# Surviving Suicide: The role of family dynamics in psychiatric disease

Authors:

Sara Castro Ledo Sananda Moctezuma Vega Miren Urrestarazu Larrañaga Ikerne Eguren Santamaria

Director: Dr. Felipe Ortuño Sánchez-Pedreño

Universidad de Navarra

# Abstract

**BACKGROUND:** Suicide is one of the top three leading causes of death among those aged 15 to 44, and worrisomely enough, the rate of suicidal attempts has increased in young people to such an extent that they are now the group at highest risk in a third of all countries. In this sense, research on the influence of family dynamics on suicidal conducts has grown importance in recent years; but, despite having proved its efficacy as a protective element when considered in psychiatric therapy, the role of family has received little protagonism in suicide intervention.

**PURPOSE:** The objective of this review is to raise awareness on the established dichotomous role of family dynamics in the pathogenesis, prevention, and successful intervention for suicide.

**METHOD:** This specific paper examines studies based on factors associated with the significance of family dynamics in suicide death.

**RESULTS:** The results indicate the validity of considering family functionality a key factor in either preventing or facilitating suicide, as well as an effective tool in psychiatric therapy. However, evidence to date shows that families do not play an active role in prevention or treatment of suicidal ideation or attempts.

## Introduction

The World Health Organization estimates that each year approximately one million people take their own lives.

This represents a global mortality rate of 16 people per 100,000, that is, one death every 40 seconds.

In the last 45 years suicide rates have increased by 60% worldwide.

It is predicted that by 2020 the rate of death will increase to one every 20 seconds.

Suicide is now among the three leading causes of death among those aged 15-44 for both male and female.

Suicide is defined as the act of intentionally ending one's life. Nonfatal suicidal thoughts and behaviors are classified more specifically into three categories: suicide ideation, which refers to thoughts of ending one's life; suicide plan, which refers to the formulation of a specific method to achieve death; and suicide attempt, which refers to engagement in potentially self-injurious behavior in which there is at least some intent to die.

According to *the Royal College of Psychiatrists* self-harm and suicide are manifestations of emotional distress and illness which not only cause the individual, their families and friends distress and anxiety but also have a damaging impact on the economy and wider society.

According to *the Eurostat analysis* for the year 2012, Spain accounted for almost 2.3 suicides per 100,000 persons, and United States' most recent official data shows that an average of 1 person every 12.3 minutes killed themselves, becoming the 2nd ranking cause of death in U.S. for young people.

Although suicide rates have traditionally been highest among elderly males, rates among young people have been increasing to such an extent that they are now the group at highest risk in a third of all countries.

Depression and drug abuse are associated with more than 90% of all cases of suicide. However, suicide is the result of multiple complex sociocultural factors and it is more likely to occur during periods of family and individual crisis, like the loss of a loved one.

As we have previously stated, recent epidemiological studies suggest that the prevalence of adolescent suicide attempts is surprisingly high.

Suicide is considered a cry for help, and as such we seek to shine the light of day on the issue, reducing the stigmatic shadow that hovers over a possible path to recovery. As medical students we have come across some research that has demonstrated the protective role of functional families in the care of suicidal individuals, but few studies emphasize on what makes family the best support resource. The study of the influence of psychosocial variables on diseases, both medical and psychiatric, has grown importance in recent years. Among these variables, family dynamics assumes prominence as a factor of great interest [1].

Due to its importance, the concept of family has been described from many different perspectives, based on its multiple facets. Many theories have been developed, and each definition offers its own point of view of what should be considered important as to pinpoint the intimate essence of family.

The 1983 *Charter of the Rights of the Family* presented by the Holy See, states: "the family, a natural society, exists prior to the State or any other community, and possesses inherent rights which are inalienable" (...) "the family constitutes, much more than a mere juridical, social and economic unit, a community of love and solidarity, which is uniquely suited to teach and transmit cultural, ethical, social, spiritual and religious values, essential for the development and wellbeing of its own members and of society." (...) "The family is the place where different generations come together and help one another to grow in human wisdom and to harmonize the rights of individuals with other demands of social life" (...)"the family and society, which are mutually linked by vital and organic bonds, have a complementary function in the defense and advancement of the good of every person and of humanity".

*Cigoli and Scabini*, family scholars at the Catholic University of Milan, project family as a synergistic system where the whole is larger than the simple sum of its parts. "The family's bond lies on the basis of trust and hope, blooming if justice and loyalty are observed." It is in times of hardship when families test these bonds, as they redefine their identity.

When comparing family with other social groups, we may find that one of its main differences lies in its function and time dimension, having no limited time but a continuum of past, present, and future. Its role is not based on efficiency or productivity but rather on the growth of its members and the development of the family as a whole. Furthermore, family can only exist when its members interact with each other, becoming fundamental in an individual's social nature and principles.

Family dynamics allow an individual the subjective sense of belonging, a property that, in the medical field, may facilitate a positive influence on health when going through stressful life situations.

Research has shown that a strong identification with one's family facilitates positive links within the family members, consequently improving one's health. On the contrary, distance and avoiding commitment with family members leads to poor family bonding to the detriment of wellness.

The objective of this paper is to define the role of family as it may become both a risk and a protective factor on suicidal ideation, particularly aimed at contributing to reviewing the existing evidence on the characteristics of a protective family dynamics.

## "Risky" families and "protective" families

Evidence has shown that family functioning is associated to dyadic adjustment. This could be due to the fact that "the family's nucleus is the conjugal coalition" and, therefore, any problem inside the marriage will undoubtedly have an impact on the course of family life. The mere fact of sharing time, space, and resources can be sufficient for creating both agreement and disputes [2].

Thus, it is understandable why families have historically been identified as both a risk and protective factor for suicide. Aside from the known genetic risk for suicide, consisting of familial aggregation of impulsive and aggressive behaviors, there are environmental effects involved with familial suicidal behaviour.

We have to stress the fact that many different methods have been employed to measure family support perceived by patients. Most of the analyses performed have been based on cross-sectional data gathered at one point in time, which does not prevent us from determining the causal order of the events. For instance, *Claes et al.* assessed parental support, by making participants complete a 12-item version of the Relational Support Inventory (RSI). The scale measures aspects of emotional and instrumental support by fathers and mothers separately. Sample items are: 'My mother/father supports me in the things I do', and 'My mother/father explains or shows how I can make or do something'. Each item was rated on a 5-point Likert scale ranging from 'very untrue' to 'very true'. In addition to the absence of temporal sequence, all constructs were assessed through adolescent self-report only and the internal consistency of several measures was relatively low. These studies reveal there is no consensus in the use of reliable instruments to measure family support.

As previously mentioned, in order to make headway in the prevention of suicide, we first need to identify characteristics of potential high-risk families. We will base our approach on three different risk factors that families could have. The first risk factor is the absence or inadequacy of parental support in adolescents suffering from bullying, victimization, and depressive mood, or that have inflicted non-suicidal self-injury. The second risk factor is parental loss during childhood and, thirdly the influence of parental alcohol abuse in their offspring's suicidal behaviour.

Parental support in bullying and victimization, depressive mood and nonsuicidal self-injury in adolescents [3]

*Claes et al.* concluded that almost 21% of adolescents engaged in at least one form of Non-Suicidal Self-Injury (NSSI). NSSI is defined as the deliberate and direct injury of one's own body tissue without suicidal intent, such as scratching, cutting, hitting, and burning oneself. Furthermore, both bullying and victimization increased the risk of engaging NSSI, with evidence showing that depressive mood could be the mediator between bullying and victimization and NSSI.

## Parental support and NSSI

They concluded that adolescents that had attempted NSSI experienced less parental support than adolescents with no evidence of NSSI.

#### **Bullying and victimization with NSSI**

The association between bullying and victimization and NSSI decreased in adolescents who perceived their parents as supportive, exactly opposite to adolescents who perceived their parents as less supportive.

#### Depressive mood and NSSI

In addition, there was a weaker association between depressive mood and NSSI in adolescents who perceived their parents as supportive compared to those who did not perceive their parents as supportive.

#### Bullying and victimization with depressive mood

Finally, the association between bullying and victimization and depressive mood was not influenced by parental support.

By analyzing these results, we can conclude that children who perceive their families as less supportive lack the resources needed to buffer stress and to cope with their depressive mood.

However, not all studies are consistent with the results presented by this research. Some studies have concluded that the association between bullying and victimization and depressive mood did not seem to be moderated by parental support.

## Considering childhood parental loss as a risk factor for suicide [4]

Considered one of the most stressful and potentially harmful life events during childhood, the death of a parent, is experienced by 3% to 4% of children in Western societies. The consequences of parental death in childhood are far-reaching, and suicide risk trajectories may be influenced by early-life conditions. Most children and adolescents adapt to the loss, but some develop preventable social and psychological problems. There is evidence that these bereaved

children have a higher long term risk of developing mental health problems and of committing suicide.

*Mai-Britt Guldin et al.* linked parental death in childhood, irrespective of the cause, with an increased long-term risk of suicide in the bereaved child. Nevertheless, this event does not imply considering family unity as "problematic", since a familiar problem is defined as not being able to cope with certain circumstances that may lead to deterioration of the family's integrity. The mentioned study, shows that the risk of suicide for the offspring was higher for boys than it was for girls: 4 suicides in the bereaved cohort and 2 suicides in the reference cohort, per 1000 boys; 2 suicides in the bereaved cohort and 1 suicide in the reference cohort, per 1000 girls.

Among the bereaved children's group, the highest risk was found among children bereaved by parental suicide; being 3.44 the incidence rate ratio (IRR), yet the risk was also high for children who had a parent who had died of other causes, the ratio in this case was 1.76. Children bereaved by parental death by suicide had an 82% higher risk of suicide than children bereaved by parental death by accident after adjusting for age, country, and sex. Emphasis has to be made on this point, because children who experienced parental death before age 6 had and incidence rate ratio of 2.83, compared to those who experienced their parents' death after reaching 6 years of age, with an IRR of 1.7.

Agerbo E, Nordenftoft M, Mortensen PB (2002) conclude that children who had a mother who died of suicide had a higher risk of suicide attempts compared with children whose father died of suicide [5]. In the present study the data allowed us to establish an increased risk after maternal death. Suicide rates varied depending on the sex of both parents and children. The situation with highest incidence was maternal death in boys, with an IRR of 2.52. Other situations such as maternal death in girls, paternal death in girls, and paternal death in boys, had lower incidence ratios: 2.10, 1.99 and 1.84, respectively. Evidence has also shown that suicide incidence changed as the sibling order did. First-born children had 2.22 incidence rate ratio, while second-born and later born offspring did not reach those incidences.

The latest contrasts the findings of a more recent cohort study (*Geoffroy MC et al.* 2014), which reports an increased risk of suicide among later-born children. The underlying mechanism for an association between birth order and risk of suicide after parental death is still unknown [6]. We believe that this difference might be explained by a number of first-born children being thrust into a parental role and by the fact of children classified as first born not being the only child in the family, circumstances that might increase their vulnerability to familial loss.

## The influence of alcohol abuse in family setting [7]

Extensive evidence ties parental alcohol abuse and suicide behaviour in their offspring. In a study of 3401 female adolescent twins, *Glowinski et al.* found that 46.1% of subjects reporting suicide behaviour (n=143) had at least one alcohol-dependent parent. However, *Gould and colleagues, and Christoffersen and Soothill*, did not find associations between parental alcohol abuse and suicide behavior [8, 9]. In addition to this, *Statham and colleagues* have also found a link between the gender of the drinking parent and offspring suicide behaviour; reporting highly significant associations between maternal alcoholism and suicide attempts, and slightly smaller associations between suicide attempts and paternal alcoholism. Yet, not all studies are consistent with these results; some studies have reached the conclusion that offspring suffered less impact when it was the mother, rather than the father, who abused of alcohol.

According to *T Mackrill & M Hesse*, 13% of adult children of alcoholics (ACAs) reported threats of committing suicide during their childhood, 15% of ACAs reported attempting suicide and 6% reported both attempting and threatening suicide. A surprising and concerning finding was that 54% percent of those who reported attempting suicide had done so without previously threatening suicide.

# Conclusion

Taking into account the studies mentioned, cataloguing "functional" families as a protective factor for patients that have a suicide ideation becomes an almost obvious statement. However, even if we can consider certain families as successful in reducing suicide attempts, it is much too audacious proposing these particular families as the ultimate social goal.

Firstly, the data analyzed suggests the cost-efficacy of identifying and treating patients at risk of suicide with a familiar approach. Psychiatric research, particularly during this last century, has showed interest in the role of family in the etiology, evolution, treatment and prevention of psychopathological disorders. By focusing on understanding familiar atmosphere, clinicians have worked on several theories and treatment strategies, each of them centered on a different aspect of family conflicts. This is how family therapy has nowadays become, more than a psychotherapeutic school, a new way of considering human behaviour and understanding it mainly in its interpersonal aspects.

The most important theoretical model of family therapy is the *theory of family systems*, which was first developed in the 1950s. According to this theory, family is understood as a group of members that act as a unique foundational group. In this manner, the heart of the therapy lies not only in knowing which was the causal aspect of pathology in one of the family members, but also focusing on the family processes that are potentially pathological [10].

Ackerman's definition of family (1958) results particularly interesting: "The family is the basic unit of growth and experience, self-development and failure".

Consequently, it is also "the basic unit of health and disease" (*Bloch et al.*, 1994).

This integrating model has been used over the last decades. However, our review reveals that there are many pathologies, including the ones considered risk factors for suicide, in which the association with family functioning is not yet considered. The result is that the appropriate therapies are failed to be applied. Furthermore, some of the studies mentioned do not underline family intervention as a valid method for treatment and prevention.

*Grant et al.* state that in clinical practice the process of empowering individuals (in this case the family caregiver) involves partnership between the provider and the family to identify the family's abilities, resources, and strengths. Thus, the process of recognizing the family's unique strengths, accessing resources, working with a mental health provider, and gaining some control over a particular situation are all necessary elements for a caregiver faced with the suicidal crisis of a loved one. This study underlines the importance of the education of family caregivers taking care of patients with suicide risk and gives a possible model of caregiver empowerment: a conceptual model for a prepared family caregiver course called COPE (creativity, optimism, planning and expert information). *The COPE caregiver preparedness model* includes education on problem-solving techniques associated with COPE information, and emphasizes collaboration between caregivers and providers. The COPE model is discussed in the second edition of the *American Cancer Society Complete Guide to Family Caregiving*.

In summary, *creativity* involves the need for caregivers to think creatively about how to overcome a challenge in caring for a family member. In this way, brainstorming, managing expectations, and exploring solutions with someone outside the situation (the mental health professional), the family members are stimulated to use what they know about their loved one under the guidance of an expert. In addition, realistic *optimism* is encouraged so that the family gains confidence that they may overcome the conflict. Setting reasonable objectives, for both the caregiver and the vulnerable family member also helps them deal with the pathology. *Planning* consists in obtaining facts about a situation, identifying a problem in detail, and clarifying what makes the situation a problem. Once this information is gathered, the caregiver works with the family member and a provider to establish an individualized caring plan. However, *expert information* is what makes the COPE model reliable. This last aspect refers to the need of knowing what the caregiver can and cannot do, and recognizing when professional care is required.

Originally designed for families caring for someone with cancer, the model has been applied to other medical problems such as end of life care (2011), transplant (2010), and pain management (1999). According to one of the lead authors of COPE, 2014 was the first time the model was applied to suicide prevention efforts. This is another sign of family implication still being pushed into the background.

In addition, using the analyzed data to define what a family should be like would be an interesting proposition. However, the concepts of health and normality are not easy to define for a single individual, and it becomes a greater challenge to do so for a family. We understand that by proposing a simplified model of family we may risk not being able to transmit the true richness and diversity that compose this institution.

As before mentioned, the definition of family we have pursued has a particular characteristic that makes a significant difference between the families who are able to solve everyday problems and those who are not. This distinctive feature is to allow flexibility and ability to comfortably manoeuvre in times of distress. In relation to this, *Walsh* (1993) stated several characteristics of families that may define them as functional:

- 1. Unity and commitment feeling that ensures unconditional support.
- 2. Respect of the differences, autonomy and self-needs of the different members and facilitating self-development and the well-being of all the generations.
- 3. In couples, a relation based on respect, support and a similar distribution of the authority and the responsibilities.
- 4. Parents' authority and leadership.
- 5. Organization with clearness, consistency and predictable interaction patterns.
- 6. Adaptability: flexibility to satisfy other members' needs that imply changes (stress situations, the transitions of the life cycle, etc.).
- 7. Open communication with known rules and pleasant interaction.
- 8. Effective processes for problem' solving.
- 9. Shared view of life that enables familiarity, principles and interest in society in the broadest sense.
- 10. Economic and psychosocial support resources that ensures the wellbeing of all members.

There is a need to gradually orienting society towards setting its base on the strongest social group: family. There is still much work to be done to reach this goal. One of the aspects where we consider that more studies are necessary is in designing *family educational programs* and analyzing the results after their application. The educational programs should include tools for family members to identify signs of disease, avoiding "taboo" topics within the family, and improving communication abilities. This opens the way to future prospective cohort or case-control studies.

# References

**[1]** Halvorsen JG (1991) Self-report family assessment instruments: an evaluative review. Fam Pract Res J 11:21–55

**[2]** Martín Lanas R. Validación de la Escala de Ajuste Diádico (Dyadic Adjustment Scale (DAS)) en población española [doctoral thesis]. Pamplona: Universidad de Navarra; 2015.

**[3]** Laurence Claes, Koen Luyckx, Imke Baetens, Monique Van de Ven, Cilia Witteman. Bullying and Victimization, Depresssive Mood, and Non-Suicidal Self-Injury in Adolescents: The Moderating Role of Parental Support. Journal of Child and Family Studies. 2015; 24: 3363-3371.

**[4]** Mai Britt Guldin, Jiong Li, Henrik SØndergaard Pedersen, Carsten Obel, Esben Agrebo, Mika Gissler et al. Incidence of Suicide Among Persons Who Had a Parent Who Died During Their Childhood. A Population-Based Cohort Study. Jama Psychiatry. 2015; 72 (12): 1227-1234.

**[5]** Agrebo E, Nordentoft M, Mortensen PB. Suicide among Young people-familiar, psychiatric and socioeconomic risk factors: a nested case-control study [in Danish]. Ugesker Laeger. 2002; 164 (49): 5786-5790.

**[6]** GeoffroyMC,GunnellD,PowerC.Prenataland childhood antecedents of suicide: 50-year follow-up of the 1958 British Birth Cohort study. PsycholMed. 2014; 44(6):1245-1256.

**[7]** Mackrill T, Hesse M. Suicide behavior in parents with alcohol abuse problemas and suicide behavior in their offspring- Adult offspring and counselor perspectives. Nord J Psychiatry. 2012; 66: 343-348.

**[8]** Gould MS, Fisher P, Parides M, Flory M, Shaffer D. Psychosocial risk factors of child and adolescent completed suicide. Arch Gen Psychiatry. 1996;53:1155 – 1162.

**[9]** Christoffersen MN, Soothill K. The long-term consequences of parental alcohol abuse: A cohort study of children in Denmark..J Subst Abuse Treat 2003;25:107 – 116.

**[10]** Barroilhet Díez S. Factores de riesgo, psicopatología y dinámica familiar en la distimia [doctoral thesis]. Pamplona: Universidad de Navarra; 2004.

**[11]** Moyá Querejeta J. Estudio del grado de adaptación y satisfacción conyugal en pacientes deprimidos [doctoral thesis]. Pamplona: Universidad de Navarra; 2005.