02	0.03	0.03	0.04	0.09	0.03
2013	1.11	2.21	1.27	1.83	1.13	1.11	1.35	0.88	0.76	0.01	0.04	0.05	0.03	0.03	0.02	0.03	0.04	0.04
2014	1.28	2.01	1.26	2.02	1.52	0.90	1.44	1.55	0.68	0.02	0.03	0.05	0.03	0.03	0.02	0.03	0.11	0.04
2015	1.28	1.70	1.33	2.01	1.41	0.97	1.04	1.45	0.59	0.01	0.02	0.04	0.02	0.03	0.02	0.02	0.08	0.03
2016	1.44	1.39	1.18	1.91	1.75	1.03	1.25	1.25	0.64	0.01	0.05	0.07	0.05	0.03	0.02	0.02	0.10	0.06

Table 2 – Hospitalization and mortality rates due to other mental and behavioral disorders. Northeast (OMBD), Brazil, 2018.

	HOSPITALIZATION RATE FOR OMBD									MORTALITY RATE FOR OMBD								
Year	MA	PI	CE	RN	PB	PE	AL	SE	BA	MA	PI	CE	RN	PB	PE	AL	SE	BA
2007	0.46	0.36	0.27	0.49	0.49	0.95	0.92	0.36	0.40	0.02	0.06	0.05	0.02	0.02	0.01	0.02	0.06	0.01
2008	0.49	0.40	0.27	0.43	0.44	1.28	0.78	0.32	0.32	0.02	0.04	0.04	0.02	0.03	0.01	0.00	0.05	0.01
2009	0.44	0.65	0.26	0.33	0.31	1.11	0.65	0.28	0.29	0.02	0.04	0.03	0.02	0.03	0.01	0.02	0.05	0.02
2010	0.47	0.53	0.28	0.32	0.36	0.72	0.54	0.34	0.31	0.01	0.03	0.05	0.02	0.04	0.01	0.02	0.07	0.01
2011	0.38	0.28	0.30	0.28	0.33	1.04	0.51	0.26	0.31	0.02	0.02	0.03	0.01	0.02	0.01	0.02	0.03	0.02
2012	0.18	0.32	0.34	0.22	0.26	1.02	0.41	0.24	0.28	0.01	0.01	0.03	0.01	0.02	0.02	0.03	0.03	0.01
2013	0.07	0.23	0.26	0.18	0.29	0.88	0.28	0.21	0.14	0.01	0.04	0.04	0.01	0.04	0.02	0.01	0.08	0.02
2014	0.10	0.27	0.21	0.20	0.36	0.71	0.43	0.93	0.22	0.02	0.03	0.02	0.01	0.02	0.01	0.03	0.04	0.02
2015	0.09	0.27	0.24	0.22	0.45	0.60	0.83	0.29	0.14	0.01	0.04	0.02	0.02	0.04	0.01	0.03	0.03	0.02
2016	0.08	0.43	0.22	0.22	0.43	0.55	0.82	0.20	0.13	0.00	0.01	0.02	0.00	0.05	0.02	0.02	0.04	0.02

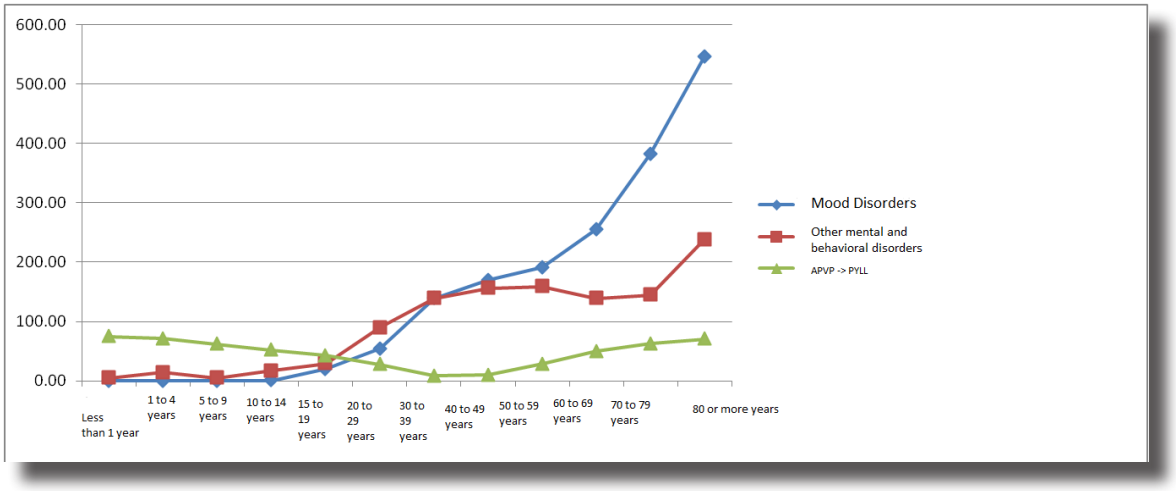

Figure 1 – Distribution of Potential Years of Life Lost according to the age group affected by mood disorders and other mental and behavioral disorders (OMBD), Northeast, Brazil, 2018.

Table 3 – Distribution of the frequency of causes of hospitalization and mortality in chapter V ICD-10. Northeast, Brazil, 2018.

	Hospital Morbidity								
	MA	PI	CE	RN	PB	PE	AL	SE	BA
	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)
Schizophrenia	51.3 (29302)	48.7 (17673)	57.3 (64157)	48.8 (20540)	53.1 (28323)	51.3 (43020)	61.5 (33599)	42.0 (11068)	51.1 (34747)
Mental and behavioral disorders due to alcohol use	13.4 (7668)	14.5 (5286)	12.5 (14001)	17.4 (7343)	19.1 (10195)	18.2 (15274)	13.6 (7461)	24.0 (6331)	18.8 (12769)
Mood disorders [emotional]	20.3 (11624)	20.2 (7331)	11.7 (13146)	19.2 (8108)	9.6 (5156)	11.5 (9631)	9.4 (5178)	12.9 (3406)	16.1 (10988)

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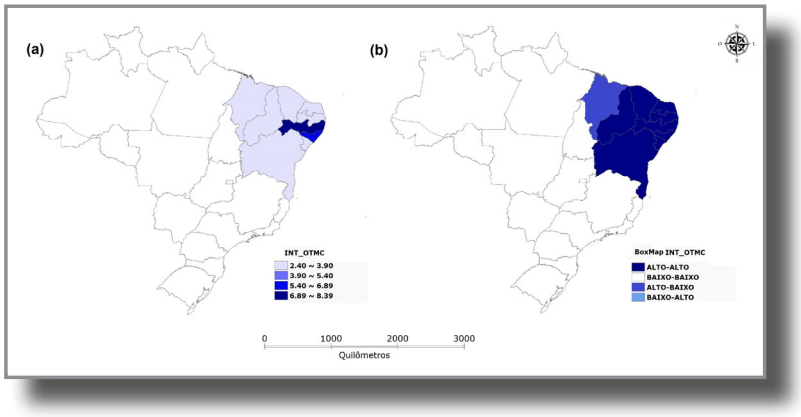
	MA	PI	CE	RN	PB	PE	AL	SE	BA
Mental and behavioral disorders due to the use of other psychoactive substances	11.5 (6562)	12.7 (4622)	16.2 (18193)	12.0 (5082)	15.1 (8052)	8.9 (7474)	11.3 (6204)	17.9 (4727)	8.2 (5614)
			Mortality						
Other mental and behavioral disorders	27.3 (1860)	3.6 (1310)	2.1 (2447)	2.3 (967)	2.9 (1578)	9.9 (8333)	3.9 (2155)	2.8 (758)	5.5 (3765)
Mental and behavioral disorders due to alcohol use	74.3 (1550)	74.6 (1410)	64.4 (5597)	66.9 (1214)	66.1 (1261)	76.1 (3859)	73.4 (1272)	64.6 (1647)	76 (5699)
Mental and behavioral disorders due to smoking	15.3 (321)	14.0 (265)	1.4 (1292)	12.8 (233)	19.3 (369)	14.2 (723)	16.1 (279)	19.6 (500)	10.7 (847)
Unspecified dementia	3.5(75)	8.5 (49)	14.5 (1263)	14.4 (262)	6.6 (126)	5.0 (255)	4.3 (75)	8.0 (205)	9.5 (748)
Depressive episodes	3.7 (78)	5.2 (100)	4.2 (373)	3.4 (63)	45.6 (89)	27.1 (154)	4.5 (78)	5.7 (146)	5.3 (417)
Schizophrenia	2.9 (61)	3.4 (65)	1.8 (163)	2.2 (40)	3.1 (60)	1.4 (76)	1.6 (28)	1,8 (48)	1.7 (136)

Figure 2 – Distribution of morbidity and mortality due to Mood Disorders and other mental and behavioral disorders (OMBD). Northeast, Brazil, 2018.

A - Hospitalization Rate for Other Mental and Behavioral Disorders (OMBD), Northeast, Brazil, 2018.



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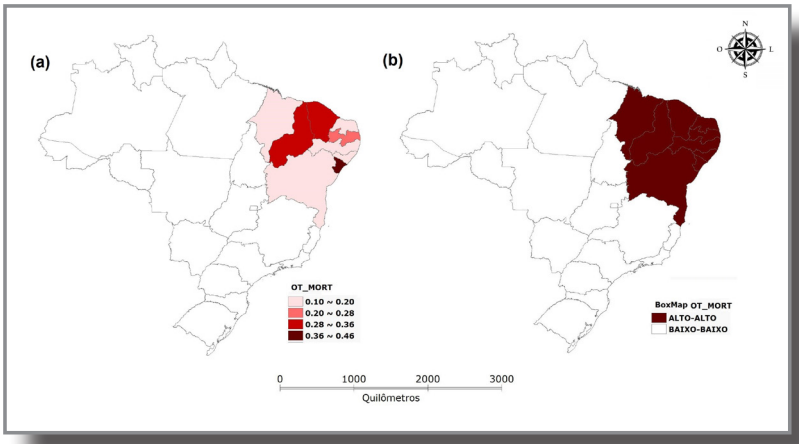
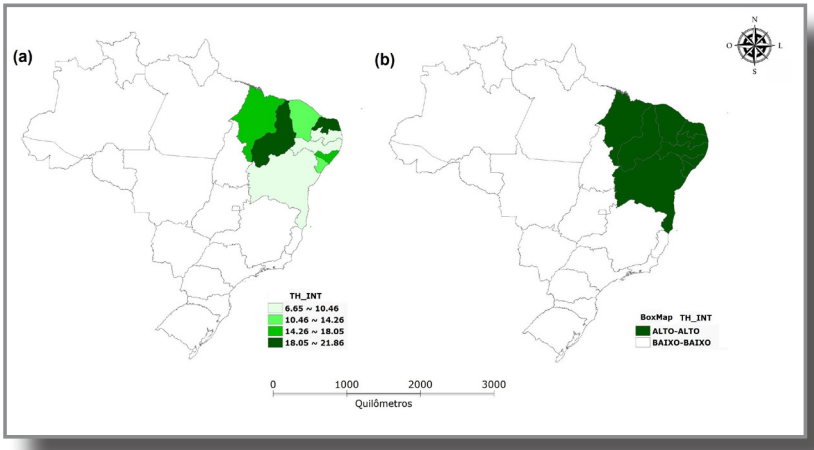
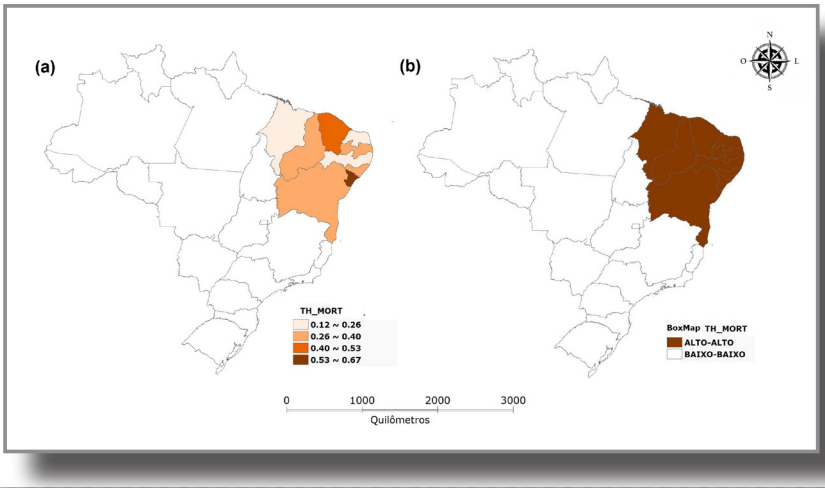
B - Mortality Rate for Other Mental and Behavioral Disorders (OMBD), Northeast, Brazil, 2018.



C - Hospitalization Rate for Mood Disorders, Northeast, Brazil, 2018.



D - Mortality Rate for Mood Disorders, Northeast, Brazil, 2018.



DISCUSSION

Regarding mortality from mood disorders and other mental and behavioral disorders of the period studied, it was observed that in Tables 1 and 2 both rates have a general tendency to decrease over the years, with emphasis on hospitalizations due to mood disorders, which showed the highest numbers. Such data were probably influenced due to greater investment in public policies in the area of mental health, such as greater support created by the Psychosocial Care Network (PSCN), instituted by Ordinance MS/GM No. 3.088, of 23/12/2011[11].

The study by Santos and Barbosa[7] raises another hypothesis for the decrease in the number of hospitalizations, which concerns the operationalization of psychiatric reform based on the reduction of institutionalizations, but which often does not have the adequate restructuring of substitute hospital and extra-hospital services, which leads to a general lack of assistance. Thus, the simple creation of psychiatric beds in general hospitals does not mean an improvement in care. The decrease in hospitalization rates and the maintenance of a high prevalence of this indicator may reveal that community mental health care services may not be adequately replacing hospital-based and homes services.

Regarding the population that died due to both the conditions studied here, it appears that mood disorders stand out again for having the highest numbers, compared to OMBD. In view of this reality, community-based substitutive services are highlighted, allowing for diagnostic screening studies and, above all, a resolute reception of a patient. For example, a patient may arrive at the health service with biological complaints which could be the result of an accumulation of factors. Therefore, it is important for a multidisciplinary team to deal with the most diverse situations and be trained to make the correlation between physical and psychological symptoms, since this is often neglected.

Thus, the effectiveness of mental health programs developed in primary care, from the perspective of Collective Health, is fundamental, since mental illness, as previously seen, influences the rates of comorbidity and mortality and consequently, the life expectancy of the country; especially in the Northeastern region.

In the meantime, the implementation and strengthening of the National Policy on Complementary Practices (PNPIC) in the Unified Health System (SUS), which aims to provide action towards prevention and health promotion and recovery, with an emphasis on Primary Care, focused on continuous, humanized and integral health care deserves attention[12].

However, Silva Junior and Fischer[13] state that in recent years in Brazil, mental illness has remained one of the three main causes for granting benefits and illness-aids due to the incapacity to work. The decrease in the productive force, especially when the illness reaches the economically active population, causes important expenses to the State, since it represents the indirect decrease of the national economy.

This is a desolate reality, as the State, wrongly, ends up privileging the potentially chronic disease, insofar as they are medicalized and find themselves in this situation for the rest of their lives; thereby, burdening the State with sick leave, long leave-of-absences and even retirements for young people.

Regarding the causes of death due to behavioral mental disorders, which are due to the use of alcohol and tobacco, as shown in table 3, it is essential to note that there is a historical gap in public health policy, under which drug abuse was interpreted as a judicial

or police matter, the health component of which is neglected.

It is believed that the difficulty in recognizing and facing problems such as alcoholism and smoking may be responsible for the little or no notification of these diseases until the mid-2000s, when the National Program of Integrated Community Care for Users of Alcohol and other Drugs was finally implemented and recognized the problem of the harmful use of these substances as a public health problem, situated in the field of mental health.

The study by Bohland and Gonçalves[14], carried out in Sergipe, confirmed the findings of the present study when it stated that deaths due to mental and behavioral disorders associated with alcohol increased between 1998 and 2010, both for men and for women, characterized a probable increase in the pattern of the alcohol consumption. Similar results were obtained by the Ministry of Health, which also found that consumption is more intense in the country.

This trend in the use of alcohol has been increasingly perceived in the reality of men and women, and has been the gateway to mental disorders, as the consumption of alcoholic beverages becomes an escape from reality, most of the times, from their emotional pains.

A report by the Pan American Health Organization (PAHO)15, released in August 2015 also confirms the results obtained in this study when it pointed out that, in Brazil, 73.9 men per 100 thousand inhabitants died from alcohol in 2010, which placed the country in third place among the countries of the Americas with the most deaths involving alcohol use.

In this context, the importance of policies to combat these drugs, especially alcohol and cigarettes, is evident, since they are legalized in the country. For this reason, it is necessary to have an active collective health system in the community, developing awareness, mapping, and treating psychically ill patients.

Concerning the main cause of hospitalizations, schizophrenia is characterized by repeated psychiatric hospitalizations, a fact that may justify its high number. In relation to this condition, it can be emphasized that, despite advances in substitutive services, psychiatric patients still find themselves in need of psychiatric hospitalization, even long-term.

Therefore, we agree with the study by Pereira and Joazeiro[16] when they affirmed that the suffering caused by the symptoms of schizophrenia induces some subjects and their families to opt for psychiatric hospitalization, seeking to reduce or end such suffering. Others have in their current hospitalization a way of survival and a way to distance themselves from some addictions and to contain aggressiveness. And yet, according to the same authors, the demand for asylum hospitalizations can be justified by the lack of adequate treatment by the CAPS, which may not meet the expectations and individual demands of these people[16]. Subjects discharged from long hospitalizations frequently identify difficulties in linking and adapting to the CAPS[16].

As shown in figure 2, on the distribution of morbidity and mortality, it revealed that there is a high spatial interaction between states. This finding is inconsistent with that observed in the study by Santos and Barbosa[7], whose results show a spatial distribution of a random character, with no cluster formation when associated with the socioeconomic factors analyzed.

This variation between the northeastern states brings a context of changes, the epidemiological transition that Brazil has been going through in the last decades was characterized by the increase of chronic diseases, mental disorders, and neoplasms.

Based upon the principle that mental health suffers the effects of territories, where the most important health determinants of populations are found, since, depending on the way in which the community is organized, on the health services offered, governmental policies and income distribution, residents of the territory may experience lesser or greater exposure to

vulnerabilities. The World Health Organization (WHO) ratifies that social injustice is a cause of inequality, which may or may not directly interfere in the living conditions of populations, which is a current challenge for the formation of social policies.

Despite the advances achieved in relation to some Brazilian social indicators, the uneven structure of income distribution persists. However, this fact alone is not responsible for poor health conditions, a fact materialized by the countries in which the Gross Domestic Product (GDP) is high but does not necessarily guarantee satisfactory health indicators. The social determination of health also involves factors such as the existence of a network of accessible quality public services with community resources[17]. Such a perspective, in the field of mental health, performs equally, assuming that this is a social, human, and collective phenomenon and not a biological and individual fact, as confirmed by the Draft comprehensive mental health action plan 2013–2020, by WHO[18].

The Ministry of Health Ordinance 3.659/201819 suspended the financial transfers in the amount of more than 300 services and then, Ordinance 3.718/201820 required the return of investments in order to implement services. This information shows investments in promotion of mental health.

In this perspective, the States of Northeastern Brazil must unite to provide comprehensive, equal and universal care to the many users in the community who are mentally suffering and who must be received according to their main psychosocial needs and not only biological needs.

CONCLUSION

It is noteworthy that deaths and hospitalizations due to alcohol and tobacco consumption remain high in Northeast Brazil, between the years 2007 and 2016, although there are factors that mask these data, such as underreporting. Other data reported that the mortality rates for mood disorders and OMBD are influenced by variables such as age group, sex, education, and marital status, which denotes the need for alternatives aimed at the specificities of each audience, especially the most affected groups.

Therefore, the planning of health actions in Primary Care, in conjunction with local mental health policies, can assist in defining the responsibilities of each piece of equipment of the healthcare network, as well as in conducting the activities carried out in the communities. Finally, it is essential to adjust and reformulate health actions to prevent mental illnesses, through the strengthening substitute services and the Primary Care system to better receive users in the community.

REFERENCES

1- Amarante, P. Loucos pela vida: a trajetória da reforma psiquiátrica no Brasil. 2ª ed. Rio de Janeiro: FIOCRUZ, 1995.
2- Yasui S. Rupturas e encontros: desafios da Reforma Psiquiátrica Brasileira [Tese da Internet]. Rio de Janeiro: Fundação Oswaldo Cruz. Escola Nacional de Saúde Pública Sérgio Arouca; 2006 [acesso em 2020 Jun 16]. 208 p. DOI 10.1590/S0102-311X2011000300023.
3- Nunes JMS, Guimarães JMX, Sampaio JJC. A produção do cuidado em saúde mental: avanços e desafios à implantação do modelo de atenção psicossocial territorial. Physis: Revista de Saúde Coletiva [Internet]. 2016 [Acesso em 2020 Jun 16];26(4):1213-1232. DOI 10.1590/s0103-73312016000400008.

4- Ministério da Saúde (BR). Lei n. 8.080 de 19 de setembro de 1990. Dispõe sobre as condições para a promoção, prevenção e recuperação da saúde, a organização e os serviços correspondentes e dá outras providências. Diário Oficial da União [Internet]. 1990 [Acesso em 2020 Jun 16]. Disponível em: https://conselho.saude.gov.br/legislacao/lei8080_190990.htm
5- Jorge MSB, Randemark NFR, Queiroz MVO, Ruiz EM. Reabilitação Psicossocial: visão da equipe de Saúde Mental. Rev Bras Enferm [Internet]. 2006 [Acesso em 2020 Jun 16];59(6):734-739. DOI 10.1590/S0034-71672006000600003.
6- Morgado AF, Coutinho ESF. Dados de epidemiologia descritiva de transtornos mentais em grupos populacionais do Brasil. Cadernos de Saúde Pública [Internet]. 1985 [Acesso em 2020 Jun 16];1(3):327-347. Disponível em: https://www.scielosp.org/pdf/csp/1985.v1n3/327-347/pt
7- Santos EGO, Barbosa IR. Conglomerados espaciais da mortalidade por suicídio no nordeste do Brasil e sua relação com indicadores socioeconômicos. Rio de Janeiro: Cad. Saúde Colet. [Internet]. 2017 [Acesso em 2020 Jun 16];25(3);371-8. DOI: 10.1590/1414-462x201700030015.
8- Souza MLP. Registro de distúrbios mentais no Sistema de Informação da Atenção Básica do Brasil, 2014. Epidemiol. Serv. Saúde [Internet]. 2016 [Acesso em 2020 Jun 16];25(2):405-410. DOI 10.5123/S1679-49742016000200018.
9- Branquinho JS, Gomes FA, Silva RP, Leite MMA, Candido MCFS, Lima LA, Bispo IMGP. Doenças crônicas em pacientes com transtornos mentais. Revista Eletrônica Gestão & Saúde [Internet]. 2014 [Acesso em 2020 Jun 16];5:2458-64. Disponível em: https://periodicos.unb.br/index.php/rgs/article/view/1003
10- Brasil. Departamento de informática do SUS – DATASUS. Disponível em: http://www2.datasus.gov.br/DATASUS/index.php?area=0203&id=6926
11- Ministério da Saúde (BR). Portaria nº 3.088, de 23 de dezembro de 2011. Institui a Rede de Atenção Psicossocial para pessoas com sofrimento ou transtorno mental e com necessidades decorrentes do uso de crack, álcool e outras drogas, no âmbito do Sistema Único de Saúde (SUS). Diário Oficial da União [Internet]. 2011 [Acesso em 2020 Jun 16]. Disponível em: http://bvsms.saude.gov.br/bvs/saudelegis/gm/2011/prt3088_23_12_2011_rep.html
12- Ministério da Saúde (BR). Secretaria de Atenção à Saúde. Departamento de Atenção Básica. Política nacional de práticas integrativas e complementares no SUS: atitude de ampliação de acesso. Brasília : Ministério da Saúde [Internet]. 2015 [Acesso em 2020 Jun 16]. 2. ed. 98 p. Disponível em: http://bvsms.saude.gov.br/bvs/publicacoes/politica_nacional_praticas_integrativas_complementares_2ed.pdf
13- Silva Junior JS, Fischer FM. Adoecimento mental incapacitante: benefícios previdenciários no Brasil entre 2008-2011. São Paulo: Rev. Saúde Pública [Internet]. 2014 [Acesso em 2020 Jun 16];48(1):186-90. DOI: 10.1590/S0034-8910.2014048004802.
14- Bohland AK, Goncalves AR. Mortalidade atribuível ao consumo de bebidas alcoólicas. Ribeirão Preto: Rev. Eletrônica Saúde Mental Álcool Drog. [Internet]. 2015 [Acesso em 2020 Jun 16];11(3)136-44. DOI: 10.11606/issn.1806-6976.v11i3p136-144.
15- Organização Pan-americana da Saúde (OPAS). OPAS/OMS apoia governos no objetivo de fortalecer e promover a saúde mental da população: 10 de outubro de 2016. 2016 [Acesso em 2020 Jun 16]. Disponível em: https://www.paho.org/bra/index.php?option=com_content&view=article&id=5263:opas-oms-apoia-governos-no-objetivo-de-fortalecer-e-promover-a-saude-mental-da-populacao&Itemid=839.
16- Pereira AR, Joazeiro G. Percepção da internação em hospital psiquiátrico por pacientes com diagnóstico de esquizofrenia. São Paulo: O Mundo da Saúde [Internet]. 2015 [Acesso em 2020 Jun 16];39(4),476-83. DOI: 10.15343/0104-7809.20153904476483.
17- Instituto Brasileiro de Geografia e Estatistica (IBGE). Censo Demográfico 2000.Características Gerais da População. Resultados da Amostra. 2003 [Acesso em 2020 Jun 16]. Disponível em: http://www.ibge.gov.br/home/estatistica/populacao/cnso2000/default_populacao.shtm.
18- World Health Organization. Mental health action plan 2013–2020. Genebra. 2013 [Acesso em 2020 Jun 16]. Disponível em https://apps.who.int/iris/bitstream/handle/10665/89966/9789241506021_eng.pdf;jsessionid=0703D8AE5E0C4F7A375179CFF7AD3192?sequence=1.
19- Ministério da Saúde (BR). Portaria nº 3.659, de 14 de novembro de 2018. Estabelece a suspensão temporária do recursos do Bloco de Custeio das Ações e Serviços Públicos de Saúde. Diário Oficial da União [Internet]. 2018 [Acesso em 2020 Jun 16]. Disponível em: http://bvsms.saude.gov.br/bvs/saudelegis/gm/2018/prt3659_16_11_2018.html.
20- Ministério da Saúde (BR). Portaria nº 3.718, de 22 de novembro de 2018. Lista de Estados e Municípios que receberam recursos referentes a parcela única de incentivo de implantação dos dispositivos que compõem a Rede de Atenção Psicossocial (RAPS), e não executaram o referido recurso no prazo determinado nas normativas vigentes. Diário Oficial da União [Internet]. 2018 [Acesso em 2020 Jun 16]. Disponível em: http://www.in.gov.br/materia/-/asset_publisher/Kujrw0TZC2Mb/content/id/51521189/do1-2018-11-23-portaria-n-3-718-de-22-de-novembro-de-2018-51521040.

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