

SUICIDE TRENDS AND SOCIO-CULTURAL DETERMINANTS IN CAMPECHE, MEXICO: A DESCRIPTIVE ANALYSIS OF RISK FACTORS

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Abstract

This study offers an epidemiological and psychosocial description of suicide behaviour in Campeche, Mexico, one of the country's states with the highest suicide rates, from 2014 to 2021. The findings highlight a consistent pattern: an exponential increase in suicides, with higher rates among men for deaths and women for attempts. Suicide is most prevalent among individuals with unstable jobs, farmers and housewives. Hanging is the most common method used, with family issues, romantic problems and depression as the main triggers. These factors suggest difficulties in interpersonal relationships, emotional management and coping with crises. The study also explores the influence of Mayan culture, the impact of globalization and the Spanish conquest as historical factors shaping suicide rates. Additionally, the role of Mexico's machismo culture, alcohol or substance abuse and subjective vulnerability during crises are considered contributing factors. For prevention, it is crucial to educate both children and adults on respecting boundaries, overcoming frustrations, managing aggression and developing emotional intelligence to foster resilient, secure personalities, independent from social pressures.

Keywords

Culture, modernization theory, existentialism, Sartre, individualism.

Citation: Aristizábal, L.A., Farfán, J.L.R. (2025). Suicide trends and socio-cultural determinants in Campeche, Mexico: A descriptive analysis of risk factors. *Social Issues*, 3(1), 65-82 <https://doi.org/10.30546/SI.2025.3.1.301>

1. Introduction

Suicide is a multifactorial process situated within an economic, social and cultural context (López, 2014). It represents a significant public health emergency that encompasses various aspects of sustainable territorial development, thus highlighting the urgent need to investigate the factors influencing its emergence and persistence. Suicide is not an isolated event with specific causes; rather, it is a complex process involving different components, such as individuals, objects, places, time and relationships. Etymologically, the term “suicide” originates from two Latin words: “sui” (self) and “cidium” (killing), with its literal meaning being “the act of killing oneself”. Consequently, it could be considered the extreme manifestation of violence, directed towards the self (Sarracent *et al.*, 2013; Alonso Carballo & Garalvade León, 2010).

The global suicide mortality rate per 100,000 inhabitants was 9.2 in 2019 (World Bank, 2021), while in Mexico, it was 5.3 (INEGI, 2021). According to the National Survey on Health and Nutrition (ENSANUT, 2018), 5% of the population aged 10 years

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and older reported having ever considered suicide; 4% of men and 6% of women indicated such thoughts. The highest suicide rates are found in Eastern Europe, while the lowest are in Latin America, Muslim countries and certain Asian regions (Hernández Soto & Villareal Casate, 2015). Future research could explore the factors distinguishing populations in Eastern Europe from those in regions with lower suicide rates.

In Mexico, the states with the highest suicide mortality rates are located in the Yucatán Peninsula: Yucatán, Quintana Roo and Campeche. Over the past decade (2010–2020), Campeche has ranked between second and sixth place in terms of the highest suicide rates among the 32 federal entities that comprise the country (INEGI, 2021). This alarming situation prompted the Mental Health Department of the Campeche State Health Secretariat to describe the patterns of this phenomenon and identify the potential psychosocial factors contributing to its persistence.

According to sociological theories, Durkheim defines suicide as any case of death that results directly or indirectly from an act, either positive or negative, carried out by the victim, knowing that such an act should lead to this outcome (Durkheim, 1998). Generally, this act is preceded by suicidal ideation, which partly arises from the difficulty in imagining the future, a process dependent on the ability to reflect on the past more intensely (Cha *et al.*, 2022). Since 1961, Trauman has suggested that suicidal ideation represents a brief loss of contact with reality and a disturbance in rational thinking, usually induced by the loss of something that was perceived as extremely important to the individual. Thus, a variety of factors, including mental disorders and adverse life events, can increase the risk of suicidal behaviour (McMahon *et al.*, 2022).

Individuals who die by suicide and those who attempt suicide share certain characteristics but represent distinct populations. Studies indicate that those who die by suicide are typically older men who employ violent methods and often have a history of prior suicide attempts, unless they die on the first attempt (Uribe *et al.*, 2013). Once a suicide attempt occurs, it becomes a risk factor for both subsequent attempts and death by suicide (Giner *et al.*, 2013). The degree of planning associated with an attempt correlates with its severity (Chaudhury *et al.*, 2016). Individuals who engage in severe suicide attempts tend to repeat the act in a planned manner and often present with some form of mental disorder (Runeson *et al.*, 2016, Goñi-Sarriés *et al.*, 2019). Both populations experience difficulties in impulse control and pervasive hopelessness (Spann *et al.*, 2006).

Risk factors for suicide include isolation, poor health, depression, alcoholism, low self-esteem, hopelessness and feelings of family and social rejection. It is also important to consider a history of self-directed harm and the inability to resolve social problems. Suicidal individuals often provide both direct and indirect verbal cues about their suicidal intentions (Gutierrez-Garcia *et al.*, 2006). Moreover, traumatic experiences and family conflicts may be considered vulnerability factors for suicide (Forero *et al.*, 2017; Serrano-Ruiz & Olave-Chaves, 2017), underscoring the need for clinicians to assess exposure to trauma in those with proximal traumatic experiences.

2. Methodology

This descriptive study utilised data provided by the Epidemiology Department of Campeche and the National Institute of Statistics and Geography of Mexico (INEGI) from 2014 to 2021, resulting in a total sample of 692 cases, which were analysed using frequency tables through SPSS software. In addition, 249 psychological autopsies from suicide cases reported by the Mental Health Department of the State of Campeche were

examined using Atlas.ti software. Further, websites of institutions and reference documentation centres on suicide were consulted from 2010 onwards, along with indexed journals in both English and Spanish, primarily from 2000 to 2022.

No direct contact was made with the individuals included in this sample. All data were analysed based on reports safeguarded by the Health Secretariat of the State of Campeche. No risks to the health or integrity of individuals were identified and the ethics committee of the Mental Health Department approved the conduct of this study.

This study's methodology leverages a mixed approach, combining quantitative and qualitative data analysis to gain a comprehensive understanding of the patterns, risk factors and socio-psychological dimensions of suicide in the region. The use of SPSS for statistical analysis ensures that the frequency of suicide cases is captured and categorised accurately, enabling a robust analysis of temporal trends, demographic variables and potential correlations with socio-economic factors. The psychological autopsy approach, analysed with Atlas.ti, allows for an in-depth exploration of individual circumstances, psychological states and contributing factors that might not be apparent through statistical analysis alone.

Furthermore, the consultation of multiple sources, including institutional websites and indexed journals, enhances the study's validity by situating the findings within a broader international context. This multi-source approach ensures that the conclusions drawn are well-supported by existing research and contribute to the global understanding of suicide, particularly in regions with high mortality rates such as Campeche.

Ethical considerations were thoroughly addressed, ensuring that the study adhered to established research standards and protocols. The absence of direct interaction with the individuals involved, alongside the secure handling of sensitive data, ensures that the integrity of the participants' privacy and well-being was maintained throughout the research process. The approval from the ethics committee provides further assurance that the study meets ethical guidelines, ensuring its scientific credibility and compliance with necessary regulations.

3. Results and Discussion

For this study, nine variables were analysed, which were collected through reports from the Public Prosecutor's Office and various Health Institutions that notified the Epidemiology Department in Campeche. These variables included: municipality of occurrence, month, sex, age, marital status, educational level, occupation, method used in suicide deaths and the presumed reason for the suicide. Some of the most relevant data are presented in tables, while others are described within this document.

Over the past decade, a consistent pattern has emerged in the national suicide statistics for the state of Campeche. Out of the 32 states in Mexico, Campeche ranked between second and fourth in suicide occurrences from 2014 to 2020. However, in 2021, it recorded the highest number of suicide deaths and ranked sixth in the national suicide mortality rate. This suggests that the psychosocial repercussions of the COVID-19 pandemic, such as the loss of loved ones, mental health disorders, unemployment, among others, may have influenced not only Campeche but also other states that reported a higher frequency of cases.

Furthermore, it was observed that during 2020 and 2021, there was a lower number of suicide attempts in comparison to completed suicides. This discrepancy may be attributed to the isolation conditions imposed by the pandemic, which resulted in fewer opportunities for individuals to be alone—a common factor in completed suicides, as such

acts often occur when there is no one present to intervene. Additionally, this could be explained by underreporting in notifications, potentially leading to a data collection bias (Table 1). Suicide attempts are often interpreted as an expression of a desire for change, a feeling of helplessness to alter an unmanageable situation (Barón, 2000). Such expressions require a specific place, time and conditions to facilitate the act; during the pandemic, these conditions were not entirely conducive to completing such an act.

The impact of the COVID-19 pandemic on suicide rates, particularly in Campeche, underscores the significant role that social and psychological stressors play in influencing suicidal behaviour. The increased frequency of suicide deaths during the pandemic period may reflect the intensified strain on individuals' mental health, exacerbated by factors such as social isolation, grief from the loss of loved ones and economic instability. These findings align with existing research that has shown a rise in suicide rates in response to crises and emergencies, highlighting the vulnerability of individuals during periods of social disruption.

The lower incidence of suicide attempts compared to suicide completions during 2020 and 2021 suggests that the social restrictions imposed by the pandemic may have reduced opportunities for individuals to engage in suicidal behaviour. The limitations on social interactions and the closure of certain services may have inadvertently reduced the impulsive nature of some suicide attempts, thus leading to a lower reported number of such attempts. However, this trend may also be indicative of underreporting, as healthcare systems struggled to address the surge in cases, potentially leaving some incidents undocumented.

Additionally, the socio-cultural factors specific to Campeche, such as traditional family structures, socio-economic conditions and local attitudes toward mental health, may also contribute to the high incidence of suicide in this region. Future studies should further explore these regional characteristics and their interaction with national and global trends, particularly in relation to the ongoing aftermath of the COVID-19 pandemic. Further research is needed to better understand the mechanisms behind the observed shifts in suicide patterns and to develop targeted intervention strategies to address these challenges.

Table 1. Suicide vs. Suicide Attempt in Campeche

Year	Suicide		Suicide Attempt	
	f	%	f	%
2014	90	13.0	174	17.6
2015	82	11.8	195	19.7
2016	86	12.4	143	14.4
2017	76	11.0	124	12.5
2018	70	10.1	129	13.0
2019	101	14.6	108	10.9
2020	77	11.1	39	3.9
2021	110	15.9	78	7.9
Total	692	100,0	990	100,0

Source: Epidemiology Campeche - Suicide Attempts for Epidemiological Surveillance (INSVE) (2022)

Of the 13 municipalities in Campeche, the highest number of suicide cases was recorded in the capital, San Francisco de Campeche, followed by Ciudad del Carmen. These cities are characterised by their coastal locations and economic strengths, with Campeche being a major tourist destination and Ciudad del Carmen focused on the petroleum industry. According to Frutoa-Cortés (2014), the recent economic growth in southeastern Mexican cities has resulted in a high social cost and has revealed new forms of poverty and precariousness, which are part of a broader process of violent modernisation. Thus, it can be asserted that suicide is a multifactorial process situated within an economic, social and cultural context (López, 2014).

From a cultural perspective, it is evident that the Maya culture predominates in southeastern Mexico. This culture has been deeply affected in various aspects, including language loss, marginalisation, proliferation of alcohol and drugs, unemployment, inadequate healthcare services and the imposition of government policies aimed at integrating them into modernity. All these factors represent significant suicide risk factors (López, 2014; Botega & De Souza, 2004; Wasserman & Narboni, 2001; Lester, 1995; Yang & Lester, 1994; Skog, 1991; Wasserman, 1989; Platt, 1984.). Additionally, from a psycho-anthropological analysis, it is noteworthy that the Maya were the only pre-Hispanic culture to have a deity associated with suicide: the goddess Ixtab or the “goddess of the hanged”. According to Román and Rodríguez (1997), the dualism in pre-Hispanic Maya religion was based on both benevolent and malevolent deities; Ixtab was considered benevolent and it was believed that all who died by hanging, in war, or women dying in childbirth, would go to paradise. However, during the Spanish conquest, Maya religion was forbidden and new authorities imposed policies, leading to feelings of fear, insecurity and chaos (Márquez, 1996). On many occasions, the Maya preferred to hang themselves rather than be conquered and baptised. This resistance to external power, perceived as dominating, could have driven them to suicide as a means of escape. While it would be presumptuous to claim that all individuals in Campeche who committed suicide shared a similar psychological pressure, the subjective construction of vulnerability to perceived threats cannot be dismissed. This point will be explored further when examining the presumed reasons for suicide in the sample of this study.

In this regard, it is important to acknowledge the contributions of Émile Durkheim, who developed the concept of “anomie” to refer to social disorganisation or individual isolation as a result of the absence or incongruity of social norms (Durkheim, 1998). In this way, social phenomena such as suicide may arise when social bonds weaken and society loses its capacity to adequately integrate and regulate its members. López (2014) interviewed individuals from both urban and rural areas of Campeche, finding ambivalence in their responses to suicide. Some rejected the behaviour, while others justified it, associating it with freedom from the tensions of daily life. While natural death was seen as rest, suicide was perceived as escape, sin, punishment or even “something demonic”; the suicidal individual bypasses prohibition, yet this may paradoxically evoke a certain appeal. Baquedano further mentions that some interviewees viewed suicide as a “self-serving” attitude, as everyone suffers, but some choose to end their pain and cause problems for others; hence, suicide could be considered an act of aggression towards others.

Suicide is also interpreted through the lens of gender. According to Canneto & Safinofsky (1998) and López (2014), suicide is more frequently carried out by men, as they bear a greater economic and social burden than any other gender. In contemporary times, suicide rates have increased for both men and women, though the growth remains

higher among men (Borges *et al.*, 2010). The reasons behind this act could be subject to reconsideration. In Campeche, 564 cases of suicide in men and 128 in women were analysed (Table 2). This finding aligns with other studies that demonstrate men commit suicide at a rate five times greater than women; however, women attempt suicide three to four times more often than men (Delgado *et al.*, 2010).

The distinct cultural and socio-economic context of Campeche, particularly in coastal areas like San Francisco de Campeche and Ciudad del Carmen, appears to play a significant role in shaping the patterns of suicide in the region. The economic pressures associated with industries like tourism and petroleum, combined with the social disparities that accompany rapid modernisation, may contribute to the high suicide rates observed in these areas. Additionally, the historical and cultural influences of the Maya civilisation, with its unique beliefs regarding suicide, suggest that the socio-cultural fabric of the region has long been intertwined with notions of death and resistance, which may still impact contemporary attitudes toward suicide.

The concept of “anomie” as proposed by Durkheim remains highly relevant in understanding the suicide rates in Campeche. The weakening of social ties and the erosion of cultural cohesion in the face of modernising forces could be contributing to the growing sense of disillusionment and social isolation, factors which are well-documented risk factors for suicide. The ambivalent views towards suicide found in López’s study further highlight the complex relationship between culture, society and mental health, underscoring the need for a more nuanced approach to suicide prevention that takes into account both the socio-economic realities and cultural perspectives of the population.

Lastly, the gendered nature of suicide in Campeche, with a significantly higher incidence in men, supports the broader trend observed globally. However, the higher frequency of suicide attempts among women suggests a need to explore the underlying psychological and social factors that drive these behaviours in both genders, as well as to consider the role of gender-specific interventions in suicide prevention strategies.

Table 2. Gender of Suicide Cases

Year	Male		Female	
	f	%	f	%
2014	70	12.4	20	15.6
2015	66	11.7	16	12.5
2016	69	12.2	17	13.3
2017	65	11.5	11	8.6
2018	59	10.5	11	8.6
2019	90	16.0	11	8.6
2020	53	9.4	24	18.8
2021	92	16.3	18	14.1
Total	564	100	128	100

Source: Epidemiology Campeche (2022) (Nominal List of Suicides, State Prosecutor's Office)

Suicide and Suicide Attempts: Psychological and Social Perspectives

Suicide and suicide attempts are considered behaviours in which individuals attempt to end their own existence, with the distinction that a suicide attempt does not

result in a fatal outcome (Rivera & Andrade, 2006). Both phenomena, however, may be driven by different motivations. Not every suicide attempt is aimed at achieving death; individuals may self-harm in order to gain secondary benefits, such as seeking attention or attempting to manipulate others. Consequently, an individual at risk of suicide may survive despite wishing to die, or alternatively, may fail to achieve their intended goal of self-harm (Forteza *et al.*, 2003).

Temporal Distribution of Suicidal Events

Another variable analysed in the Campeche data was the month in which suicides occurred. Cases were recorded across all months of the year. Between 2014 and 2021, no month showed a higher probability of suicide occurrence. This suggests that, in Campeche, there is no clear correlation between suicide and time factors. It is equally likely for a suicide to take place in May as in August or December. This observation highlights the subjective nature of human vulnerability, where factors making one individual vulnerable in January may affect another in July.

Age Distribution and Vulnerability

With regard to the age variable, four age groups were found to be most frequent in Campeche, listed in descending order: 110 individuals between the ages of 20 and 24 (15.90%), 98 between 25 and 29 (14.16%), 71 between 30 and 34 (10.26%) and 70 between 35 and 39 (10.12%). This period of life (20 to 40 years) is considered the most productive phase, yet it also presents heightened vulnerability in the face of contextual threats and challenges in coping with them.

Suicide rates have notably increased among individuals aged 15 to 29, with suicide becoming one of the five leading causes of death among those up to 34 years of age and the third leading cause for individuals aged 15 to 24 (Borges *et al.*, 2010). Forster and Wu (2002) indicated that age and sex are fixed risk factors for suicide attempts, factors that the individual cannot modify. These variables may also be seen as tertiary risk factors, alongside belonging to a socially marginalised group that is frequently persecuted or excluded (Sharma, 2003).

Marital Status and Relationship Dynamics

Regarding marital status, the data were grouped into categories such as single, married, cohabiting, divorced, separated and widowed. From 2014 to 2021, the largest percentage of suicide cases was observed in the “single” category (249 cases, 36%), followed by “married” (165 cases, 23.8%) and “cohabiting” (186 cases, 26.9%). No significant difference was found between the married and cohabiting categories and since both involve living with a partner, these were merged. This combined percentage exceeded that of the single category (351 cases, 50.7%). This finding clearly indicates that having a partner does not necessarily serve as a protective factor against suicide. Moreover, a fragile relationship or one mediated by other stressors such as violence, routine, or couples without shared life goals may represent a risk factor for the population of Campeche. Similar patterns are found in the reported cases of suicide attempts. These results lead to further questions that may be explored in future studies: What is happening with contemporary relationships? Are relationship issues driving suicide? Is the studied population more emotionally dependent today? Are they more fragile when facing crises?

Educational Level and Vulnerability

An analysis of the educational level in the sample revealed the highest occurrence in the following categories: secondary school (233 cases, 33.7%), primary school (227

cases, 32.8%) and high school (112 cases, 16.2%). However, between 2014 and 2016, primary school was the most predominant level (94 cases, 36.4%), contrasting with the years 2019, 2020 and 2021, when secondary school emerged as the most prevalent level (100 cases, 34.7%). In 2017 and 2018, no significant differences were observed between the two most prevalent educational levels. We question the probability of a future increase in suicide rates at higher educational levels, particularly in high school and beyond. It is important to continue monitoring this variable to identify vulnerable groups and address potential changes over time.

Conclusion and Implications for Suicide Prevention

The findings of this study highlight the complex and multifaceted nature of suicide in Campeche. They suggest that while some demographic factors such as age, marital status and educational level are associated with higher risk, the contextual and psychological factors underlying these trends remain complex. The findings underscore the importance of a nuanced approach to suicide prevention, one that accounts for socio-economic, cultural and individual vulnerabilities. Future research should explore the changing dynamics of contemporary relationships, the influence of emotional dependency and the evolving role of educational levels in shaping the mental health landscape. By addressing these issues, public health strategies can be better tailored to prevent suicide and support at-risk populations.

Table 3. Occupation of Suicide Cases

Occupation	2021	%	2020	%	2019	%	Total	% Total
Student	6	5,5	10	13,0	6	5,9	22	7,6
Housewife	9	8,2	11	14,3	3	3,0	23	8,0
Stable employment	15	13,6	10	13,0	19	18,8	44	15,3
Unstable employment	47	42,7	21	27,3	39	38,6	107	37,2
Study & Work	0	0,0	0	0,0	1	1,0	1	0,3
Farmer	19	17,3	7	9,1	21	20,8	47	16,3
Unemployed	8	7,3	7	9,1	10	9,9	25	8,7
Retired / Pensioner	1	0,9	8	10,4	1	1,0	10	3,5
Prison inmate	1	0,9	1	1,3	0	0,0	2	0,7
Other	0	0,0	0	0,0	0	0,0	0	0,0
None	0	0,0	0	0,0	0	0,0	0	0,0
No data	4	3,6	2	2,6	1	1,0	7	2,4
Total	110	100	77	100	101	100	288	100

Source: Epidemiology Campeche, 2022 (Nominal List of Suicides, State Prosecutor's Office)

Occupation as a Factor in Suicide and Suicide Attempts in Campeche

Occupation is a variable that was added to the epidemiological data from Campeche in 2019 due to the growing interest in analysing suicidal profiles within the state (Table 3). The highest percentage of individuals who died by suicide were those with “unstable employment”, without social benefits, paid on an hourly or contract basis. From a total of 288 suicide cases reported between 2019 and 2021, 107 cases (37.2%) were recorded in this category. However, a closer examination of each occupational category revealed that in 2020, when the COVID-19 pandemic began, retirees or

pensioners exhibited the highest percentage (10.4%) compared to 2019 (1%) and 2021 (0.9%). This finding suggests a potential relationship between anticipatory fear of loss or grief (e.g., death, comorbidity, isolation, routine changes, etc.) mediated by the pandemic circumstances.

In the second instance, 16.3% of suicides were attributed to “farmers” - individuals with low educational attainment (or illiteracy), engaged in agricultural work and who often rely on state assistance. The occupation of farmers could also be classified as unstable; in both occupations, it is difficult to establish long-term financial planning, thereby fostering a dependency on individuals, institutions or unpredictable external conditions.

Interestingly, it is worth considering why, in the three years analysed, those in “stable employment” - which typically includes government benefits - ranked third in frequency of suicide (44 cases, 15.3%). While the data shows a large gap between unstable and stable employment in terms of suicide frequency, it is noteworthy that, for some individuals, stable employment (a highly sought-after status for many) appeared to be a contributing factor. This might be influenced by elements such as stress (e.g., burnout), the perceived salary vs. actual salary and workplace climate. These findings contrast with the research of Graeme et al. (2022), who argued that employment serves as an independent protective factor against suicide risk. Unfortunately, the absence of primary data limits further exploration of these questions.

In the case of housewives, the frequency of suicides was notably high in 2020 (14.3%), followed by 2021 (8.2%). This suggests that housewives experienced significant stress during the pandemic, which could stem from the uncertainty of loss, the pressure of meeting others' needs (often at the expense of their own) and heightened isolation.

Occupation and Suicide Attempts

In contrast to completed suicides, it is housewives and students who exhibit the highest rates of suicide attempts. Of the 225 suicide attempt cases reported between 2019 and 2021, 53 students (24%) and 48 housewives (21.3%) were involved in suicide attempts. This raises new questions: Are the motivations behind the suicides of housewives and students related to the environments in which they spend most of their time - primarily their homes? What is the family dynamic that might contribute to these actions? As Forteza et al. (2003) have noted and as discussed earlier, not all suicide attempts are intended to result in death; therefore, could students and housewives be seeking attention or perhaps are they unaware of the lethality of the means they use? What are the underlying motivations? Interviews with individuals who attempted suicide often reveal that they attempt to conceal their true motivations and minimise the perceived consequences of their actions.

These findings underscore the need for a more in-depth exploration of the role occupation plays in the mental health and vulnerability of individuals, particularly those who occupy traditionally gendered roles like housewives and students. The relationships between environmental stressors, occupation and suicidal behaviour require careful attention to improve prevention strategies and targeted interventions for high-risk groups.

Method of Suicide and Contributing Factors: A Study of the Campeche State Suicide Trends

Regarding the method employed for suicide, it is observed that during the entire evaluation period, over half of the reported cases involved suicide by hanging (586 cases, 84.7%) (Table 4). Following this, 48 individuals used poisoning (6.8%) and 45 chose firearms (6.5%). These data align with national statistics from the National Institute of

Statistics and Geography (INEGI, 2021) and other studies (Borges *et al.*, 2010). However, they differ from studies which claim that pesticides, firearms and medication overdoses are the most common methods used in suicide (Hernández & Villareal, 2015). The prevalent method might be related to gender and cultural customs, as in Campeche, most households have hammocks and ropes for support; men easily use ropes, not simply tying a string, but ensuring that it can hold the body's weight. According to Borges *et al.* (2010), men tend to use violent methods such as hanging by nature.

Table 4. Method Used in Suicide

Method	2021	2020	2019	2018	2017	2016	2015	2014	Total	% Total
Drug Overdose	3	0	0	0	0	0	0	0	3	0.4
Hanging	93	68	85	58	66	73	71	72	586	84.7
Bladed weapon	0	1	0	0	1	0	0	0	2	0.3
Poisoning	6	4	8	5	4	8	3	10	48	6.9
Firearm	8	4	4	5	5	5	7	7	45	6.5
Other	0	0	4	2	0	0	1	1	8	1.2
No data	0	0	0	0	0	0	0	0	0	0
Total	110	77	101	70	76	86	82	90	692	100

Source: Campeche Epidemiology, 2022 (Nominal list of suicides, State Prosecutor's Office)

In suicide attempts, the predominant method is medication overdose, though it is less lethal. Following this, poisoning is the next most common method. This indicates that “medication overdose” (512 cases, 51.7%) is more accessible to the general population, similar to poison (166 cases, 16.8%). While less lethal than hanging, these methods still have significant physiological repercussions.

Table 5. Suspected Motive for Suicide

Suspected Reason	2021	2020	2019	2018	2017	2016	2015	2014	Total	% Total
Family problems	8	5	9	2	15	12	12	18	81	11.7
Romantic problems	11	6	5	7	4	5	6	14	58	8.4
Mental illness	1	2	0	3		3	3	1	13	1.9
Economic difficulty	1	3	1	1	2	2	3	1	14	2.0
Feeling depressed	16	8	3	5	2	5	5	7	51	7.4
Alcoholism	1	1	3	1		1	0	2	9	1.3
Health issues	6	5	2	4	2	4	3	6	32	4.6
Other	2	1	0	0	0	0	0	2	5	0.7
No data	64	46	78	47	51	54	50	39	429	62.0
Total	110	77	101	70	76	86	82	90	692	100

Source: Epidemiology Campeche, 2022 (Nominal list of suicides, State Prosecutor's Office)

When analysing the presumed motive for suicide, based on family members' accounts (reported through psychological autopsies or official statements to the Prosecutor's Office), it is evident that in most cases the reasons for the decision remain unknown (429 cases, 62%). According to some family members interviewed, “family

problems” followed by “romantic issues” are the main causes of the act (Table 5). The distinction between family problems and romantic problems is not always clear, as some referred to couple issues as family problems, while others attributed romantic problems to factors such as infidelity, unrequited love, rejection, separation or divorce. Given this connection, we question: what is happening in intrafamilial and romantic relationships? What type of family problems lead to such a drastic decision as suicide? According to De Bedout (2008), romantic disappointment, unrequited love, or betrayal by a partner can be determinants in suicidal behaviour. Mosquera (2016) and Álvarez-Caballero et al. (2017) also argue that romantic breakups (especially in adolescents) are variables that affect an individual’s emotional stability and can lead to suicide.

Some individuals reported in psychological autopsies mentioned family problems such as mismanagement of finances, debt, insufficient income, disagreements and/or violence. As for romantic issues, some referred to partner jealousy, infidelity, economic violence and psychological, emotional, physical and sexual violence. The relationship between domestic violence and suicide attempts is increasing and is considered a predominant factor in suicide acts (Pinzon *et al.*, 2013). Violence is recognised as a risk factor for suicide (Lambert *et al.*, 2022).

This could be related to the types of violence outlined by UN Women: economic violence, which refers to financial dependency imposed on another person, preventing them from accessing their own resources and prohibiting them from working or attending school; psychological violence, which instils fear through intimidation; emotional violence, which aims to undermine a person’s self-esteem through offensive comments; physical violence, which causes harm through physical force or blows and sexual violence, which forces a partner to participate in sexual acts without consent (UN, 2022).

These forms of violence, which often remain concealed within households, could be considered psychosocial factors influencing suicide. What about young people who are not yet cohabiting with partners? They too may experience certain forms of violence, but we may also be dealing with the fragility of relationships described by Bauman (2005) and the emotional dependency that characterises postmodern interpersonal relationships. Bauman refers to “liquid love” as relationships lacking solidity, increasingly transient, superficial and ethereal, aimed at preserving individualism and/or personal independence. “Author” describes emotional dependency as a form of psychosocial prison, marked by difficulty in emotional regulation, where there is an excessive need for affection and constant contact with the partner, alongside unrealistic relationship expectations. This combination creates a space conducive to suicide, where the individual neither wants to negotiate their independence nor can they conceive of losing the benefits of a romantic, pleasurable relationship. Addressing this aspect would lead to developing preventive actions that promote healthy connections and prevent suicide. It is essential to recognise that every relationship entails both gains and sacrifices and the agreements between these two aspects determine the balance and continuity of the relationship, without attempting to possess the other as if they were oneself. This prompts another study focusing on the affective relationships of individuals who have attempted suicide.

Another presumed reason for suicide in the sample was “feeling depressed”, which even scored the highest in 2021 (16 cases, 14.5%), possibly linked to uncertainties arising from the pandemic. Depression is a mental disorder with significant challenges in identifying its pathophysiology (Gómez-Restrepo *et al.*, 2004), affecting the quality of life of those who suffer from it and constituting a predictor for suicide (Joiner *et al.*, 2005). It could not be determined whether the individuals in the sample were clinically diagnosed

as depressed at the time of suicide (no such clinical diagnosis exists), but they did exhibit feelings of depression. Most family members reported in psychological autopsies that the suicides had exhibited behavioural changes one or more weeks prior to the act: irritability, low mood, loss of appetite or compulsive eating, disinterest in activities they previously enjoyed, insomnia or hypersomnia and some had self-inflicted injuries. Difficulty in problem-solving and pessimism are considered dysfunctional attitudes that promote suicide (Ahrens *et al.*, 2000).

Depressed individuals are characterised by negative expectations about the future and a sense of helplessness in achieving their goals, which makes it difficult to respond adequately to daily life. As Barón (2000) notes, suicide or an attempted suicide is considered a path when there is no other possible way out of what one is feeling or living. In this sense, the hopelessness of achieving one's goals (directed by depression) is associated with suicidal ideation (Chioqueta & Stiles, 2003). Depression is regarded as the most significant risk factor for suicide (Holman & Williams, 2022).

Other preceding factors included a diagnosed mental illness, generally schizophrenia and affective disorders. According to Skegg (2005) and Borges *et al.* (2010), there is a close relationship between affective disorders and the tendency to deliberately harm oneself, seemingly as a form of escape or evasion. More than 50% of suicides are committed by individuals with depressive disorders and the comorbidity of anxiety and depression multiplies the risk (Gutiérrez-García *et al.*, 2006). However, according to Nock *et al.* (2008), depression is not the only, nor the most frequent, mental disorder associated with suicide attempts in the Mexican population; in developed countries, mood disorders are more closely associated, while in developing countries, substance use and impulse control disorders are of greater significance (Borges *et al.*, 2010).

Mental disorders have been recognised as a universal risk factor for suicide attempts (Vijayakumar *et al.*, 2005; Goldston *et al.*, 2006; Palacio *et al.*, 2007). Some family members reported that when diagnosed, individuals felt they would never recover. Mental disorders and other health issues could be considered modifiable risk factors, where the intervention of the individual, their support network and health professionals could alter the course of the tragic event (Forster & Wu, 2002). They could also be considered primary risk factors requiring urgent attention (Ahrens *et al.*, 2000; Van Heeringen, 2003).

“Economic difficulty” was identified in epidemiological records as a presumed motivation for suicide. Ramírez (1998) mentions that economic deprivation or loss, the emptiness of life due to material satisfaction (which carries the idea of failure), can, in some way, lead to suicidal action (De Bedout Hoyos, 2008). According to Forster and Wu (2002), economic situations are a fixed risk factor for suicide attempts, one that cannot easily be modified by the individual, as it largely depends on the context they are in. Likewise, Cervantes and Hernández (2008) mention the socioeconomic status of parents as an important risk factor in adolescents.

All of the above describes an alarming situation not only in the State of Campeche but globally, one that has not changed in the past 17 years. The National Institute of Statistics and Geography reported that in 2004, 3,324 suicide attempts were recorded, with family disagreements (280 cases), romantic difficulties (230 cases) and a severe, incurable illness (172 cases) as the top three causes. The first two reasons—family problems and romantic issues—continue to highlight the urgent need to work on affective bonds, as described by Aristizábal, referring to “any relational process between subjects

and/or social objects, marked by an affective charge that ascribes its own meanings and mobilises the actions of the parties (or one of the parties) relating to each other” (Aristizábal, 2020).

4. Conclusions and Recommendations

The suicide trend in the state of Campeche has revealed a consistent pattern over the past decade: an exponential increase in cases, with a higher frequency of suicides among men and attempts among women. Individuals most vulnerable to suicide include those with unstable employment, farmers, some with stable jobs and housewives. Furthermore, ropes have been the most commonly used instruments for suicide through hanging, reflecting the availability and everyday use of such items in homes across Campeche, which can be used at any time and are within easy reach. This aligns with findings from psychological autopsies, which show that most suicides occurred within the home through self-inflicted injuries, specifically by hanging, strangulation or suffocation. These acts typically occurred in the early hours of the morning or during the day when the individual was alone. The primary motivations for these suicides have been linked to family problems, romantic difficulties and feelings of depression. These three factors are closely interrelated and clearly reflect difficulties in interpersonal relationships, the power granted to others over oneself, the struggle in managing emotions, meanings and the capacity to evaluate the present in terms of past failures rather than future expectations.

This situation mirrors the broader national and international picture. However, what distinguishes Campeche as one of the states with the highest suicide rates in Mexico? An analysis of the socio-cultural context reveals the impact of globalization on the predominating Maya culture in Campeche: the influx of the petroleum industry, maquiladoras (cheap labour), marginalisation, the proliferation of alcohol and drugs, unemployment, inadequate health services and the imposition of government policies aimed at integrating the population into modernity—all of which constitute significant suicide risk factors. Additionally, the Maya people are unique in having a benevolent deity associated with suicide: the goddess Ixtab, who was believed to receive those who died by hanging, in battle or women dying during childbirth, into paradise. This view has been questioned in contemporary times as traditions and beliefs have evolved. During the Spanish conquest, the Maya preferred hanging themselves rather than being conquered or baptised (López, 2014). This resistance to external power, which they perceived as oppressive, led to suicide as a form of escape. These three historical aspects, which from a psychodynamic perspective, as proposed by Carl Gustav Jung, would be transmitted through the “collective unconscious” (shared structures of the mind between members of the same species), provide insight into potential factors that may have influenced the Campechan population to perceive suicide as a viable option in times of crisis. These elements combine with the level of vulnerability constructed from personal histories.

It is also important to recognise that those who commit suicide often feel unable to dominate a situation they believe exceeds their capacity for response. In a culture dominated by “machismo”, such as that in Mexico, men face greater pressure to embody strength, authority, power and the ability to resolve all issues. When these stereotypes are ingrained from an early age and passed down across generations, potential warning signs of vulnerability often go unnoticed. This may help explain why men commit suicide more frequently than women in Mexico. When men interpret that they fail to meet these culturally imposed expectations, they may turn to escape options such as alcohol, drugs

or other means, ultimately leading to suicide. Psychological autopsies revealed that the majority of cases involved prior consumption of alcohol and/or psychoactive substances. This suggests a possible relationship between the disinhibitory effect of these substances and the lethal decision that seemingly offers liberation from social problems or tensions.

From this perspective, suicide could be considered as the outcome of the interplay between an unfavourable environment and the individual's emotional constitution, from which a self-destructive personality emerges (Dubugras & Guevara, 2007). Some studies indicate that the majority of individuals who died by suicide had consulted a doctor in the month prior to the event, had expressed their desire to die to someone and had even made an explicit suicide threat. Detecting these three factors early could prevent suicide (Gutierrez-Garcia *et al.*, 2006). According to Goldney (2005), it is crucial to educate doctors and psychologists for the timely detection of the issue, as well as to train teachers and counsellors in schools, colleges and universities, as they are the ones with the most contact with young people and could quickly identify approaching risk factors. Family members and close contacts of at-risk individuals should restrict access to means and instruments commonly used in suicide, as well as monitor the use of electronic media, promoting educational purposes (Mann *et al.*, 2005). Furthermore, the urgent need for preventive programmes aimed at health professionals, who often face high levels of stress and are also vulnerable to suicide, must not be overlooked.

There is a clear necessity to educate children and re-educate adults in the respect of boundaries, learning how to assimilate and overcome frustrations, manage perceived or received aggressiveness and develop emotional intelligence. This will help build resilient, active and secure personalities, enabling individuals to navigate the obstacles and pleasures of life with relative independence from social pressures (Guibert, 2002). Palacio *et al.* (2005) indicates that religious practice, having children and maintaining a good social support network are preventive factors for suicide. Hernández Soto and Villareal Casate (2015) add that high self-esteem, healthy social relationships (family, friends, partners) and solid religious or spiritual beliefs could prevent individuals in crisis from viewing suicide as their only or best option for escape. Additionally, resilience has been found to be protective against suicidal ideation (Holman & Williams, 2022) and all of us could become promoters of resilience through our daily interactions. The key in this process is to recognise that everyone can contribute to suicide prevention through the connections we form based on affection, respect, solidarity and above all, empathy. Identifying that someone close to us is at risk and acting (or asking for help) is the first courageous step that defines us as social beings. It is essential to remember that ambivalence and the fear of taking action will always be present, even until the last moment and that an appropriate intervention can interrupt the suicide process at any stage (Bouchard, 2006).

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Received: 5 December 2024;

Accepted: 22 January 2025;

Published: 31 January 2025.