

## Suicide risk factors among the elderly

### Factores de riesgo suicida en el anciano

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**Abstract** *The author offers a brief overview of suicide risk factors among the elderly such as depression, all manner of abuse of the elderly, as well as medical, psychological and social risk factors, etc. By way of conclusion, a practical guide to evaluate suicide risk among the elderly is provided.*

**Key words** *Suicide risk factors, Elderly people, Practical guide*

**Resumen** *El autor expone brevemente los factores de riesgo suicida en la vejez, entre los que se mencionan la depresión, el abuso en cualquiera de sus formas de presentación, los factores médicos, psicológicos, sociales, etc. Finalmente se ofrece una guía práctica para evaluar el riesgo de suicidio en el anciano.*

**Palabras claves** *Factores de riesgo suicida, anciano, guía práctica*

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## Introduction

Despite public interest in youth suicide and the extensive research regarding this phenomenon, suicide among the elderly is a significant cause of death. The elderly are the fastest growing segment of the population, therefore the absolute number of suicides in this group will continue to increase and it is expected to double by 2030, which makes it necessary to improve awareness of risk factors in old age in order to mitigate this prediction to some extent<sup>1,2</sup>.

This article focuses on risk factors, taking into account the contributions of the international literature on the subject, and above all, the author's experience studying suicide prevention.

## Development

It is known that suicidal behavior in the elderly has the following distinctive features: (1) Fewer suicide attempts than youngsters – for each senior that commits suicide, four have attempted it, while for each youngster who commit suicide, two hundred have tried. In the general population, for every suicide, there are 15 to 20 suicide attempts, a ratio that is greater than that observed in old age. (2) Use of lethal methods (85% of suicides in elderly men is carried out by hanging; firearms and falling from high places). (3) Fewer and harder to detect warning signs. (4) Suicidal acts that are not impulsive, rather considered, performed after a careful process of contemplation. (5) Possibly manifested as a passive suicide (refraining from eating in order to eventually die).

It is very important that family physicians, geriatricians and family members know the specificities of suicide communication in old age, as it has distinctive characteristics and differs from those seen in childhood, adolescence and adulthood. It is common for the elderly to express their suicidal intentions by affirming they are a burden to others, and that they do not wish to remain so, and that the others would be better off if they were dead. They believe they have already lived too much, that it makes no sense to continue living, and that they do not want to cause more trouble to their loved ones.

Other components of frequent suicidal behavior in other stages of life, such as threats, actions, suicide attempts and accidental suicide are rare in old age, while failed suicides, considered as such, are common and not unusual – that is, suicidal acts that do not result in death due to a

combination of fortuitous, casual and unforeseen circumstances. Along with intentional suicides, they are the most frequent manifestations of suicidal communication among the elderly<sup>3,4</sup>. One way to communicate their suicidal intention takes on non-suicidal forms, such as lying in bed and refraining from eating, interrupting therapeutic regimens – as a veiled attempt to cause death from the health complications that these actions bring about – or even failing to inject insulin – in the case of insulin-dependent diabetics –, not taking antihypertensive medicines – in the case of those suffering from severe hypertension –, and isolating themselves – as Inuit elders who decide to leave their loved ones to die of cold and refuse to contribute to more consumption without helping the family<sup>5-8</sup>.

In general, the elderly commit suicide by using readily available and highly lethal methods, especially hanging, falling, gunshot, ingesting agricultural toxic products and carbon monoxide poisoning. These suicides are carried out with apparent logic and this earns them the qualification of “rational suicide”, a term used to define those that occur in the absence of mental illness, as a so-called manifestation of the individual's freedom to choose his/her own death, especially in those situations where life offers no alternative. Thus, these acts are believed to display high intentionality and a rational motivation; however, a trained observer can notice a background depression in most cases.

Moreover, suicide pacts between elderly couples that are depressed are not uncommon, nor are murder-suicide situations in which the perpetrator has presented relevant depressive manifestations.

The following are the most common forms of direct verbal suicidal communication commonly observed in the elderly. These are all expressions heard in psychological autopsy studies:

- . Saying they think about killing themselves
- . Saying they have the desire to die
- . Saying they don't want to go on living
- . Saying others would feel better if they didn't exist
- . Saying life is not worth it
- . Saying they want to kill themselves
- . Saying it's better to be dead than alive
- . Saying they want to perish, once and for all
- . Saying they don't want to continue being a burden to others
- . Saying it is not worth living
- . Saying that they would like to go to sleep and never wake up

- . Saying they are tired of life
- . Saying that others won't have to tolerate them much longer – common in suicidal crises that occur in the context of family disputes.

- . Threatening to commit suicide
- . Expressing the desire to rest from all
- . Saying they would not like to cause trouble to their family
- . Saying no one would miss them
- . Considering help useless and a waste of time

Regarding the direct non-verbal suicide communication among the elderly, the following behavior can be observed:

- . Looking for ways to commit suicide
- . Organizing their business
- . Giving away their valuables
- . After an agitated period, becoming calm in a way that is consistent with the end of anguish, feeling internal peace and calm. This should be understood as a sign of great suicide risk, because of the resolution of the conflict between the desire to live and to die, favoring the latter (calm before the storm)

- . Hiding the method to be used to commit suicide (carrying around a rope, buying a gun, etc.)

- . Going to the chosen place to commit suicide
- . Writing letters describing what would be done or leaving farewell notes

- . Insisting on writing a will without any manifestation of a terminal medical condition that would justify it

- . Taking on a passive suicide (staying in bed and refraining from or refusing to eat, asking to be left alone in order to die in peace)

- . Becoming very demanding in regard to attention, presenting a highly histrionic behavior as a desperate and primitive way to ask for help
- . Having a failed suicide.

Aging brings along the end of a career or other objectives, the reduction of physical strength, the change in sensual pleasure and the awareness of death unknown in previous stages of life. Seniors do not always show symptoms because they fear the diagnosis of a serious illness or because they accept their complaints as part of the aging process. Among the physical problems that the elderly face are arthritic conditions, which affect their movements; cardiovascular diseases, which limit physical exercise; neurological diseases, which affect intellectual activity; and cancer, which causes pain and dependence<sup>9-12</sup>.

Emotional problems afflicting the elderly include depression, which is the most common mental problem in old age and the best predictor of suicide

among the elderly. It is believed that two-thirds of geriatric suicides are associated with depression, which can be expressed the following ways:

***Depression that occurs as a seemingly normal aging process*** - In this case the elderly person loses interest in things that used to get their attention, as well as vitality and willpower. They also tend to relive the past, lose weight and have troubled sleep patterns. Some complain about lack of memory and tendency to isolation, and spend most of the time in their bedroom. (For many people this is consistent with old age and not a treatable depression).

***Depression that occurs as abnormal aging*** – Seniors experience varying degrees of disorientation regarding place and time and involving themselves and others. Familiar people are mixed up, and the elderly person is unable to recognize places. Capacities and habits worsen and the individual presents sphincter relaxation, that is, urine and bowel movements become uncontrolled; abnormal walking occurs, suggesting a cerebrovascular disease, and behavioral disorders can also be noticed, such as refusal to eat, emotional lability, and others. (For many people, this is consistent with irreversible dementia and not a treatable depression).

***Depression that occurs as a physical, somatic or organic condition*** – The senior complains about multiple physical symptoms, such as pain in the back, legs and chest and headaches. He/she may also mention digestive problems, such as slow digestion, heartburn, stomach fullness without having ingested food that would justify the feeling; and frequently take laxatives, antacids and other medications for their gastrointestinal troubles. The individual also refers to loss of taste, appetite and weight, and present cardiovascular issues such as palpitations, tightness, shortness of breath, and others. (For many people this situation is consistent with a disease of the body and not a treatable depression).

***Depression that occurs as a non-depressive psychiatric illness*** - The elderly person affirms that he/she is being followed or watched, that someone wants to kill him/her and that the police will come to arrest him/her, and these ideas are part of a paranoid constellation. However, when asked why this is happening, a delusional depressive component emerges, and they say they are “responsible for all ills in the universe, he/she deserves this and has to pay for all his/her fault and for all the atrocities of the past”.

***Depression that occurs as a depressive psychiatric illness*** - The elderly person demonstrates

sadness, little desire to do anything, persistent suicidal ideation, ideas of worthlessness and self-reproach, loss of self-esteem, mental and motor slowness, troubled sleep and appetite, neglect of personal hygiene and anguish<sup>1-3</sup>.

Other factors can be added to a depression in old age, such as social pressure resulting from retirement, dependence, death of loved ones, relatives or friends and loss of economic security, all increasing the risk of suicide. As is evident, there are many conditions inherent to aging that create a breeding ground for the manifestation of self-destructive behavior<sup>2</sup>.

Attempted suicide among the elderly is a serious problem, since in the majority of cases they are actual failed suicides due to their high degree of premeditation, lethal methods employed, co-existence of physical illness, particularly chronic obstructive lung disease or gastrointestinal and skeletal muscle disorders, as well as certain untreatable physical symptoms, especially pain or shortness of breath.

One should always bear in mind that somatic symptoms may be a sign of depression, since depressed seniors tend to downplay sadness, often considered an inherent aspect of aging, and complain mostly about physical symptoms – “something is wrong with my health” – considering themselves physically ill. This results in frequent visits to interns or primary care physicians and delays the start of an effective and specific antidepressant treatment. Doctors unfamiliar with this condition might not diagnose it early, which may facilitate the emergence of the risk of suicide during the alleged physical illness. Failing to obtain an improvement with the treatments prescribed, the elderly person might begin to think that their disease is malignant and will cause prolonged agony and thus choose suicide to avoid the suffering that he/she foresees.

Biological signs of depression such as insomnia, weight, appetite and energy loss, heartburn, acidity, slow digestion, constipation, palpitations, chest pain, myalgia, arthralgia, back pain and lower back pain are attributed by the elderly, as stated previously, to physical illness, so if the physician is not familiar with this form of presentation of mood disorders, a non suicidal depression may become a suicidal one due to the lack of specific antidepressant treatment.<sup>3,4,13-16</sup>

Another risk factor for suicide in old age is the abuse to which many seniors are subjected. There is a close relationship between poor physical health, suicidal behavior and a situation of abuse. By definition, elderly abuse is considered

to be “a single or repeated act, or lack of appropriate care, occurring within any relationship where there is an expectation of trust and that causes harm or distress to an older person.” It can take place in many different ways, among which are physical, psychological, sexual, economic, emotional abuse or omission, neglect or negligent care. Family members and caregivers who have a history of violence and antisocial behavior perpetrate elder abuse. Mental illness and substance abuse predispose family members to abuse their elders, however, the abuse is easily recognizable to an alert doctor, who can notice injury at various stages of development and identify vague or imprecise explanations for evident lesions. Other manifestations that may suggest the existence of elder abuse are: (1) delay between the occurrence of the injury or onset of the illness and seeking medical care; (2) differences between the stories provided by the elderly and potential perpetrators or offenders; (3) frequent visits to doctors due to worsening of chronic disease despite having an effective treatment plan; (4) anxiety, confusion, depression, suicidal ideation and suicide attempts may be the responses of a senior to physical or psychological abuse.

Based on the above, it can be said, in essence, that the risk factors for elderly suicide fall into the following categories:

**Medical factors** - (a) chronic, terminal, painful, disabling, incapacitating diseases, such as senile dementia of the Alzheimer type, Parkinson's disease, neoplasia, diabetes mellitus complicated by retinopathy or neuropathy, congestive heart failure, chronic obstructive pulmonary disease; (b) recurring hospitalization of the elderly person and frequent surgeries, mainly of the genitourinary or gastrointestinal tract; (c) pro-depressive treatments used to counteract diseases that commonly affect the elderly (digitalis, propranolol, indomethacin, methyldopa, etc.); (d) pro-depressive diseases such as arteriosclerosis, dementia, carcinoma of the pancreatic head and others.

**Psychiatric factors** - This category includes depression of any kind, alcohol and drug abuse, chronic sleep disorders, delusional paranoid psychosis with great agitation and mistrust and confusion.

**Psychological factors** - Feelings of loneliness and uselessness, inactivity, boredom, lack of life projects and tendency to relive the past.

**Family factors** - (a) losing loved ones by suicide or natural death; (b) the first year of widowhood is a critical time for the elderly, which can

bring about the so-called passive self-destruction, in which the life event triggers a depression that affects the immune system and makes way for the development of physical illnesses, especially infectious ones that can ruin the lives of the elderly, (c) the “ping pong” grandparent situation that occurs when the elderly person is forced to migrate, being moved from one residence to another for the convenience of the family and at the expense of his/her comfort, privacy and stability; (d) admission to a nursing home, during the adaption stage or when against the senior’s will, which often reactivates previous events of abandonment and may precipitate a suicidal act.

**Social and environmental factors** - (a) retirement; (b) social isolation; (c) hostile, derogatory or disparaging attitude of society towards se-

niors; (d) the competition of the younger generations; (e) loss of prestige<sup>17-23</sup>.

To finish this paper, we propose a Practical Guide that has been validated by use since 1995 in primary health care in Cuba and that has been part of the National Suicide Prevention tools since 2005. The main goal of this Guide is to provide primary care physicians a user-friendly tool that can help them recognize when a senior is having a suicidal crisis situation and timely refer the individual to specialized mental health services for an early evaluation. Its continued use assists primary care physicians in understanding common clinical manifestations at this stage of life that require prompt referral to a psychiatrist, so that the risk of suicide can be adequately evaluated (Chart 1).

**Chart 1.** Factors associated to elderly suicide

Item	Score
1. Uncooperative attitude of the senior during the interview	2 points
2. Having a physical illness that has required frequent hospital admissions and prolonged treatment	2 points
3. Having a mental illness	3 points
4. Personal history of attempted suicide	3 points
5. Family history with suicidal behavior	1 points
6. Senior living alone	2 points
7. Wishing to rest from all, not being a burden to others and feeling that he/she won't be missed	4 points
8. Expressing suicidal ideas or plans	5 points
9. Behavioral changes in the form of isolation, aggressiveness, restlessness and frequent crying evolving in just a few days	3 points
10. Refusing help because they consider it useless, a waste of time, despite maintaining a proper attitude in the interview	5 points

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