

SUICIDE ATTEMPTS IN WOMEN: DATA FROM A TOXICOLOGICAL ASSISTANCE CENTER IN PARANA

TENTATIVA DE SUICÍDIO DE MULHERES: DADOS DE UM CENTRO DE ASSISTÊNCIA TOXICOLÓGICA DO PARANÁ

INTENTO DE SUICIDIO DE MUJERES: DATOS DE UN CENTRO DE ATENCIÓN TOXICOLÓGICA DE PARANÁ

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ABSTRACT

The present work is a descriptive and retrospective study aimed at determining the profile of women who had attempted suicide and were treated at an information and toxicological assistance center in Parana, Brazil, in 2008. Records of toxicological occurrences were used to compile the following variables: month of occurrence, age, patient's occupation and origin, location in which the suicide attempt (SA) occurred, type of agent used, associated pathology and type of treatment performed before the SA occurred; history of prior SAs, and the clinical evolution of the case. Three hundred eight (308) SA records were found. Most occurred in the age group of 20-59 years (70.38%). The most common agent used to attempt suicide was medication, found in 250 cases (81.70%). Depression was found to be the most common mental disorder, in 36 cases (25.35%), and most cases, 171 women (67.06%), showed no history of prior attempts. Most cases, 289 (96.33%), evolved into a cure. It is important to highlight the importance of studying specific groups as regards the occurrence of SA and women's vulnerability to this issue.

Keywords: Attempted Suicide; Women; Vulnerability.

RESUMO

Trata-se de um estudo de caráter descritivo e retrospectivo que objetivou estabelecer o perfil de mulheres que tentaram suicídio e foram atendidas em um centro de informação e assistência toxicológica do Paraná, no ano de 2008. Foram utilizadas as fichas de ocorrência toxicológica para a compilação das variáveis: mês da ocorrência, idade, ocupação e procedência da paciente e local da ocorrência da tentativa de suicídio (TS); tipo de agente utilizado; doença associada e tipo de tratamento realizado até o momento da ocorrência; histórico de tentativas anteriores e evolução clínica do caso. Foram encontrados 308 registros de TS. A maioria ocorreu na faixa etária de 20 a 59 anos (70,38%). O meio mais utilizado para TS foi o medicamento, com 250 casos (81,70%). A depressão foi o transtorno mental mais encontrado, com 36 casos (25,35%), e a maioria (171 mulheres ou 67,06%) não apresentou histórico de tentativas anteriores. A maioria dos casos evoluiu para a cura 289 (96,33%). Ressalta-se a importância de estudar grupos específicos no tocante à ocorrência da TS e à vulnerabilidade feminina a ela relacionada.

Palavras-chave: Tentativa de Suicídio; Mulheres; Vulnerabilidade.

RESUMEN

Se trata de un estudio de carácter descriptivo y retrospectivo que buscó establecer el perfil de mujeres que intentaron suicidarse y fueron atendidas en un centro de información y atención toxicológica de Paraná, en 2008. Se utilizaron los registros de incidencia toxicológica para compilación de las siguientes variables: mes del hecho; edad, ocupación y procedencia de la paciente y lugar del intento de suicidio (IS); tipo de agente utilizado; patología asociada y tipo de tratamiento realizado hasta el momento del hecho; historial de intentos anteriores y evolución clínica del caso. Se encontraron 308 registros de IS. La mayoría ocurrió entre los 20 y 59 años (70,38%). El agente mas utilizado como medio para el IS fue el medicamento con 250 casos (81,70%). La depresión fue el trastorno mental mas encontrado, 36 (25,35%), y la mayoría (171 mujeres ó 67,06%), no presentó historial de intentos anteriores. La mayoría de los casos evolucionó para la cura 289 (96,33%). Se recalca la importancia de que se estudien los grupos específicos en cuanto a la incidencia de IS y a la vulnerabilidad femenina ante esta problemática.

Palabras clave: Intento de Suicidio; Mujeres; Vulnerabilidad.

INTRODUCTION

From a historical perspective, the act of taking one's own life has always been entangled in taboo and prejudice, arousing an unpleasant feeling in people. Although the theme has been studied worldwide, no such investigations have been reported concerning the Brazilian reality.¹

It is estimated that the number of suicide attempts (SA) surpasses the number of suicides by no less than 10 fold.² According to data from the World Health Organization (WHO), from 15% to 25% of the people who attempt to commit suicide will try again in the following year, and 10% of the people who attempt to commit suicide are able to effectively kill themselves within the following 10 years.³

Suicide is among the 10 main causes of death for all people of over five years of age and can be found among the three main causes of death of people from both genders between 15 and 35 years of age.⁴ In women, this behavior follows a world trend: although with suicide rates of less than those found for men, women present high rates of SA, at three times more often than those found for men.^{5,6}

The division of gender roles makes it possible and even leads to the constitution of suicides seen as male suicides and others seen as characteristically female suicides. In other words, they institute forms and manners of committing suicide through means considered to be male and means considered to be female ways of committing suicide. In general, men choose more violent and lethal methods, such as hanging themselves or using a firearm, while women opt for less violent methods like intoxication.^{7,8}

Studies in a number of countries define that those who attempt suicide are, in the majority of cases, young women of less than 30 years of age, from a low social class, who predominantly use the method of a drug overdose.^{7,9,10}

Intoxications are defined as a group of adverse effects provoked by the interaction of the biological system with chemical agents found in the environment – plants, poisonous animals, agrottoxins, drugs, industrial cleaning products, home cleaning products – with clinical consequences that are revealed by a group of toxic or biochemical signs and symptoms.¹¹

The increase in suicidal behavior has produced a demand for healthcare and nursing services, which, as the caretaker of an ill human being, needs to understand the suicide event as a call for help, devoid of prejudice on the issue. Only by recognizing the wide range of factors involved in one's search for death can the nursing profession be able to provide humane healthcare to patients, not only taking care of their biological needs, but also collaborating to minimize the psychological suffering inherent within these cases.^{12,13}

The carrying out of actions to promote equality and fairness of gender, race, ethnicity, and sexual orientation help to

stimulate the dissemination of non-discriminatory and non-stereotypical images of women. Nevertheless, to confront this problem, aimed at reducing vulnerabilities in a fair manner, it is essential to consider that some groups of women can be more heavily affected by a health risk.¹⁴

In this light, the present work aims to establish the profile of women who have attempted suicide and who were attended to at the information and toxicological assistance center in Paraná, Brazil, in an attempt to highlight the vulnerability of women to this issue and contribute to improving the quality of the nursing services provided to this specific group.

MATERIAL AND METHODS

The present work was a descriptive, cross-sectional, and quantitative study carried out in the Intoxication Control Center of the Maringá Regional University Hospital (CCI/ HUM) in Paraná, Brazil.

The studied population was found in the medical records at CCI/HUM from 2008 (year immediately preceding the beginning of this research project) and consisted of all of the women listed as intoxicated due to an attempted suicide by ingestion of one or more of the 13 toxic agents monitored in Brazil.¹⁵

As a data source, this study used the CCI/HUM Notification and Patient Medical Record File, called the Toxicological Occurrence File (TO), which contains information concerning patient identification, toxicological occurrence, treatment performed, clinical evolution, and the outcome of the notified case.

First, the TO files referent to the cases of attempted suicide in women were separated, and the data for the characterization of the studied population and of the toxicological occurrence were collected. These data were compiled in a previously drafted form and the following variables were analyzed: month of occurrence, age, patient's occupation and origin, location in which the suicide attempt (SA) had occurred, type of agent used, health risk associated with SA and type of treatment performed before the SA occurred, history of prior SAs, and the clinical evolution of the case. No data was discarded.

The processing of data was performed using the Excel[®] 2003 software; the results were exhibited in tables and graphs and analyzed descriptively.

To carry out the research, authorization was requested from the Board of Directors of the Maringá Regional University Hospital as well as from the Intoxication Control Center. The project was submitted for approval by the Committee for Ethics and Research on Human Beings from the State University of Maringá (COPEP), which approved the proposal under protocol number 127/2010.

RESULTS

Of the total 444 records of attempted suicide in 2008, 308 (69.36%) were committed by women, with 34.7% (107) occurring in the summer months and 28.6% (88) in the winter months.

As regards the age of the women, 217 (70.4%) of the cases occurred in the age range considered economically productive, from 20 to 59 years of age. Another significant number of cases occurred in adolescents from 12 to 19 years of age (85), representing 27.6% of the total number of cases, including 23 pre-teens, whose ages ranged from 12 to 14 years (Figure 1).

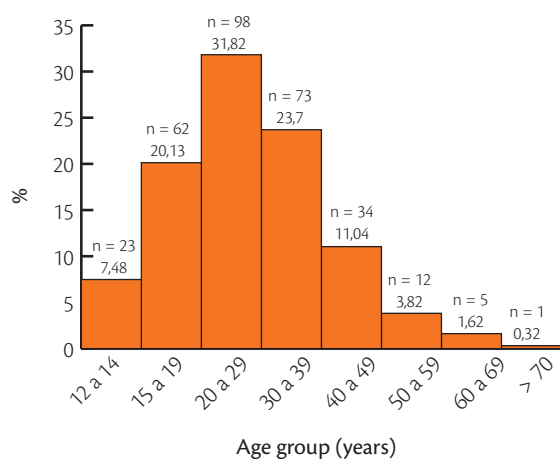


Figure 1 - Distribution of the cases of SA in women according to age group: Intoxication Control Center, Maringá Regional University Hospital, Maringá, PR, Brazil, 2008 (n=308).

The analysis of the patient's occupation showed that 145 (61.4%) women had no formal occupation (students, housewives, and retired), while the others were legally employed in formal jobs.

The most common location where the SA occurred was at the women's home, totaling 267 cases (87.5%). The most commonly used toxic agents were drugs, found in 250 cases (81.7%), which were also commonly associated with other agent groups. The accumulated rate of cases of suicide by ingestion of a toxic agent showed that 94.1% used drugs, agrottoxins, or rat poison as a means through which to commit suicide (Table 1).

The type of medicine used for SA was recorded in all of the files. A predominance of psychoactive drugs could be found, which were detected in 186 cases (74.4%). In 101 cases (54.3%) of SA by ingestion of psychoactive drugs, these drugs were intended for the women's personal and continued use in the treatment of a chronic health condition.

Mental disorders (45.2%) were presented by 119 women. Of these, 77 (64.7%) had a medical diagnosis of depression, and 42 presented another mental disorder, such as schizophrenia and drug abuse; 79 (68.7%) of the women reported undergoing psychiatric treatment on the day of the SA; while 13 (11.3%) were undergoing both psychiatric and psychological treatment.

Table 1 - Distribution of the cases of SA in women according to the toxic agent used: Intoxication Control Center, Maringá Regional University Hospital, Maringá, PR, Brazil, 2008 (n=306)*

Type of agent	N	%	% Accumulated
Drugs**	250	81,70	81,70
Agrottoxin	19	6,21	87,91
Rat poison	19	6,21	94,12
Household cleaning products	12	3,92	98,04
Veterinarian products	2	0,65	98,69
Industrial chemical products	2	0,65	99,34
Cosmetics	1	0,33	99,67
Plants	1	0,33	100
Total	306	100	

* Two cases were discarded.

** Includes 19 cases associated with drug abuse, three with household cleaning products, one with plants, one with agrottoxins, and one with rat poison.

Medical record of the recurrence of SA could be identified in 84 (32.5%) of the women, of which the maximum number of SA committed by a single women was 13. Upon comparing the women who presented a medical record of SA with those who had attempted suicide for the first time, it could be observed that, in both cases, the majority of women presented a history of depression and used psychoactive drugs continually.

However, in the recurrence group, the majority of women were between 15 and 49 years of age, in 71 cases (84.5%), and did not work in formal jobs (housewives) (34.8%). By contrast, the group of women who had attempted suicide for the first time was predominantly between 12 and 39 years of age (86-84.2%) and had a formal occupation (61-42.6%).

For the cases that recorded a clinical evolution on the TO file (300), 289 evolved toward a cure (96.3%), while four (1.3%) ended up dying.

DISCUSSION

In the present study, the majority of SA occurred in the summer months, data which is not compatible with studies that analyzed the epidemiological behavior of SA in the population in general, which showed a higher number of occurrences in the winter months.^{13,15} Nevertheless, the season and climate of SA are variables that are difficult to associate in a country with such a wide regional diversity as Brazil, in which the seasons of the year are not well-defined by region, and the climate contains no clearly defined seasons.

The weight of the climate in people's daily routines has been related to the fall in the production of serotonin in the summer, leading to a consequent increase in aggressive actions, including the "self-aggression" shown in SAs, or an increase and decrease in sunlight and in temperature during specific periods

of the year. However, it is difficult to affirm the correlation between climate and a phenomenon with cultural and socioeconomic characteristics, such as suicide.¹³

Considering the age range of the women who have attempted suicide, the results from the present study point to suicide as a phenomenon that more commonly occurs in the youngest age bracket of women. By contrast, in the prior decade, an increase in suicide rates could be observed among young women, a situation considered to be a strong indicator of the social crisis in Brazil at that time. The difficulty to find a job, a common problem among young people who are trying to enter the work market, can produce a sense of incapacity that can lead to SA.¹⁶

The majority of women had no formal occupation, which corroborates data from other studies carried out in Brazil that indicate that SA normally occurs in the unskilled labor levels as well as in lower qualification levels, with a larger proportion of cases in categories of predominantly manual labor jobs.^{13,15}

Medicine was used as the main agent in the majority of SA cases and, since 1994, has remained in first place among the 13 monitored toxic agents in Brazil, corresponding to 27% of the cases of intoxication.¹⁷

According to data from the WHO, 15% of the world population consume more than 90% of the pharmaceutical output; 50% of all medicine is prescribed, disposed of, or used inappropriately; hospitals waste 15% to 20% of their budgets to deal with the complications caused by the inappropriate use of medicines; and, of all the patients who are admitted to health-care clinics due to intoxication, 40% are victims of the very medicines they ingest.¹⁸

The immediate access to a method to commit suicide is a determining factor for an individual to commit suicide or not. Reducing the access to these methods to commit suicide is an effective prevention strategy.¹⁹

The high participation of psychoactive drugs among the medicines used for SA suggests that a better control over the prescription and acquisition of psychoactive drugs may well contribute to a change in the profile of the drugs used in SA, with potential repercussions in its lethality, given that such a type of drug can alter the proper functioning of the brain, which can diminish or stimulate the activity of the Central Nervous System (CNS).¹⁸

Both in developed and developing countries, two important factors are linked to suicide. The first is that the majority of people that commit suicide present a mental disorder that can be diagnosed. The second is that the suicide and the suicidal behavior are more frequent in psychiatric patients, who normally present, in a decreasing order of risk: mood disorders (depression in all forms) as well as mental and behavioral disorders resulting from the use of psychoactive substances, such as alcoholism and drug abuse.²⁰

In the cases of SA of people with mental disorders, what could be observed was a predominance of the female gender, the history of SA and the abuse of/dependence on psychoactive substances, reinforcing the risk factors for suicide established by the WHO in 2006.²¹

The history of recurrent SA is an important predictor of suicide and of new attempts, especially among women, whose recurrence index is 4.2 times higher than that of men.²¹ Data of this nature are invaluable in appropriately treating these women, especially since the individuals with a prior record of SA require different treatment strategies from those individuals who have attempted suicide for the first time.²²

The high number of cases that have evolved into a cure indicates that the women do not normally want to commit suicide in the sense of destruction or annihilation, but rather wish to escape, to forget, to run away from their current life. In this manner, it is possible to understand why they do not abandon suicidal means considered to be "radical", whereas men tend to use more violent means.⁷

When compared to the male population, the women present hormonal, metabolic, and structural differences (women present less water and a higher amount of fatty tissue in their body compositions)²³, which makes the women more susceptible to harm associated with the consumption of psychoactive substances, especially as regards damage to one's health and to social contexts, whose results tend to be more severe.²⁴

In addition to the toxicological risk, defined as the probability of individuals to intoxicate themselves when exposed to the diverse chemical agents within their environment, the present study also observed the existence of other factors associated with the risk of women to commit suicide. Such factors can be classified as: predisposing, facilitating, triggering and enhancing factors.^{11,25}

Predisposing factors are those which can create favorable conditions to the agent, such as age, gender, and the prior existence of health risks. Facilitating factors can act by contributing to the occurrence of intoxication, such as inappropriate eating habits or living conditions that could be considered favorable to this event. Triggering factors can be associated with intoxication or an event that harms one's health, such as the exposure to specific agents. Enhancing factors can worsen a pre-existing intoxication, such as exposure to adverse conditions, whether repeated or for a prolonged period of time.^{11,25}

In the present study among the women who attempted to commit suicide, what was most commonly observed included: mental disorders, the use of one's own home as the location of the SA, access to medicine (mainly psychoactive drugs for one's own personal use), and the recurrence of SA.

These findings corroborate data from the literature, which show a high prevalence of mental disorders in people who at-

tempt suicide. It is estimated that the risk of suicide throughout life in people with mood disorders (mainly depression) is from 6% to 15%; however, a substantial proportion of these people have never had a doctor's appointment with a mental health professional.⁴

Thus, the improvement and handling of psychiatric disorders in medical services are important steps in the prevention of suicide; however, in Brazil, there is a need for specialized services geared toward mental health services for women, little training provided to healthcare professionals, and a lack of productivity in scientific research.²³

The use of one's own home to attempt suicide suggests a breakdown in the family structure and intrafamily feuds, a situation which is common in the homes of individuals who try to take their own lives. The recurrence of SA among women, another important enhancing factor, can produce a positive return in terms of a cry for help and/or a change of environment, which could stimulate the recurrence of SA.^{4,26}

In this sense, it therefore becomes necessary to develop strategies, especially in local healthcare systems, to receive and listen to these women, aiding them in the recovery of their self-esteem and their overcoming of the stressful events. For this, policies geared toward these aspects of life for the woman are crucial, as they direct the work of the healthcare professionals and serve to guarantee legitimacy and visibility of the problem, which is many times hidden from the eyes of society and the family itself.²⁷

CONCLUSIONS

Analyzing the results of the present study, it became possible to characterize some specific aspects related to SA among women in the assessed population. It could be observed that the majority of women used medicine as a means through which to commit suicide, mainly psychoactive drugs, and possessed some form of mental disorder which revealed the suicide attempt. The easy access to medication may well represent a risk factor related to female SA.

These data reflect the importance of studying specific groups as regards the occurrence of suicides, since the universality of the female gender establishes the woman as a homogeneous group, with similar interests, perspectives, objectives, and experiences. The vulnerability to suicide is striking, and the knowledge of factors that influence this practice is crucial, so that effective means of prevention can be executed, which also serves as a warning to healthcare professionals to provide a more efficient medical service to the population.

Although the present study has been limited to the demand of women who receive medical care at a specific healthcare clinic, the results presented can help to improve the performance of nursing professionals in general as well as provide the impetus for specific public policies for better healthcare

services provided to these women. Health education carried out by these professionals, through their link with the human being/patient and the family, is an extremely important factor for success in preventing suicide. Based on the integral view of the individual and of the knowledge of the factors that lead people to commit these extreme acts, nurses can help to lessen the suffering caused by SA.

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