

ORIGINAL ARTICLE

Trends in suicide attempts at an emergency department

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Objective: To characterize the profile of suicide attempts treated at an emergency department in the municipality of Arapiraca, state of Alagoas, Brazil, from 2009 to 2012.

Methods: We analyzed all emergency department records containing a diagnosis of suicide attempt. Data were evaluated using Student's *t* test and Pearson's chi-square test. Significance was accepted at $p < 0.05$.

Results: We identified 2,142 cases. Suicide attempts were more frequent among women and young adults, but deaths were more frequent among men. Suicide attempts were most frequent among patients aged 10 to 39 years (81.1%). Drug intoxication (65.0%) and non-drug poisoning (16.2%) were significantly more prevalent than other methods of suicide. The month of April (10.6%) accounted for the greatest number of cases, and July had the smallest number (5.5%). Suicide attempts were most prevalent in spring (28.3%), on Sundays (18.4%) and Saturdays (16.8%), and from 12:00 p.m. to 5:59 p.m.

Conclusion: Suicide prevention measures should focus on young women. Further research into the care provided to suicide attempters and better monitoring of the sale and use of medicines and poisons could be useful.

Keywords: Suicide attempt; poisoning; emergency

Introduction

Mental health emergencies require immediate care. Such episodes are associated with risk of death, including suicide or violent behavior. Interventions in care to reduce complications during these events are necessary.¹

The number of patients presenting to emergency departments is increasing as a result of the growing incidence of self-inflicted violence, altered mental status, and epidemic alcohol dependence and other substance-related disorders.¹ The presence of a mental disorder is also one of the most important risk factors for suicide; in general, 90 to 98% of people who commit suicide have a mental disorder.^{2,3}

Although fairly reliable national records of suicide deaths are available in Brazil, there are no systematic records of suicide attempts. This lack of information makes it difficult to understand and characterize the situations that lead to suicide attempts, as well as to plan interventions for proper prevention and care after a suicide attempt.² It is estimated that the rate of suicide attempts may be 10 to 40 times higher than that of suicide deaths.^{4,5}

Although Brazil has a relatively low rate of completed suicide among emerging countries, the problem is

worsening,⁶ and has been identified as a public health crisis.⁷ Between 1998 and 2008, Brazil reported a 33.5% increase in the number of suicides,⁸ and now has the eighth highest number of suicide attempts worldwide.⁹

From an economic perspective, suicide and suicide attempts represent an enormous cost to society, both by consuming public resources that could be allocated elsewhere and by causing significant loss of human capital.⁶ Understanding suicide attempts can contribute to the planning of care directed to this specific population. Within this context, this study sought to characterize suicide attempts treated at a municipal emergency department in the state of Alagoas, Northeast Brazil, between 2009 and 2012.

Materials and methods

This quantitative, descriptive, retrospective, documentary study was conducted at the Dr. Daniel Houly Urgent Care and Emergency Unit, located in the municipality of Arapiraca, state of Alagoas, Brazil. This facility is a referral center for trauma care in the region. Arapiraca is the second-largest municipality in the state of Alagoas, with a population of 214,000, and is located 123 km from the state capital of Maceió.

Health professionals working at the study hospital considered the following as suicide attempts: poisoning, hanging, drowning, burning, self-inflicted melee weapon and firearm injuries, and jumping from height. This diagnosis was made exclusively by the medical staff.

We analyzed all emergency department records with a diagnosis of suicide attempt from January 2009 to December 2012. Records containing erased data, illegible handwriting, or no diagnosis of suicide attempt were excluded. We used a standard form, similar to the regular emergency department record used at the hospital, to acquire data. All healthcare professionals involved in the treatment of patients admitted for suicide attempt recorded patient data into this form.

The Ethics Committee of Universidade Federal de Alagoas approved this study. Data analysis was performed in the Epi-Info 7 software environment (Atlanta, Georgia, USA). Statistical analyses included Student's *t* test and Pearson's chi-square test. Significance was accepted at $p < 0.05$.

Results

We identified a total of 2,142 suicide attempts (520 in 2009, 576 in 2010, 550 in 2011, and 496 in 2012). More women attempted suicide than men. The frequency of suicide attempts was significantly different between the years 2009 and 2011 ($p < 0.05$) and between 2010 and 2011 ($p < 0.05$) (Table 1).

The average age of cases differed significantly across

the years analyzed ($t_3 = 62.2$; $p < 0.05$). Significant differences were also found when comparing female ($t_3 = 104.7$, $p < 0.05$) and male patients ($t_3 = 32.7$; $p < 0.05$). Women had a lower average age than men (Table 1). Suicide attempts were most frequent among patients aged 10 to 39 years (Table 1).

Only one half of patients treated at the hospital were brought by an ambulance. Alcoholic beverage intake was most frequent in 2012 (25.2%). Notably, alcoholic beverage use and mental disorders were underreported among patients treated for suicide attempt. Patients were discharged from the hospital based on a decision from the medical staff and were referred to primary care services, such as psychosocial care centers and outpatient psychiatric clinics. A higher frequency of attempted suicide among pregnant women was observed in 2009 and 2010 (Table 1). Mortality was more frequent in males, except in 2012. The highest number of deaths occurred in 2010 (Table 1).

Poisoning was the main method used to attempt suicide. Medicines ($p < 0.05$) were the most frequent agent, followed by actual poisons ($p < 0.05$), such as chemicals or rat poison. Among more aggressive methods, self-inflicted weapon injury was most frequent, followed by hanging (Table 2).

Table 1 Demographic profile of patients presenting to the Dr. Daniel Houly Urgent Care and Emergency Unit for suicide attempt, Arapiraca, state of Alagoas, Brazil, 2009-2012

	2009	2010	2011	2012	<i>t</i>
Age, mean (SD)					
Total	26.83 (11.2)	27.8 (11.6)	26.98 (12.5)	28.76 (13.2)	$p < 0.05$
Female	25.78 (10.86)	26.5 (11.1)	25.76 (11.37)	26.74 (11.2)	$p < 0.05$
Male	28.8 (11.58)	30.3 (12.3)	30.21 (14.67)	33.26 (16.1)	$p < 0.05$
Age range					
10-19 years	150 (28.8)	155 (27.0)	193 (35.1)	144 (29.0)	
20-29 years	201 (38.6)	210 (36.4)	176 (32.0)	165 (33.3)	
30-39 years	102 (19.7)	111 (19.3)	92 (16.7)	93 (18.8)	
40-49 years	43 (8.3)	66 (11.4)	54 (9.8)	63 (12.7)	
50-59 years	12 (2.3)	20 (3.5)	16 (2.9)	14 (2.8)	
60-69 years	10 (1.9)	12 (2.1)	13 (2.4)	9 (1.8)	
70-79 years	1 (0.2)	0 (0)	4 (0.7)	5 (1.0)	
80-89 years	0 (0)	0 (0)	0 (0)	3 (0.6)	
Not recorded	1 (0.2)	2 (0.3)	2 (0.4)	0 (0)	
Sex distribution					
Female	338 (65.0)	379 (65.8)	400 (72.7)	342 (69.0)	
Male	182 (35.0)	197 (34.2)	150 (27.3)	154 (31.0)	
Other information					
Brought in by ambulance	268 (51.5)	313 (54.3)	252 (45.8)	223 (45.0)	
Alcohol intake	47 (9.0)	60 (10.4)	32 (5.8)	125 (25.2)	
Mental disorder	45 (8.6)	53 (9.2)	33 (6.0)	26 (5.2)	
Pregnant	16 (3.0)	19 (3.3)	5 (0.9)	3 (0.6)	
Discharged at physician's discretion	420 (80.8)	412 (71.5)	392 (71.3)	314 (63.3)	
Discharged to outpatient psychosocial care center	90 (17.3)	70 (12.2)	27 (4.9)	60 (12.1)	
Mortality					
Overall	11 (2.1)	21 (3.6)	13 (2.4)	7 (1.4)	
Males	8 (72.7)	14 (66.7)	8 (61.5)	3 (42.9)	
Females	3 (27.3)	7 (33.3)	5 (38.5)	4 (57.1)	
Total	520 (100.0)	576 (100.0)	550 (100.0)	496 (100.0)	

Data presented as n (%), unless otherwise specified.

Table 2 Frequency of different methods of suicide among cases admitted to the Dr. Daniel Houly Urgent Care and Emergency Unit, Arapiraca, state of Alagoas, Brazil, 2009-2012

Method	2009	2010	2011	2012
Hanging	2 (0.4)	7 (1.2)	2 (0.4)	7 (1.4)
Drowning	0 (0)	1 (0.2)	2 (0.4)	0 (0)
Exogenous poisoning by medicine	332 (63.8)	350 (60.8)	367 (66.7)	343 (69.2)
Exogenous poisoning by poison	134 (25.8)	153 (26.5)	117 (21.2)	88 (17.7)
Exogenous poisoning by rat poison	35 (6.7)	31 (5.4)	45 (8.2)	44 (8.9)
Melee weapon	14 (2.7)	24 (4.2)	14 (2.5)	7 (1.4)
Firearm	1 (0.2)	4 (0.7)	1 (0.2)	3 (0.6)
Fall from height	2 (0.4)	6 (1.0)	1 (0.2)	2 (0.4)
Burns	0 (0)	0 (0)	1 (0.2)	2 (0.4)
Total	520 (100.0)	576 (100.0)	550 (100.0)	496 (100.0)

Data presented as n (%).

Table 3 Frequency of suicide attempts presenting to the Dr. Daniel Houly Urgent Care and Emergency Unit, stratified by district of origin, Arapiraca, state of Alagoas, Brazil, 2009-2012

	2009	2010	2011	2012
District				
Brasília	16 (6.6)	13 (4.7)	9 (3.3)	9 (3.9)
Cacimbas	11 (4.5)	16 (5.8)	18 (6.5)	1 (0.4)
Centro	36 (14.8)	37 (13.5)	18 (6.5)	40 (17.2)
Planalto	15 (6.2)	13 (4.7)	11 (4.0)	10 (4.3)
Primavera	8 (3.3)	24 (8.8)	29 (10.5)	17 (7.3)
Rural	38 (15.6)	143 (52.2)	121 (43.8)	101 (43.3)
Other	119 (49.0)	28 (10.2)	70 (25.4)	55 (23.6)
Total	243 (100.0)	274 (100.0)	276 (100.0)	233 (100.0)

Data presented as n (%).

Table 4 Frequency of suicide attempts presenting to the Dr. Daniel Houly Urgent Care and Emergency Unit, stratified by municipality of origin, Arapiraca, state of Alagoas, Brazil, 2009-2012

	2009	2010	2011	2012
Municipality				
Arapiraca	243 (46.8)	274 (47.6)	276 (50.2)	233 (47.0)
Craibas	19 (3.6)	20 (3.5)	18 (3.3)	23 (4.6)
Feira Grande	14 (2.7)	22 (3.8)	23 (4.2)	18 (3.6)
Girau do Ponciano	35 (6.7)	2 (0.3)	37 (6.7)	23 (4.6)
Lagoa da Canoa	20 (3.8)	24 (4.2)	21 (3.8)	17 (3.4)
Limoeiro de Anadia	14 (2.7)	18 (3.1)	16 (2.9)	26 (5.2)
Taquarana	16 (3.1)	18 (3.1)	33 (6.0)	24 (5.0)
Other	157 (30.2)	194 (33.7)	126 (22.9)	132 (26.6)
Not recorded	2 (0.4)	4 (0.7)	0 (0)	0 (0)
Total	520 (100.0)	576 (100.0)	550 (100.0)	496 (100.0)

Data presented as n (%).

On analysis of which districts of Arapiraca had the highest prevalence of suicide attempts, we found that the rural zone and city center accounted for the majority of cases (Table 3).

The municipality of Arapiraca has one of the highest rates of suicide among people aged > 10 years in the state of Alagoas (15.6/10,000 population in 2011). Nevertheless, we found a substantial number of cases, and even higher rates, in neighboring towns: Taquarana (21.3/10,000 in 2011), Lagoa da Canoa (16.1/10,000 in 2010), Feira Grande (13.3/10,000 in 2011), Craibas (12.6/10,000 in 2012), Girau do Ponciano (12.6/10,000 in 2011), and Limoeiro de Anadia (11.8/10,000 in 2012) (Table 4).

The months with the highest frequency of suicide attempts were January through April, followed by a

decline and another rise from September to December. April accounted for the highest number of cases, and July had the lowest. Spring and autumn were the seasons of the year with the highest frequencies of suicide attempts. Saturday, Sunday, and Monday were the weekdays with the highest number of suicide attempts. Most attempts occurred were from 6:00 p.m. to 11:59 p.m. and from 12:00 p.m. to 5:59 p.m. ($p < 0.05$) (Table 5).

Discussion

From 2009 to 2012, there were a considerable number of cases of suicide attempts. This number remained similar over the years, suggesting that no preventive measures

Table 5 Frequency of suicide attempts presenting to the Dr. Daniel Houly Urgent Care and Emergency Unit, stratified by month, season, and time of day, Arapiraca, state of Alagoas, Brazil, 2009-2012

	2009	2010	2011	2012	Total
Month					
January	38 (7.3)	45 (7.8)	97 (17.6)	47 (9.5)	227
February	49 (9.4)	38 (6.6)	3 (0.5)	49 (9.9)	139
March	51 (9.8)	32 (5.6)	40 (7.3)	75 (15.1)	198
April	54 (10.4)	51 (8.8)	41 (7.4)	82 (16.5)	228
May	43 (8.3)	42 (7.3)	32 (5.8)	40 (8.1)	157
June	40 (7.7)	36 (6.2)	37 (6.7)	17 (3.4)	130
July	33 (6.4)	26 (4.5)	43 (7.8)	15 (3.0)	117
August	28 (5.4)	51 (8.8)	41 (7.5)	10 (2.0)	130
September	46 (8.8)	52 (9.0)	36 (6.5)	60 (12.1)	194
October	47 (9.0)	73 (12.7)	62 (11.3)	34 (6.8)	216
November	41 (7.9)	70 (12.2)	70 (12.8)	45 (9.1)	226
December	50 (9.6)	60 (10.4)	48 (8.8)	22 (4.4)	180
Season					
Autumn	149 (28.6)	133 (23.1)	101 (18.4)	174 (35.1)	557
Winter	109 (21.0)	129 (22.4)	120 (21.8)	70 (14.1)	428
Spring	133 (25.6)	193 (33.5)	171 (31.1)	109 (22.0)	606
Summer	129 (24.8)	121 (21.0)	158 (28.7)	143 (28.8)	551
Day of the week					
Sunday	97 (18.7)	94 (16.3)	120 (21.8)	84 (16.9)	395
Monday	81 (15.6)	82 (14.2)	94 (17.1)	75 (15.1)	332
Tuesday	63 (12.1)	79 (13.7)	60 (10.9)	76 (15.3)	278
Wednesday	63 (12.1)	83 (14.5)	67 (12.2)	67 (13.5)	280
Thursday	79 (15.2)	72 (12.5)	51 (9.3)	56 (11.3)	258
Friday	50 (9.6)	72 (12.5)	64 (11.6)	52 (10.5)	238
Saturday	87 (16.7)	94 (16.3)	94 (17.1)	86 (17.4)	361
Time of day					
12:00-5:59 a.m.	40 (7.7)	56 (9.7)	41 (7.4)	55 (11.1)	192
6:00-11:59 a.m.	95 (18.3)	103 (17.9)	99 (18.0)	103 (20.8)	400
12:00-5:59 p.m.	186 (35.8)	205 (35.6)	178 (32.4)	124 (25.0)	693
6:00-11:59 p.m.	190 (36.5)	210 (36.4)	227 (41.3)	206 (41.5)	833
Not recorded	9 (1.7)	2 (0.4)	5 (0.9)	8 (1.6)	24
Total	520 (100.0)	576 (100.0)	550 (100.0)	496 (100.0)	2,142

Data presented as n (%).

were implemented by the health services in the municipality. A similar study conducted in a mental health unit at Hospital Universitario del Valle, Cali, Colombia, from 1994 to 2010, identified 2,012 cases of attempted suicide.¹⁰ Another study conducted in the microregion of Barbacena, Brazil, which comprises 15 municipalities covering a population of approximately 230,000, identified 1,060 suicide attempts from 2003 to 2009.¹¹ Arapiraca has a population of 214,000, which is less than that of the region analyzed in the study mentioned above. On comparison, the number of cases identified in our study – which represents a greater number of suicide attempts over a shorter period of time – is alarming and warrants attention.

Estimates show that, for each suicide, there are at least 10 attempts serious enough to require medical attention. Additionally, for each known suicide attempt, four unknown attempts are made.⁶ Realistically, the consequences of the number of suicide attempts in the municipality where our study was conducted are even greater. Thus, we sought to contribute to the identification of critical points for intervention in mental health care and urgent and emergency medical care. Identification of sex and age differences in suicide epidemiology is essential to care and prevention strategies. Other variables amenable

to intervention include alcoholic beverage intake, pregnancy, and timing (season, month, day, and hour).

The aforementioned Colombian study found that most patients who attempted suicide were women.¹⁰ Other studies have reported more cases of suicide attempts among women, corroborating our findings.¹¹⁻¹⁵ Women attempt suicide more often than men, but men use more lethal methods.^{3,13} In some studies, a lower occurrence of suicide among women has been attributed to a low prevalence of alcohol dependence, greater religiosity, social involvement, and influence of the roles of mother, wife, and daughter. In addition, women are better at recognizing early signs of risk for depression, suicide, and mental illness; are more likely to seek help in times of crisis; and participate more in social support networks.¹⁶

Studies have reported that the highest frequency of suicide attempts occurs among those aged 20 to 39 years,¹² 30 to 40, and 20 to 25.¹³ One study in Korea found that the average age of patients attempting suicide was 42.32 years.¹⁴ In our study, suicide attempts occurred more frequently in younger people.

The fact that many patients in this sample were not brought to the hospital by ambulance, but rather were transported by relatives or neighbors, suggests that

individuals did not understand the severity of the situation. This finding also suggests that access to prehospital services may be limited in the municipality where the study was conducted.

Our study identified a small number of cases involving the use of alcohol. Consumption of alcohol in instances of suicide has been mentioned by some authors.^{17,18} In a deeper understanding of this association, measures that can help prevent suicide attempts involving alcohol abuse should be enhanced.

Diagnosing the presence of mental disorders among patients treated for suicide attempts must also be encouraged, as these disorders are a risk factor for suicide. Wider access to the identification and treatment of serious mental disorders is crucial to reducing suicidal behaviors. The current unsatisfactory situation of mental health care in Brazil may be contributing to the worsening of this problem.¹⁹ Not all cases of suicide can be prevented, but the ability to address suicide makes a difference. Thousands of lives could be saved every year if all individuals who attempted suicide were treated properly; a decrease in suicidal ideation and suicide attempts must surely lead to decreased mortality.^{20,21} Although patients in our sample were discharged from the hospital with referrals to a mental health service available in the municipality, there is no guarantee that these individuals will obtain the care they need. Lack of access to timely care can worsen mental illness and, consequently, increase the risk of additional suicide attempts.

Suicide attempts during pregnancy are not very common, and pregnancy should be considered a protective factor. Our study identified a higher frequency of cases of attempted suicide among pregnant women from 2009 to 2010. Studies on pregnant women have begun to identify the risk of suicide among this population.^{22,23} During pregnancy, women become vulnerable to the adverse consequences of depression, which are often exacerbated by the hormonal changes experienced during this period.²⁴ The prenatal period is an excellent opportunity to combine the efforts of different professionals to improve the psychosocial condition of pregnant women.²³

The largest number of deaths occurred among males, probably because men were more likely to use violent methods when attempting suicide.

Our study identified an increased frequency of using medicines as a method of suicide. Studies corroborate that this is one of the most commonly used methods in suicide attempts.^{14,25-28}

A meta-analysis identified 62 methods of suicide in Japan. Poisoning was the most frequent.²⁹ This method was also identified as the most common in southern Brazil.¹³ In rural areas of China and Southeast Asia, ingestion of pesticides has been linked to more than 60% of suicides.³⁰ In our study, most cases of suicide attempts occurred residents of rural areas in Arapiraca.

Another poison used was rodenticide. Aldicarb is a rodenticide sold illegally across Brazil, and was identified in one study as the most common method of suicide attempts by rat poison.^{28,31}

Restricting the use of toxic products, combined with more rigorous actions by regulatory agencies and companies at

points of sale, should be the main strategies to minimize poisoning in Brazil.^{26,27}

A study in Rio Grande do Sul, Brazil, identified a precarious balance between identifying people at risk of suicide and resistance from facility administrators to accommodate this demand in the emergency department.³² This problem is not exclusive to Rio Grande do Sul; in fact, it represents a challenge to suicide prevention in Brazil's health system.

Improving people's ability to value life and paying greater attention to mental disorders and psychological and psychiatric problems could alleviate the problem in some regions with higher suicide rates.⁶

It is important that health policy planners consider universal access to health services. It is essential to properly train health professionals, emergency units, mental health services, and primary health care, which should be organized and follow protocols within health networks.¹¹

Strengthening of health networks will allow early identification of crisis situations before they turn into suicide attempts.³¹

In this study, young people had a higher risk of suicide attempts and poisoning was the most frequently used method, particularly through drug intoxication. This raises concerns about ease of access to medications; security measures should be implemented in an attempt to reverse this high number of cases. Special attention must also be given to the use of actual poison as a suicide method, given that most suicide attempts of this type occurred in residents of rural areas. This, in turn, raises concern about ease of access to pesticides, rodenticides, and other chemicals.

Attendance rates for suicide attempts have increased in the hospital where the study was conducted. However, a substantial number of cases came from neighboring towns. A study conducted in Seville, Spain, identified that most suicides occurred in rural areas.¹⁷ These results were similar to ours. However, another study conducted in Southern Brazil identified that suicide attempts were more common among people who lived in an urban area.¹³

Studies have been able to stratify the frequency of suicide attempts by season, month, day of the week, and time of day. Suicidal behavior can be influenced by sunlight and follows a seasonal pattern. However, the seasons also bring changes in various meteorological factors, and seasonal rhythms in social behavior can also contribute to fluctuations in suicide rates.³³

A study in Bahia, Brazil, found a higher frequency of suicide attempts in the autumn and spring.¹² These results are important and corroborate our findings. Another study identified a greater frequency of suicide attempts in autumn.¹⁵

A study conducted at Hospital Universitario del Valle, Colombia, found that most suicide attempts occurred in March, while the fewest occurred in June.¹⁰ In our study, April and July accounted for the highest and lowest prevalence of cases, respectively.

One study showed that Saturday and Tuesday were the days of the week with the most cases of suicide

attempts.¹² Another study identified Sunday as having the highest number of cases.^{10,15} In our study, most suicide attempts occurred on Saturday, Sunday, and Monday. This could be due to several factors, including alcohol.

Studies have shown that suicide attempts occur more frequently in the morning and at night,¹² while others occur during the afternoon.¹⁵ In our study, we found that suicide attempts were most frequent during the afternoon and at night. We do not know which factors might account for this.

The profile of cases treated at the studied facility revealed that women and young adults were more likely to attempt suicide, but deaths were more frequent among men. The most commonly used method was drug poisoning. Arapiraca accounted for the largest number of cases, as this is the municipality in which the hospital is located. Comparing the number of suicide attempts with the population of the municipalities represented in the sample identified that Taquarana had the highest suicide rate per number of inhabitants, but this finding cannot be taken into account, as additional cases of suicide attempts in these cities may have been treated at other hospitals or medical clinics. In our sample, suicide attempts were most frequent in April; in the spring and autumn; on Saturday, Sunday, and Monday; and during the afternoon and at night.

Earlier diagnosis of mental disorders is useful in preventing suicide attempts. To accomplish this, there needs to be an organized mental health network that encourages monitoring and treatment of patients who are at risk for suicide attempts. Restrictive measures regarding the use of toxic products and medicines must be implemented and emphasized. Guidance on the careful measuring, handling, and packaging of these products and the rational use of medicines should be provided by health services in cities with high rates of attempted suicide by poisoning. We know that we cannot prevent all cases of suicide attempts, but restricting access to medicines and treating patients with mental disorders are efficient ways to reduce their frequency.

The foremost limitation of this study concerns our inability to control for variables among the patients studied at the Emergency Unit. For example, suicide attempts were more frequent among patients from 10 to 39 years old, but this is also precisely the age group more likely to be found seeking emergency-room care. Women (vs. men) and transportation to the emergency room by neighbors (vs. by ambulance) also represented the majority of cases both in our sample of suicide attempts and in the general population seeking care at the emergency department. Another limitation concerns flaws in the description of the conditions of psychiatric patients and failure to record some information from the hospital chart. This hindered identification of other variables involved in suicide attempts. The relationship of suicide attempts with intake of alcoholic beverages as identified in medical records and failure to record variables of interest prevented us from conducting an analysis of association. Finally, we cannot infer that the number of suicide attempts treated at our facility represents all suicide

attempts that took place in the municipality of Arapiraca, as some patients may have been taken to smaller hospitals or may not have needed medical attention at a hospital at all.

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Disclosure

The authors report no conflicts of interest.

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