Suicide of the elderly in Brazil: 1996-2017

Suicídio de idosos no Brasil: 1996-2017

Suicidio de ancianos en Brasil: 1996-2017

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REVISA

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RESUMO

Objetivo: Analisar a mortalidade de idosos por suicídio no "Brasil" entre "1996 a 2017". **Método:** Pesquisa epidemiológica, exploratória, descritiva e quantitativa. Os dados foram extraídos no Sistema de Informação sobre Mortalidade do Ministério da Saúde (SIM/MS) e organizados no software Microsoft Excel 2016® pertencente ao pacote Microsoft Office 2016®, sendo implementada análise estatística descritiva. **Resultados:** Foi identificado o universo de 29.768 registros, com média e desvio-padrão de (1353,1±375,7). A região Sudeste (SE) registrou a maior preponderância com 35,2% (n=10.490). Também foi verificada maior preponderância com 54,5% (n=16.231) pessoas com 60 a 69 anos, 81,3% (n=24.213) pessoas do sexo masculino, 62,4% (n=18.582) da raça/cor branca, 19,2% (n=5.713) possuíam entre 1 a 3 anos de escolarização, 51,5% (n=15.339) se encontravam casados(as) e 66% (n=19.646) tiveram registro de óbito no domicílio. **Considerações finais:** Foi verificado aumento na frequência de registros de casos de suicídio de idosos no recorte geográfico e histórico analisados.

Descritores: Mortalidade; Idoso; Suicídio; Epidemiologia

ABSTRACT

Objective: To analyze the mortality of elderly people due to suicide in "Brazil" between "1996 to 2017". **Method:** Epidemiological, exploratory, descriptive and quantitative research. The data were extracted in the Mortality Information System of the Ministry of Health (SIM/MS) and organized in the Microsoft Excel 2016® software belonging to the Microsoft Office 2016® package, and a descriptive statistical analysis was implemented. **Results:** The universe of 29,768 records was identified, with mean and standard deviation (1353,1±375,7). The Southeast region (SE) registered the largest preponderance with 35.2% (n=10.490). There was also a greater preponderance with 54.5% (n=16.231) people aged 60 to 69 years, 81.3% (n=24.213) male, 62.4% (n=18.582) of white race/color, 19.2% (n=5.713) had between 1 and 3 years of schooling, 51.5% (n=15.339) were married and 66% (n=19.646) had a death record at home. **Final considerations:** There was an increase in the frequency of records of suicide cases among the elderly in the analyzed geographical and historical context

Descriptors: Mortality; Old man; Suicide; Epidemiology.

RESUMEN

Objetivo: analizar la mortalidad de personas mayores por suicidio en "Brasil" entre "1996 a 2017". **Método:** Investigación epidemiológica, exploratoria, descriptiva y cuantitativa. Los datos se extrajeron en el Sistema de Información de Mortalidad del Ministerio de Salud (SIM /MS) y se organizaron en el software Microsoft Excel 2016® que pertenece al paquete Microsoft Office 2016®, y se implementó un análisis estadístico descriptivo. **Resultados:** Se identificó el universo de 29,768 registros, con media y desviación estándar (1353,1±375,7). La región sureste (SE) registró la mayor preponderancia con 35.2% (n=10.490). También hubo una mayor preponderancia con 54.5% (n=16.231) personas de 60 a 69 años, 81.3% (n=24.213) hombres, 62.4% (n=18.582) de raza/color blanco , 19.2% (n=5.713) tenían entre 1 y 3 años de escolaridad, 51.5% (n=15.339) estaban casados y 66% (n=19.646) tenían un registro de defunción en el hogar. **Consideraciones finales**: Hubo un aumento en la frecuencia de registros de casos de suicidio entre los ancianos en el contexto geográfico e histórico analizado.

Descriptores: Mortalidad; Anciano; Suicidio; Epidemiología.

ORIGINAL

Introduction

The word suicide (suicidium) is of Latin origin and means intentionally killing yourself, where, in the vast majority of cases, it is associated with a mental disorder (TM), and this fact leads us to reflect on the process in which it takes the person to commit such an act.[1] It can be considered as a multidetermined phenomenon, which manifests itself as a request for help, recognizable and predictable, which needs support and immediate response.[2]

The sociologist Émile Durkheim is considered one of the most important thinkers related to the theme in question, defending in his work that has the title "Suicide", that it constitutes itself as a social issue, suffering variation according to the inverse reason of the degree of interaction of people with society.[3]

This is a social problem that impacts directly or indirectly in various contexts and aspects of society, and may be associated with mental illness, social factors, economic crises, religiosity, divorce, income, education, unemployment, various intolerances, meteorological variables, among others.[4] For some researchers, for each case of suicide there are at least 10 previous attempts implemented by the victim.[5]

For some researchers, the elderly person is constituted as a being vulnerable to suicide, due to the various changes that occurred in his body in relation to the aging process.[6] In this sense, the aging of the population gains prominence due to demographic changes that has been occurring in the last years, and in this way, it can constitute itself as a risk factor for suicidal behavior.[7-9]

In our existential daily life, the processes occur in an accelerated way and everything quickly becomes obsolete, and in this way, the elderly find little space, difficulty in self-acceptance and even rejection.[10] In this context, people fear death, however, it can be considered by people who are emotionally fragile, as a form of relief for those who do not find alternatives to their problems, who end up looking for self-destructive behaviors, end their own lives.[11-12]

Thus, suicidal behavior is considered to be any act by which the person causes injury to him, regardless of the degree, being classified into three (03) distinct categories, that is, the suicidal ideation, the attempt and the consummated act.[5] suicide leads to countless questions, among them something is pertinent, nobody wants to stop living, and in that sense, the suicidal person does not want to end his own life, but rather to end his suffering.[12-13]

Face the technology advancement, many elderly people no longer feel positive for society, since they lose their social status due to the loss of social roles, they end up feeling a burden for both family and the state.[14] It often occurs due to the difficulty in dimensioning, registering and making effective suicidal acts official, and this difficulty is intensified by the taboo that still exists, especially for the victim's family.[15]

The National Policy for the Elderly aims to ensure the rights within society through measures of inclusion and benefits that allow and make democratic access for this portion of the population to essential services, contributing to the mitigation of the suicidal phenomenon.[16-17]

Another important milestone in the defense of the rights of this important population is the Law number 10.741, of October 1, 2003, better

known as the Elderly Statute, aiming at greater social insertion and protection to their inalienable rights[18] and access to services that guarantee the active aging.[17-18]

In this sense, this research aimed to analyze the mortality of elderly people due to suicide in the geographic section formed by "Brazil" and in the historical section formed by the years "1996 to 2017", that is, twenty (21) years.

Method

This is an epidemiological, exploratory, descriptive study with a quantitative approach, and the data were extracted from the Mortality Information System of the Informatics Department of the Unified Health System of the Ministry of Health (SIM/DATASUS/MS). Aiming to facilitate the process of acquiring the necessary data for the construction of this research, the International Classification of Diseases was used in its tenth edition (ICD10), in chapter "XX" and with the codes "X60 to X84", related to "self-harm caused intentionally ".

SIM/DATASUS/MS is the oldest of the national health information systems, in operation since its institution registered in 1975 and, therefore, the present information base is the Death Certificate (DO), which has a single standardized model for the entire Brazilian nation.[19] For other researchers, the records made in relation to the phenomenon of mortality are periodically sent to the respective State Health Departments (SES) and, subsequently to this activity, transmitted to the highest health agency in Brazil..[20]

In order to facilitate the realization of this production, an elderly person was established as an individual aged 60 years or over, in accordance with the provisions of Law No. 8,842, of January 4, 1994, which provides for the National Policy of Elderly, creates the National Council for the Elderly and makes other provisions17 and also Law No. 10,741, of October 1, 2003, which provides for the Elderly Statute and other provisions.[18]

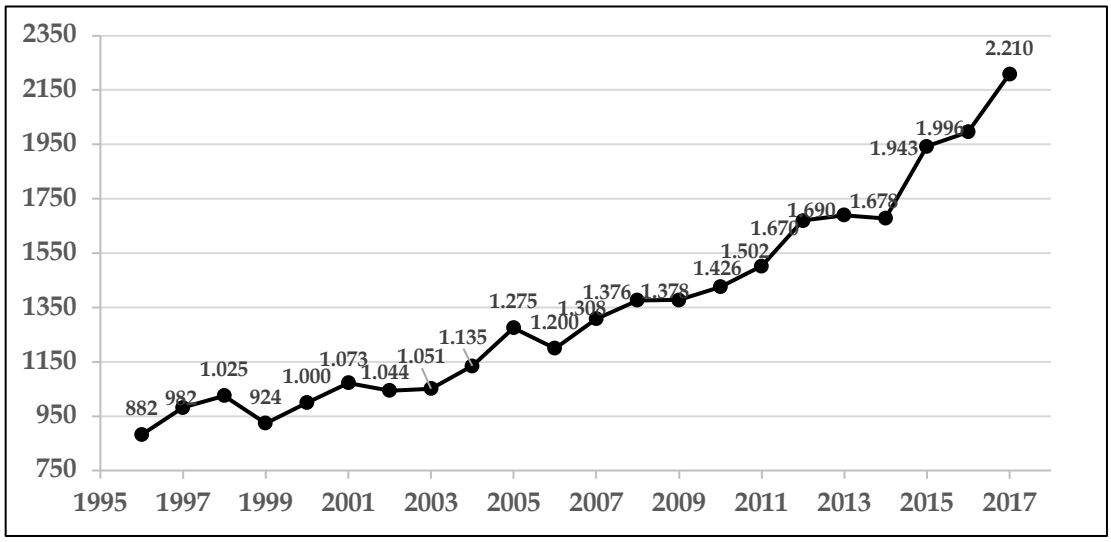
During the data extraction process, it was possible to identify the analytical categories, "year", "Brazilian region", "federative unit", "sex", "age", "race / color", "education", "state civil law "and place of death". After the acquisition of the data, they were organized with the Microsoft Excel 2016® software belonging to the Microsoft Office 2016® for Windows® package.

Descriptive statistical analysis was implemented with the development of calculations related to minimum values, maximum values, percentages (%), arithmetic means and standard deviation (σ). The acquired results were exposed by means of two (02) figures and three (03) explanatory tables. The authors declare no conflicts of interest.

Results

After the data extraction process, it was organized, making it possible to identify the universe of 29,768 elderly mortality records in the analyzed geographic and historical profile, in addition to the mean and standard deviation (1353.1 ± 375.7). It was also verified that the year 2017 registered the highest preponderance of case records with 7.4% (n = 2210) and the lowest preponderance was identified in 1996 with 3% (n = 882), as shown in Figure 1.

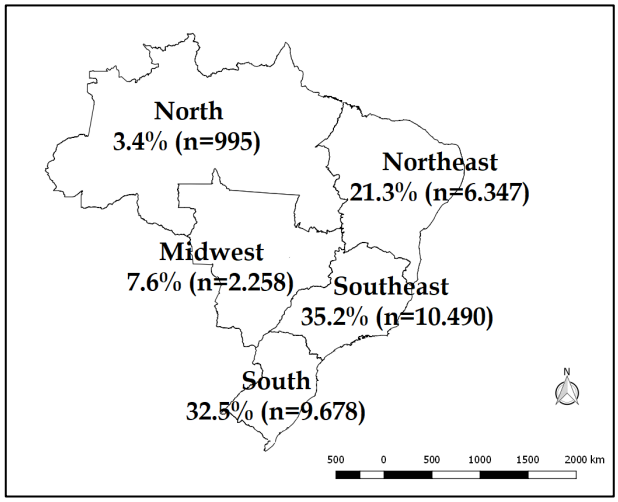
Figure 1 - Distribution of elderly suicide records per year in Brazil, 1996 to 2017 (n=29.768):



Source: SIM/MS, 2020.

When analyzing the elderly suicide frequency records by Brazilian regions, it was found that the southeast region (SE) registered the highest preponderance with 35.2% (n = 10,490) and the North region (N) the lowest with 3.4 % (n = 995) as shown in figure 2.

Figure 2 - Distribution of elderly suicide records by regions in Brazil, 1996 to 2017 (n=29.768).



Source: SIM/MS, 2020.

Regarding the frequency of suicide records of elderly people by federative units (UF), it was found that the state of Rio Grande do Sul (RS) registered the highest preponderance with 18.9% (n = 5,614) and Amapá (AP) a lower with 0.1% (n = 37) as shown in table 1.

Table 1 - Frequency of elderly suicide records by federal units in Brazil, 1996-2017 (n = 29,768).

UF	f	%
Rio Grande do Sul	5.614	18,9
Sao Paulo	5.475	18,4
Minas Gerais	2.834	9,5
Parana	2.040	6,9
Santa Catarina	2.024	6,8
Rio de Janeiro	1.746	5,9
Ceara	1.401	4,7
Bahia	1.225	4,1
Pernambuco	1.110	3,7
Goias	1.095	3,7
Piaui	629	2,1
Rio Grande do Norte	539	1,8
Mato Grosso do Sul	516	1,7
Paraiba	505	1,7
Espirito Santo	435	1,5
Maranhao	431	1,4
Mato Grosso	427	1,4
Pará	370	1,2
Sergipe	257	0,9
Alagoas	250	0,8
Federal District	220	0,7
Tocantins	210	0,7
Amazonas	157	0,5
Rondonia	140	0,5
Acre	43	0,1
Roraima	38	0,1
Amapa	37	0,1
Total	**29.768**	**100**

Source: SIM/MS, 2020.

Regarding the socioeconomic and / or sociodemographic profile of the elderly who had a death record due to suicide, it was noticed that the greater preponderance composed of 54.5% (n = 16,231) were those who were aged 60 to 69 years, 81, 3% (n = 24,213) were male, 62% (n = 18,582) declared to be white (skin color), 19.2% (n = 5,713) had 1 to 3 years of schooling, 51.5% (n = 15,339) declared that they were married, 66% (n = 19,646) had their place of death as their home, as shown in Table 2.

Table 2 - Distribution of elderly suicide records by age, sex, education, race/color, marital status, place of death in Brazil, 1996 to 2016 (n = 29,768).

Age	f	%
60 to 69 years	16.231	54,5
70 to 79 years	9.313	31,3
80 years or more	4.224	14,2
Sex		
Male	24.213	81,3
Female	5.552	18,7
Ignored	3	0,0
Race/ Skin color		
White	18.582	62,4
Brown	7.041	23,7
Black	979	3,3
Yellow	326	1,1
Indian	53	0,2
Ignored	2.787	9,4
Education		
1 to 3 years	5.713	19,2
4 to 7 years	4.671	15,7
None	3.629	12,2
8 to 11 years	2.237	7,5
12 years or more	1.567	5,3
1 to 8 years	143	0,5
9 to 11 years	109	0,4
Ignored	11.699	39,3
Marital Status		
Maried	15.339	51,5
Widower	5.671	19,1
Single	4.126	13,9
Judicially separated	2.161	7,3
Ignored	2.037	6,8
Other	434	1,5
Registration Location		
Home	19.646	66
Hospital	4.996	16,8
Others	3.243	10,9
Public Highway	1.335	4,5
Other health service	240	0,8
Ignored	308	1
Total	**29.768**	**100**

Source: SIM/MS, 2020.

Regarding the suicide method used, it was noticed that the largest preponderance composed of 61% (n = 18,149) was X70 related to intentional self-harm by hanging, strangulation and suffocation and the lowest preponderance was X62 related to autointoxication by and exposure , intentional, to narcotics and psychodysleptics (hallucinogens) not classified elsewhere, as shown in Table 3.

Table 3 - Distribution of mortality records of elderly people due to suicide by the method used in Brazil, 1996 to 2017 (n=29.768):

Method		
X70 - Self-inflicted injury intentionally by hanging, strangulation and suffocation.	18.149	61
X74 - Self-inflicted injury intentionally caused by the firing of another firearm and an unspecified firearm.	3.002	10,1
X68 - Self-poisoning by and intentional exposure to pesticides.	1.507	5,1
X80 - Self-inflicted injury intentionally caused by precipitation from a high place.	1.038	3,5
X84 - Self-inflicted injury intentionally by unspecified means.	1.030	3,5
X72 - Self-inflicted injury intentionally caused by firing a handgun.	917	3,1
X69 - Self-poisoning by and intentional exposure to other unspecified chemicals and harmful substances.	837	2,8
X78 - Self-inflicted injury intentionally caused by a sharp or penetrating object.	694	2,3
X76 - Self-inflicted injury intentionally by smoke, fire and flames.	659	2,2
X71 - Self-inflicted injury intentionally by drowning and submersion.	445	1,5
X79 - Self-inflicted injury intentionally by blunt object.	368	1,2
X64 - Self-poisoning by and intentional exposure to other drugs, medicaments and biological substances and unspecified ones.	334	1,1
X61 - Self-poisoning and intentional exposure to sedative, hypnotic, antiparkinsonian and psychotropic anticonvulsant drugs [antiepileptics] not elsewhere classified.	219	0,7
X73 - Self-inflicted injury intentionally caused by shotgun, carbine, or larger-caliber firearms.	124	0,4
X83 - Self-inflicted injury intentionally by other specified means.	104	0,3
X65 - Voluntary self-poisoning by alcohol.	93	0,3
X82 - Self-inflicted injury intentionally by impact of a motor vehicle.	59	0,2
X81- Self-inflicted injury intentionally due to precipitation or standing in front of a moving object.	48	0,2
X66-Intentional self-poisoning by organic solvents, halogenated hydrocarbons and their vapors.	39	0,1
X67 - Intentional self-poisoning by other gases and vapors.	34	0,1
X60- Self-poisoning by and intentional exposure to painkillers, antipyretics and antirheumatics, non-opioids.	24	0,1
X63 - Self-poisoning by and intentional exposure to other pharmacological substances acting on the autonomic nervous system.	16	0,1
X77 - Self-harm caused intentionally by water vapor, gases or hot objects.	11	0,0
X75 - Intentional self-harm by explosive devices.	9	0,0
X62 - Self-poisoning by and intentional exposure to narcotics and psychodysleptics (hallucinogens) not elsewhere classified.	8	0,0
Total	**29.768**	**100**

Source: SIM/MS, 2020.

In this sense, there was an increase in the frequency of elderly suicide records in the analyzed geographic and historical profile, with the largest preponderances identified in the Southeast (SE), in the state of Rio Grande do Sul (RS), in elderly belonging to the age group from 60 to 69 years old, male, race / color, with schooling from 1 to 3 years old, married, who had a record of self-extermination at home and with the modus operandi of self-inflicted injury by hanging, strangulation and suffocation.

Discussion

Regarding the increase in the frequency of suicide records among the elderly in the analyzed geographical and historical context, it is in agreement with the scientific literature that supports the expansion of records in Brazil.[4] For some researchers, epidemiological patterns show that the suicide mortality rate in the elderly is approximately three times (3x) when compared to other age groups.[21-22,29]

Suicidal behavior is related to multiple factors, such as psychiatric illness (es), mood disorders, mainly depressive disorder and bipolar disorder, alcohol and drug abuse.[21-22] As for other researchers, the process of insertion into society of a person in which they live in the midst of drugs, alcohol, constant fights and where there is no dialogue, becomes more complex. This is due to the fact that the person grows up in a world of problems and concerns that are often not even his, but that end up causing psychological disorders or high stress that can lead to the practice of suicide due to being close to a family member who is going through for difficulties or bringing problems to other family members.[3,22]

When analyzing the frequency of suicide records among the elderly and their greater preponderance in the southeast region (SE), it found support in the scientific literature when it is pointed out that in this Brazilian region, approximately 50% of the records of autocides identified are concentrated in the entire region. Brazil.[26,35,36] Regarding the greater preponderance of records of suicide cases among the elderly recorded in the state of RS, it is also in common agreement with what is defended by the scientific literature, also because this phenomenon is related to the historical phenomenon of self-murder implemented by farmers in the interior of that Brazilian federative unit.[36]

With regard to the greater preponderance of elderly people belonging to the age group from 60 to 69 years old, with the highest suicide records, it was also found that it is supported by the scientific literature, as there is a greater number of people in this age range, being more socially active and, therefore, with better mobility conditions than older elderly people.[31-32] Thus, age is an important factor in the configuration of suicides, as the data show that the high number of suicides among men in the third age is greater due to the more effective means used by them to commit self-extermination.[28-29,32]

The age group between 60 and 69 years is where most of those who have risky behavior are concentrated, and in this sense, the higher frequency of these people, confirm the data of the highest suicide attempt rate.[31-33] I relation to the greater preponderance of elderly men, the highest frequency of suicides was registered, it was also verified compliance with what is described in the scientific literature when it is argued that they have greater success in carrying out the said intent, which demonstrates the expressiveness of this occurrence in Brazil, confirming the worldwide trend that they are three times (3x) more likely than women. [27-28,34]

The higher occurrence of suicides among elderly men can be attributed to the performance of masculinity, showing the behaviors that predispose to self-murder, including competitiveness, impulsivity and greater access to lethal technologies.[27,34] The proportion of deaths by suicide according to sex shows us a higher prevalence in males, which can be analyzed specifically, the end of active working life, death of spouses, diagnosis of some serious illness, loss of

social contacts, deprivation within the context of one's own residence. [8,30]

For other researchers, female people are more likely to attempt self-extermination, however, they tend to develop more strategies to deal with difficult situations, in addition to more easily recognizing risk signs, seeking more professional help and relying on largest social support network when they are in crisis.[25,34] The highest number of suicide attempts is by the female gender, where they use methods with a lower lethality, such as drug intoxication.[26-27]

Thus, they tend to have help in coping with extreme situations, often due to religion, family and end up worrying more about their own health, especially mental and emotional, and seek professional help with less resistance than men.[25-28] Suicide attempts are part of a specific type of behavior, which can be defined as intentional acts of self-harm that do not result in death, encompassing varied attitudes and behaviors, from more serious acts without resulting in death, to self-harm that do not require care in health services, which makes it difficult to carry out studies that address this issue.[23-24,28]

Regarding the elderly who have white race/color register a greater preponderance with the suicide records analyzed, agreement was also identified with what is found in the scientific literature when it is argued that in national studies, the largest population quantity of this society's share.[10] About the greater preponderance of elderly people with reduced education committing the highest frequency of suicides, it was also found agreement with what is proposed in scientific publications, when it is argued that this part of society, usually has low socioeconomic and educational level.[3-4,10]

In this sense, it is made up especially of people from the working class and also, possessing different cultures, because they are unable to fit into today's cultural models, they end up not resisting the burden of having to leave their roots and, because of that, end up committing such an act.[3,10,30] Regarding married elderly people registering the highest frequency in the number of suicides, support was also found in the scientific literature, when it is proposed that this phenomenon is related to the cultural aspects of society, which for long periods remained the wedding pattern.[31-33]

Studies affirm that the marital relationship represents a great importance for the health of people in general, being able to be healthier than the singles, however, it is verified that the marriage can have negative consequences for the health, when one or both spouses present some dissatisfaction, or even when there are difficulties in resolving everyday conflicts.[31-32] In many literature, marriage is cited as a protective factor.[10]

With regard to the greater preponderance identified of self-extermination `records of elderly people verified at home, a correlation was also found with what is proposed in the scientific literature, as the loss of social and family valuation can result in isolation, which can favor and even facilitate the execution of suicide.[10] The most frequent place of occurrence is the home, which has a significant relationship with the elderly, and thus, the choice of residence is probably due to living alone.[8,14,20]

In this way and, because of the caregivers being able to leave for work and daily activities, the development of this phenomenon becomes easier. In the hospital environment, the second highest frequency of deaths was evidenced, and in this sense, this phenomenon may be related to the fact that these elderly people, despite receiving emergency care, may still have an irreversible clinical

picture.[10-11]

Regarding the greater preponderance of records of suicides among the elderly, due to the modus operandi of self-harm caused by hanging, strangulation and suffocation, it is also found in the scientific literature, as this phenomenon can be explained by the easy access to various materials that, properly used, can cause the effect of mechanical suffocation in an improvised way.[26-28] For other researchers, access to different means of committing suicide increases the chances of the person committing self-extermination, especially through pesticides and other poisons. [24,26,30,33]

Deaths resulting from the use of pesticides, which are traded illegally for other purposes, suggest inadequate control and inspection. It is still possible to easily find "chumbinho", a product manufactured with pesticides and sold as "rat poison" in the country.[24,26,33] The three main ones found are hanging, use of firearms and pesticide poisoning, with hanging injuries being responsible for more than 50% of the suicides committed. The stricter regulations for firearms, pesticides and other means of suicide may have contributed to the increase in suicide by hanging.[32,33-34]

Regarding the issue of underreporting of cases of suicide records among the elderly, a correlation was also found with what is proposed by the scientific literature, since the number of real cases of self-homicide is underestimated in many nations, which makes it difficult to obtain of a reliable measure of this type of death.[23-24] Thus, the issue of underreporting of cases can be caused by several factors, such as the incorrect completion of the death certificate in the case of suicide, by clandestine cemeteries and also, due to requests from the family to change the cause of death, which rectifies the idea that suicide is a reality ignored and also hidden by the population.[25-26,30]

For other researchers, even in relation to the underreporting of suicide cases, it is more common to present the nature of the injury instead of the circumstance in question, such as drowning or car accident, or they are classified as deaths from unknown or undetermined cause.[25-28] Regarding with family life, there are issues directly related to suicide, with the family being the first foundation on which the person comes into contact in their socialization process.[3]

The data show that, although the majority of the elderly have left verbal, behavioral or situational clues, requests for help would require a lot of sensitivity from family members and caregivers. Because, most of the time, verbal or behavioral cues are displayed, but relatives and friends tend not to take them into account.[29-31]

Prevention programs and other more effective strategies against suicide can be guided by knowledge of the causes of death. As for the other causes of suicide that are more difficult to control, it is up to the early identification of the elderly person prone to the adoption of measures that limit access to these means. Therefore, it is necessary to operate specialized mental health care services with professionals qualified to correctly identify and assist the most serious cases in the context of suicide attempts and desires.[23]

Conclusion

Through this research, there was an increase in the frequency of suicide in the elderly in the analyzed geographical and historical context. Despite the underreporting of the investigated records and the limitations existing in the present study, it is possible to have a general overview of the phenomenon

analyzed at the national level, being feasible to verify the importance of the theme and its contribution to a better understanding of the phenomenon in question.

As it constitutes a complex and multifactorial reality, there is a need to redouble efforts to reduce this national and international public health problem. The issue of suicide implemented by the elderly, constituting itself as a current theme, in addition to challenging the whole of society, it is necessary to rethink methodologies and strategies for its mitigation, combat and control.

The process of training, qualifying and requalifying health professionals, in its various constitutive levels, also represents an important strategy for the process of preventing suicide among the elderly belonging to all the constituent strata of society. The various mechanisms and strategies proposed to guarantee the safety of the elderly, who are on the verge of the development of self-extermination, must be supported as a way of maintaining these services.

The various factors directly and indirectly related to the issue of self-extermination of the elderly, such as alcoholism, chemical dependence, psychological and psychiatric illnesses, among many others, must be combated, as a way of preventing this noisy social issue. Society needs to guarantee the means for the elderly to actively develop their aging and exercise their citizenship in a broad way.

References

1. Cortez PA, Veiga HMS, Gomide APA, Souza MVR. Suicídio no trabalho: um estudo de revisão da literatura brasileira em psicologia. Revista Psicologia Organizações e Trabalho. 2019;19(1):523-531. doi: http://dx.doi.org/10.17652/rpot/2019.1.14480.

2. Ribeiro JM, Moreira MR. Uma abordagem sobre o suicídio de adolescentes e jovens no Brasil. Ciência saúde coletiva. 2018;23(9):2821-2834. doi: https://doi.org/10.1590/1413-81232018239.17192018.

3. Almeida FM. O suicídio: Contribuições de Émile Durkheim e Karl Marx para a compreensão desse fenômeno na contemporaneidade. Revista Aurora.2018;11(1): 119-138. doi: https://doi.org/10.36311/1982-8004.2018.v11n1.07.p119.

4. Araújo RS. Análise econométrico-espacial do suicídio no Brasil. 2020. 62f. Dissertação (Mestrado em Economia) - Centro de Ciências Sociais Aplicadas, Universidade Federal do Rio Grande do Norte, Natal, jan. 2020.

5. Moreira LCO, Bastos PRHO. Prevalência e fatores associados à ideação suicida na adolescência: revisão de literatura. Psicologia Escolar e Educacional. 2015;19(3):445-453. doi: http://dx.doi.org/10.1590/2175-3539/2015/0193857.

6. Rosa L, Demarco TT. Suicídio na terceira idade e as estratégias de intervenção. Anuário Pesquisa e Extensão Unoesc Videira. 2019;4: e23385.

7. Oliveira ATR. Envelhecimento populacional e políticas públicas: desafios para o Brasil no século XXI. Espaço e Economia. Revista Brasileira de Geografia Econômica. 2016;8(8).1-20. doi: https://doi.org/10.4000/espacoeconomia.2140.

8. Azevedo UM. Perfil da mortalidade por suicídio em idosos no Brasil: uma análise das diferenças entre os gêneros. 2018. 65f. Dissertação (Mestrado em Saúde Coletiva) - Centro de Ciências da Saúde, Universidade Federal do Rio Grande do Norte, Natal, dez. 2018.

9. *Gomes AV, Cardoso PKB, Rocha FCV, Carvalho CMS, Sales MCV*. Perfil

sociodemográfico de idosos vítimas de suicídio em um estado do Nordeste do Brasil. Revista Baiana de Enfermagem. 2018;32(1): e26078. doi: http://dx.doi.org/10.18471/rbe.v32.26078.
10. Carvalho AF. Perfil epidemiológico dos casos de intoxicação por medicamentos registrados Centro de Informação e Assistência Toxicológica do Distrito Federal entre 2011 e 2016. 64 f. Trabalho de Conclusão de Curso (Bacharelado em Farmácia) Universidade de Brasília, Brasília, dez. 2017.
11. Ferraiuoli C, Ferreira S. O outro lado da "melhor idade": Depressão e Suicídio em Idosos. Humanas & Sociais Aplicadas. 2017;18(7):43-53. doi: https://doi.org/10.25242/88767182017821.
12. Carvalho IL do N, Lôbo APA, Aguiar CA de A, Campos AR. A intoxicação por psicofármacos com motivação suicida: uma caracterização em idosos. Revista Brasileira de Geriatria e Gerontologia. 2017:*20*(1):129-137. doi: https://doi.org/10.1590/1981-22562017020.160064.
13. Macedo FL, Bernardo BT. Suicídio no idoso: aspectos psicossociais que contribuem para o aumento do suicídio em pessoas idosas. Revista InterCiência. 2019;1(3):60-69.
14. Barros MSR. Política nacional do idoso: uma análise sobre os mecanismos de controle democrático. 2019. 213 f., il. Dissertação (Mestrado em Política Social) — Universidade de Brasília, Brasília. 2019.
15. Placideli N, et al. Avaliação da atenção integral ao idoso em serviços de atenção primária. Revista de Saúde Pública. 2020;54(6). doi: https://doi.org/10.11606/s1518-8787.2020054001370.
16. Souza JC, et al. Ações de promoção à saúde sobre suicídio no município de Campo Grande/MS: relato de experiência. Pesquisa, sociedade e desenvolvimento. 2020;9(7):1-16. doi: http://dx.doi.org/10.33448/rsd-v9i7.3650.
17. Brasil. Presidência da República. Casa Civil. Subchefia para Assuntos Jurídicos. Lei número 8.842, de 4 de janeiro de 1994. Dispõe sobre a política nacional do idoso, cria o Conselho Nacional do Idoso e dá outras providências. Disponível em: [http://www.planalto.gov.br/ccivil_03/leis/l8842.htm]. Acesso em: 11 jun 2020.
18. Brasil. Presidência da República. Casa Civil. Subchefia para Assuntos Jurídicos. Lei de número 10.741, de 1º de outubro de 2003. Dispõe sobre o Estatuto do Idoso e dá outras providências. Disponível em: [http://www.planalto.gov.br/ccivil_03/leis/2003/l10.741.htm]. Acesso em: 11 de jun 2020.
19. Brasil. Ministério da Saúde. A experiência brasileira em sistemas de informação em saúde. Brasília: Editora do Ministério da Saúde, 2009.148p.
20. Morais RM, Costa AL. Uma avaliação do Sistema de Informações sobre Mortalidade. Saúde Debate. 2017;41.n.(esp):101-17.
21. Breda LC, Guerra P. Suicídio entre crianças e adolescentes, suas principais causas e métodos: Síntese de evidências. UNILUS Ensino e Pesquisa. 2019;16(42):39-49.
22. Rosa NM, Campos APS, Guedes MRJ, Sales CCF, Mathias TAF, Oliveira MLF. Intoxicações associadas às tentativas de suicídio e suicídio em crianças e adolescentes. Revista de Enfermagem da UFPE. 2015;9(2):661-668. doi: 10.5205/r euol.7028-60723-1-SM.0812201423.
23. D'Eça Júnior A, Rodrigues LS, Filho EPM, Costa LLN, Rêgo AS, Costa LC, Batista RFL. Mortalidade por suicídio na população brasileira, 1996-2015: qual é

a tendência predominante? **Caderno Saúde Coletiva.**2019;27(1):20-24. doi: http://dx.doi.org/10.1590/1414-462x201900010211.
24. Mata KCR, Daltro MR, Ponde MP. Perfil epidemiológico de mortalidade por suicídio no Brasil entre 2006 e 2015. Revista Psicologia, Diversidade e Saúde. 2020;9(1):74-87. doi: http://dx.doi.org/10.17267/2317-3394rpds.v9i1.2842.
25. Cicogna JIR, Hillesheim D, Hallal ALLC. Mortalidade por suicídio de adolescentes no Brasil: tendência temporal de crescimento entre 2000 e 2015. Jornal Brasileiro de Psiquiatria. 2019;68(1):1-7. doi: https://doi.org/10.1590/0047-2085000000218.
26. Filho MC, Zerbini T. Epidemiologia do suicídio no Brasil entre os anos de 2000 e 2010. Saúde, Ética & Justiça. 2016;21(2): 45-51. doi: https://doi.org/10.11606/issn.2317-2770.v21i2p45-51.
27. Conceição HN, *et al*. Vulnerabilidade a ideações e práticas suicida em idosos e o impacto familiar e social. Revista Eletrônica Acervo Saúde. 2018;(Sup.12): S1252-S1258. doi:10.25248/REAS220_2018.
28. Santos CB. Mortalidade por suicídio em idosos no estado do Rio Grande do Sul e no município de Porto Alegre, 2001-2015. Trabalho de Conclusão de Curso (Bacharelado em Saúde Coletiva) Universidade Federal do Rio Grande do Sul, Porto Alegre, jan. 2018.
29. Nunes ASR. Avaliação do risco de suicídio em idosos e fatores associados. 2018. 81 fl. (Trabalho de Conclusão de Curso – Monografia), Curso de Bacharelado em Enfermagem, Centro de Educação e Saúde, Universidade Federal de Campina Grande, Cuité – Paraíba – Brasil, jul. 2018.
30. Cristovão KKA, Souza RA. Fatores de risco relacionados ao suicídio em idosos: revisão bibliográfica de artigos nacionais publicados de 2009 até 2018. Trabalho de conclusão de curso (Bacharelado em Enfermagem) Centro Universitário São Lucas, Porto Velho, 2018.
31. Minayo MCS, Figueiredo AEB, Mangas RMN. O comportamento suicida de idosos institucionalizados: histórias de vida. Physis: Revista de Saúde Coletiva. 2017;27(4):981-1002. doi: https://doi.org/10.1590/s0103-73312017000400007.
32. Pinto LW, Assis SG, Pires TO. Mortalidade por suicídio em pessoas com 60 anos ou mais nos municípios brasileiros no período de 1996 a 2007. Ciência & Saúde Coletiva. 2012;17(8):1963-1972. doi: https://doi.org/10.1590/S1413-81232012000800007.
33. Gondim APS, Nogueira RR, Lima JGB, Lima RAC, et al. Tentativas de suicídio por exposição a agentes tóxicos registradas em um Centro de Informação e Assistência Toxicológica em Fortaleza, Ceará, 2013. Epidemiologia e Serviço de Saúde. 2017;26(1):109-119. doi: https://doi.org/10.5123/s1679-49742017000100012.
34. Barros MVM. Análise da mortalidade por suicídio no Brasil 1996 a 2015. 2018. 26f. Trabalho de Conclusão de Curso (Especialização em Residência Multiprofissional em Saúde

Coletiva) - Instituto Aggeu Magalhães, Fundação Oswaldo Cruz, Recife, mai. 2018.
35. Macente LB, Zandonade E. Avaliação da completude do sistema de informação sobre mortalidade por suicídio na região Sudeste, Brasil, no período de 1996 a 2007. Jornal Brasileiro de Psiquiatria. 2010; *59*(3):173-181. doi: https://doi.org/10.1590/S0047-20852010000300002.
36. Lovisi GM, Santos AS, Legay L, Abelha L, Valencia E. Análise epidemiológica do suicídio no Brasil entre 1980 e 2006. Rev Bras Psiquiatr. 2009;31(Supl II):S86-93. doi: http://dx.doi.org/10.1590/S1516-44462009000600007.

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