FUNCTIONAL ASSESSMENT IN FAMILIES OF PEOPLE WITH SUICIDAL BEHAVIOR: APPLICATION OF THE CALGARY MODEL*

HIGHLIGHTS
1. Family members report vigilance to the person with suicidal behavior.
2. Need for daily monitoring of people with suicidal behavior.
3. Management of crisis and needs of people with suicidal behavior.

Objective: unveil the actions that maintain the functionality of the family of people with suicidal behavior. Method: this is a qualitative, descriptive-exploratory study, based on the theoretical and methodological framework of the Calgary Family Assessment Model. 11 users of the Suicide Study and Prevention Center, located in Salvador, Bahia, Brazil, participated in the online meeting in 2022 to construct the family genogram. In the second stage, the interview included nine user families. Results: the following categories emerged: surveillance by family members; family member’s use of technology for daily contact; management of the suicidal crisis by family members and family attention to basic needs, all categories related to a person with suicidal behavior. Conclusion: there are ways to implement health policies and manuals that guide family and friends in managing the suicidal crisis, thus avoiding undesirable consequences, such as the suicide attempt and the completed act.

DESCRIPTORS: Self-destructive behavior; Suicide attempt; Suicide; Family; Mental health.

HOW TO REFERENCE THIS ARTICLE:
**INTRODUCTION**

Suicidal behavior is characterized by the existence of an obstinate thought about death, attempts to die, which are demonstrated in actions carried out against oneself that can lead to this end\(^1\). Such conduct arises from the person’s desire to end suffering, with death itself not being the objective, but rather a means of freeing oneself from such suffering\(^2\). This procedure is often accompanied by parasuicidal behavior, such as lack of hope, self-destructive actions and deep sadness\(^1\).

This is a phenomenon that occurs on a global scale. According to the World Health Organization (WHO), in 2019, one in every 100 deaths were due to suicide, totaling more than 700,000 deaths\(^4\). In Brazil, the Ministry of Health, through a historical series, counted, between 2010 and 2019, more than 100 thousand deaths by suicide, which represents this being the fourth leading cause of death among individuals aged 15 to 29 years. It is also noteworthy that from this analysis there was a dizzying annual increase\(^5\). It must be considered that this number may be even higher given the number of people who attempt suicide and survive and the underreporting of cases that are suppressed out of shame\(^2\).

This behavior reveals intense suffering, often associated with adverse life conditions. Research in Madrid and Bangladesh, with homeless women and mothers of children on the autistic spectrum, revealed a greater propensity to attempt suicide considering challenging aspects in their daily lives\(^6\)-\(^7\). Similarly, researchers found an association between suicidal ideation and anxiety and depression in people with rheumatoid arthritis in Turkey\(^8\). In this way, the search for death can represent a desire to end the suffering experienced or even be associated with a pre-installed psychic illness.

In this scenario, the family is seen as a possibility of caring for people who exhibit suicidal behavior. It is understood that this is the first social cycle of an individual, being built based on bonds of affection, and may or may not originate from consanguinity\(^9\). Based on this, it can be said that there is intimacy in this relationship, which favors the perception of differences in the attitudes of loved ones, thus allowing the provision of first care. Corroborating a study carried out in the United States with 4,232 adolescents revealed that the lack of support from parents was significantly associated with the report of suicidal ideation and suicide attempts, with these 68% being more vulnerable to suicidal behavior\(^10\).

Considering the magnitude of the problem, health services must be attentive to preventing the phenomenon, especially by including the family in treatment/monitoring, to carry out actions that can be protective for users. Research carried out in Malawi revealed that people undergoing psychological treatment who receive support and family support have greater adherence to therapy\(^11\). Furthermore, based on the participation of loved ones in care in health services, it is possible to identify the protective or expository potential that it plays in the life of the individual with suicidal behavior. In view of the above, knowing the actions carried out by family members of people with suicidal behavior can help in understanding the phenomenon and the elements that facilitate prevention. Furthermore, it can provide support in the development of strategies that include family members in monitoring their loved ones. In this sense, the study aimed to reveal the actions that maintain the functionality of the family of people with suicidal behavior.

**METHODS**

This is a descriptive, exploratory study, with a qualitative approach, based on the theoretical and methodological framework of the Calgary Family Assessment Model (CFAM). The CFAM is a multidimensional framework, comprising three main categories:
structural, developmental, and functional. The model is based on a theoretical foundation that involves systems, cybernetics, communication and change\textsuperscript{12}.

For the first stage of the study in 2022, 11 users of the Suicide Study and Prevention Center (NEPS), an outpatient service located in Salvador, Bahia, Brazil, participated. Those who were over 18 years old and had been regularly assisted by the service for at least 1 year were included; psychologically stable, following the assessment of the service technicians; and, as exclusion criteria, users who had attempted suicide at least thirty days ago, as this is considered a period after a suicide attempt in which there is greater fragility and emotional instability.

For this stage of data collection, they participated in an online meeting with the researcher, to construct the simultaneous family genogram. This is a tool capable of grouping several generations of a family and identifying patterns, behaviors and conflicts within the family\textsuperscript{13}. To construct the genogram, the GenoPro software was used, created with the aim of assisting in data storage, construction and presentation of family genealogies\textsuperscript{14}. The program was shown during the interviews and the researchers created the genograms as the participants described them. It was possible to capture at least three generations of each family and adopt fictitious names for each user, using constellations such as Aries, Orion, Capricorn, among others, as references.

After developing the genogram, it was possible to get to know the family of each user and continue with the second stage of the study: the interviews. In this phase, nine families of NEPS users participated, selected according to the following criteria: spouses; blood relatives or family members with emotional ties to users; be 18 years of age and/or older; and be in emotional and cognitive condition. Family members who were also NEPS users and had suicidal behavior did not participate in the study; did not actively participate in the family member’s treatment; or those who did not attend the interview after three scheduling attempts. It was not possible to include the expected 11 families, as impasses arose related to the illness in the family, loss of an important member and resistance from the family to participate in the interview.

Data collection with family members took place between November 2021 and May 2022, online, using the technological resource of video recording to store data. The interviews lasted between 40 and 120 minutes and the questions about the functioning of the family nucleus were previously structured in an open questionnaire based on the CFAM\textsuperscript{12}. For the data analysis stage, two researchers carried out the process of transcribing the interviews, checking the transcribed data with the data collected, as well as going through the transcription and textualization processes. The research analysis categories emerged through a classification of elements that were grouped together and then had similar themes or genres. In this way, three manuscripts were developed based on the Calgary Model: the first is anchored in the structural aspects of the family; the second, in assessing the development of families of people with suicidal behavior; and the last, in the functional issues of the family nucleus; all integrating the thesis “Family dynamics of people with suicidal behavior: Application of the Calgary Family Assessment Model”. In this section, results are presented that relate to the details of the families’ daily lives, how the functions of each member are organized, and how they are willing to help their loved one with suicidal behavior. It is the aspect directly related to the reality currently experienced by these family members of how the functional part of the family takes place.

Regarding ethical aspects, this study was approved by the Research Ethics Committee (CEP) of the Health Secretariat of the State of Bahia (SESAB) and the School of Nursing of the Federal University of Bahia (EEUFBA) with opinion number 4,794,107 and 4,661,158, respectively. The Free and Informed Consent Form (TCLE) was read by each family member and signed electronically and, to guarantee the anonymity of each person, fictitious names related to their degree of kinship with the user were adopted. of service, such as: Uncle of Hydra, Cousin of Scorpio, Sister of Leo, among others.
RESULTS

Nine family members from seven families of users of the Suicide Study and Prevention Center (NEPS) participated in the study. Most family members were women (eight), self-declared mixed race (seven), married (five), with an average of two children (five) and 1st or 2nd degree of kinship, depending on the generations of the family. Following the Calgary Functional Assessment Model for these families, the following criteria were assessed: activities of daily living, communication between family members, and problem solving/management within the family nucleus.

Category I: surveillance by family members of persons with suicidal behavior

I always talk to her and I’m watching her. She got married, but lives at the back of my house. [...] I didn’t let her go far away, because I need to be always attentive. I will never abandon my daughter! (Libra mother)

I was always vigilant because she would run away to attempt suicide. [...] we had to run after her and keep her locked! Then I would confirm that the front doors and windows were closed and would stay up all night taking care of her. (Leo mother)

Inspection and observation of the family environment and social life of the person with suicidal behavior is a continuous action in the lives of their family members.

Category II: use of technologies by family members for daily contact with the person exhibiting suicidal behavior

When I don’t go to her house, I have to talk to her every day on my cell phone and make video calls to see how she is doing. [...] “Did you take the medication?” “Did you take a shower?” “What are you doing?” It must be every day; you can’t forget about it, or the sadness will come along. (Aries mother)

She always texts me. If I don’t respond right away, within thirty minutes she’ll send about ten messages saying “if you don’t respond, I’ll come there now!” [...] it’s the best way to communicate since I can’t be with her every day, and neither can she be with me. (Virgo aunt)

It is part of the functionality of the family nucleus of people with suicidal behavior to use technology, that is, the use of video calls, audio and text messages to guarantee and continue monitoring their physical and mental health.

Category III: management of the suicidal crisis by families of people with suicidal behavior

I do everything for her. I use therapies, ice, massages, pampering, I put her on my lap and touch her face, I listen, I let her cry and say what she wants. [...] I support everything, I double my support and sleep hugging her. (Libra mom)

I do everything for her. I use therapies, ice, massages, pampering, I put her on my lap and touch her face, I listen, I let her cry and say what she wants. [...] I support everything, I double my support and sleep hugging her. (Libra mom)
With close family interaction, family members learn to use “therapeutic” techniques to manage and control their loved ones’ suicidal crises.

Category IV: family attention to the basic needs of the person with suicidal behavior

When she came to live with me, I realized she was in that serious stage. I looked for a clinic, a therapist, paid for an appointment and took her to the doctor every week. [...] I was the one who brushed her hair, gave her baths, food and took her to the beauty salon. I bought her clothes, shoes, hygiene items and tried to organize her life. (Virgo aunt)

When I bought medicine, bleach, alcohol, something sharp or any cleaning material, I left it locked in the pantry with a padlock. I sewed a pocket into all my clothes to always keep the key with me. [...] when it wasn’t like that, I kept all these things at my neighbor’s, used them and then kept them there again. Everything was dangerous for her. [...] and the immense care was always little. (Leo mother)

In addition to mental health and monitoring suicidal behavior, family members are also responsible for taking care of their loved one’s basic needs, such as intimate hygiene, medication use, bathing and clothing.

DISCUSSION

The results reveal, through the statements of family members, how intense and diverse the functionality of each family nucleus is. This is because there are many ways that each one finds to remain structured and resilient despite the obstacles encountered, including mental illness and the suicidal behavior of one of its members.

Considering the above, one of the ways to keep the family functioning is related to family surveillance. In the reports, this is evidenced when the mother is careful to lock doors and windows, in addition to not sleeping at night when the family member is in the middle of a suicidal crisis. All these actions can be understood as a fundamental resource for maintaining care, assessment, health promotion and disease prevention. Surveillance practiced by the family, when carried out appropriately, can be considered an important strategy to prevent suicide attempts, in addition to providing relevant information that can assist the health professional in welcoming and maintaining care effectively.

As an example of this, we can mention the surveillance model, implemented by Sweden, aimed entirely at preventing suicidal behavior. This strategy, referenced by the World Health Organization (WHO), is structured based on the National Action Plan for Suicide Prevention, with the aim of mitigating the number of suicides in the entire population. This model is responsible for developing coordination and cooperation between relevant health agencies/services, which work with suicide prevention at a national level, in addition to promoting the construction, compilation and dissemination of knowledge and guidance to people at risk for suicide. Suicide and their families, which has been very successful since its implementation in 2016.

Still in this context, despite the effectiveness that previous studies have shown regarding family surveillance, it is still possible to bring a dichotomous perspective on the subject. Surveillance by family members can be considered both a protective factor to prevent the disease, as previously mentioned, and a trigger for negative processes, which are evidenced by overprotection and dependence, which can generate even more suffering. Regarding this aspect, a comparative study carried out in two environments, acute psychiatric care and high school, points out that although overprotection is not
directly associated with suicide ideation or attempts, this affective control is related to suicidal tendencies, i.e., with emotional dysregulation, loneliness and low self-esteem\(^\text{18}\).

Therefore, considering the complexity that permeates suicidal behavior and the urgency to prevent the problem, it is unavoidable to identify other means to exercise surveillance that do not lead to oppression and suffering. In order to promote the maintenance of vigilance, without causing even more suffering, research highlights the need for observation, by family and friends, so that it occurs in a subtle way, involving the identification of possible changes in behavior, mood, in concentration, quality of sleep, diet, use of medications, as prescribed by a doctor, and interaction with people in social life\(^\text{19}\), whether in person or remotely.

Considering the aspect of physical distance, the study points out that even though they are not physically present, 24 hours and/or every day, family members use daily contact, through text messages and video calls, as a type of surveillance. Regarding this aspect, a reflective study highlights technology, as an action of daily contact, through telephone calls, instant messages, video and voice calls via multiplatform application for cell phones, as an important resource for attention and care for people who present suicidal behavior\(^\text{19}\).

In this way, the use of technology constitutes a care tool that helps to welcome people with suicidal behavior. This is because it is possible to observe some signs that can be identified in the case of suicidal behavior, such as decreased self-care, expressions of suicidal ideas, isolation and changes in mood\(^\text{20}\). Thus, surveillance in parallel with telemonitoring favors the identification of characteristics that can be recognized.

This technology has already been used around the world to reduce the barriers of time and distance, becoming an effective care tool for people at imminent risk to their lives\(^\text{21}\). The care provided through telemonitoring was well evidenced during the Covid-19 pandemic period, which required social isolation to prevent the spread of the virus, which provided the opportunity for the use of virtual communication applications and smartphones between people. This can be corroborated by research carried out by the Ponto BR Information and Coordination Center, which shows that 5.5 thousand Brazilians used Telehealth in 2021\(^\text{22}\). This fact elucidates the growth in the use of technologies during the pandemic period, placing this device in an accessible level in terms of care.

In the meantime, the technologies were presented by the participants of this study as a device that favored welcoming, which enabled the maintenance of family unity and made the family more functional in terms of care. Therefore, this surveillance carried out through cell phones has proven to be a form of prevention regarding suicidal behavior. However, although verbal communication carried out using technology is an important means of meeting relatives’ demands, family members say that physical contact is irreplaceable in managing the crisis.

Managing the care of people in psychological distress requires family members to be willing to exercise physical contact, considered an essential element to mitigate the feeling of loneliness and lack of belonging, since in this situation the individual is weakened and has little ability to evaluate reality\(^\text{23}\), requiring from a support network to a reception that enables a reduction in suicidal thoughts and suffering.

An international study carried out with people with suicidal behavior showed that those who have support networks are less likely to commit suicide\(^\text{24}\). This fact may be related to the bonds that are built between people when they carry out certain activities together, especially those that are considered pleasurable for them, such as watching films, talking, cleaning the house and eating\(^\text{25}\), as reported by family members in this study. Thus, it is possible to see that, because they know each other so much, each family finds within themselves an effective way to alleviate, repair or resolve the situation of the suicidal crisis that affects their family member.
Another example of this dynamic within the family is the daily and basic care mentioned by family members. For example, the study indicates that they experience a daily practice of care in terms of control in the physical environment, in order to make it impossible to access utensils and products present in the domestic environment that may present a risk to the physical integrity of the person with the behavior suicide, as well as drawing attention to the insight developed by family members, to the point of sewing seams in the pockets of their clothes to hide the keys that would give access to toxic products, in order to safeguard their family member. Similar strategies can also be seen in national and international qualitative studies.\(^26\)\(^{-27}\)

Furthermore, the study also shows that family members show concern about food, intimate hygiene and the well-being of their loved ones, as exemplified by Virgo’s aunt. Based on another study carried out with family members of people with suicidal behavior, it is briefly mentioned that care in relation to the person’s basic needs occurs mainly after the suicide attempt, but can last if necessary.\(^26\),\(^28\). In a published reinterpretation of the Self-Care Theory, by Dorothea Orem, it is possible to highlight the importance of patients independently carrying out self-care in their daily lives to enable them to take responsibility for their treatment.\(^29\). This also applies to people in psychological distress and with suicidal behavior.

Thus, the statements show that the strategies used cross the family nuclei of people with suicidal behavior and trigger changes in the internal organization. Therefore, once we understand how each family rebuilds itself in the face of adverse life situations, it is possible to mainstream surveillance actions, daily contact, management of suicidal crises and attention to basic needs, to guarantee the safety of people with behavior suicide and the continuity of a functional family structure.

The research had limitations regarding the number of families interviewed. This is related to the locus of the research, as it is the only specific Center for the Study and Prevention of Suicide linked to a Toxicological Information Center in Brazil, with limited professionals for comprehensive care, as well as the refusal of some family members throughout the research.

**FINAL CONSIDERATIONS**

The study revealed aspects that permeate strategies that ensure the functionality of the family of people with suicidal behavior. These involve surveillance by family members of the person with suicidal behavior; use of technologies by family members for daily contact with the person with suicidal behavior; management of the suicidal crisis by family members of the person with suicidal behavior and the attention of family members to the basic human needs of the person with suicidal behavior.

Thus, bringing some of the aspects that guarantee the functionality of the family of people with suicidal behavior, it is possible to point out directions to be followed for the care and monitoring of these family members. Going further, there are also ways to implement health policies and manuals that encourage guidance from family and friends in managing a suicidal crisis, what to do and how to do in these situations, thus avoiding undesirable consequences, such as attempted suicide and the act was carried out.
ACKNOWLEDGMENTS

“The present study was carried out with support from the Bahia State Research Support Foundation (FAPESB), notice 003/2017 of the Research Program for SUS: Shared Management in Health – PPSUS/BA – FAPESB/SESAB/CNPQ/MS.

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Functional assessment in families of people with suicidal behavior: application of the Calgary model


[Internet]. 2015 [cited 2023 Aug. 10]; 64–75. Available from: https://doi.org/10.19132/1807-8583201533.64-75


Received: 11/08/2023
Approved: 19/09/2023

Associate editor: Dra. Susanne Betiolli

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ISSN 2176-9133

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