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SUICIDE STUDY: A PSYCHOLOGICAL AUTOPSY

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Suicide Study

A Psychological Autopsy

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ABSTRACT

Suicide is, nowadays, a public health problem. A million dies annually by suicide worldwide. According to several agencies and organizations an estimation of 20 to 40 suicide attempts is advanced for each complete suicide. Associated costs to suicide, both human and economic, are huge and spread on family, jobs, economy, and finances. Official available figures for suicide in Portugal indicate a rate slightly over 10 for each 100 000 inhabitants, but with regions where one can actually find extremely high rates, like for instance in the Southwest part of the country, where are regularly found rates 3 times higher, when compared to national average.

We have investigated the phenomenon aiming to validate the technique of psychological autopsy in a community context never explored before in Portugal and to contribute for a wider understanding of this public health problem, especially in this region of Odemira. Psychological autopsy consists into a detailed gathering of information about the personality and life of someone died in equivocal circumstances (suicide, homicide, accident), registries and other documentation as well as interviews with family members, co-workers and friends. An adaptation of a semi-structured interview was made. Two groups of participants were recruited: a group of relatives of people committing suicide (n=30), and a group of relatives of people whose death was after natural causes (n=24). Study was made in 3 moments with presentation sessions; (i) preparation sessions; (ii) interviewing data collection and monitoring (iii).

Main results showed difficulties to obtain information from interviewees, most suicides were from males over 40 years old, affected by serious illness or severe injury in adulthood but valid to work, retired, living in family, with bitterness, sad or pessimistic as personality traits, with few leisure activities, without significant health somatic problems or mental disorders, communicating intention to die previously, coming from families with no indication of financial distress or inadequate family relationship.

Taking into account the literature it looks like some features seem to be quiet particular from this population. Apparently one might say that suicide could have genetic implications which further research should account in the future.

Integration of mental health into primary care is urgent once the scarcity of mental health professionals is enormous in a part of the country where most suicides occur. Scaling up services must go in order to address to treatment gap and social determinants of health should be taken into account to face isolation.

Results show that the profile of the suicidal in the region of Odemira is particular and implications of genetics should be taken into account. Moreover much can be done in organization of services in the region where we performed the present study in order to address to treatment gap for mental disorders and to the social determinants of health.

RESUMEN

El suicidio es actualmente un problema de salud pública. Se estima que un millón de personas muere anualmente debido al suicidio. Según varias agencias y organizaciones se calcula que ocurran entre 20 a 40 intentos de suicidio por cada suicidio realizado. Los costes asociados al suicidio, tanto humanos como económicos son enormes y se extienden a la familia, empleo, economía y finanzas. Los números oficiales del suicidio en Portugal indican una tasa ligeramente superior a 10 por 100 000 habitantes, pero incluyendo regiones donde son observadas tasas muy elevadas, como en el suroeste de Portugal donde se observan regularmente tasas 3 veces superiores a la media nacional.

Se investigó el fenómeno con el objetivo de validar la técnica de la autopsia psicológica en contexto ambulatorio, que nunca se realizó en Portugal, para dar un contributo que facilite una comprensión más alargada de este problema de salud pública, especialmente en la región de Odemira.

La autopsia psicológica consiste en reunir detalladamente información sobre la personalidad y vida de alguien que muere en circunstancias equívocas (por suicidio, homicidio o accidente) recurriendo incluso a registros y documentación, además de proceder a entrevistas con familiares, compañeros o amigos.

Fue realizada una adaptación de una entrevista semi-estructurada para el efecto. Fueron contactados 2 grupos de participantes: un grupo de familiares de personas que cometieron suicidio (n= 30) y un grupo de familiares de personas que murieron de causas naturales (n= 24). El estudio tuvo lugar en 3 momentos con sesiones de presentación (i), sesiones de preparación (ii) y entrevistas para la obtención de información y monitorización.

Los principales resultados muestran que existieron dificultades en la obtención de la información a partir de los entrevistados, la mayoría de los suicidas eran hombres con más de 40 años de edad, padeciendo lesiones o enfermedades graves en el periodo adulto, aunque presentaban condiciones válidas para trabajar, jubilados, viviendo en familia, con trazos de personalidad de tipo depresivo, tristes o pesimistas, con escasa actividad en los tiempos libres, sin problemas somáticos significativos o trastornos mentales que comunicaron la intención de morir previamente y provenientes de familias sin dificultades económicas o relaciones familiares desadecuadas.

Según la literatura, algunas características parecen ser muy particulares de esta población. Aparentemente el suicidio podrá tener implicaciones genéticas que deberían ser consideradas en futuras investigaciones.

La integración de la salud mental en la atención primaria se presenta urgente, teniendo en cuenta que la escasez de profesionales de salud mental es enorme en una parte del país donde ocurre el mayor número de suicidios. Cambiar de modelo y reorganizar los servicios de forma a poder responder al deficit de tratamiento de salud mental y tener en cuenta los determinantes sociales de la salud para luchar contra el aislamiento es fundamental.

RESUMO

O suicídio é atualmente um problema de saúde pública. Estima-se que um milhão de pessoas morra anualmente devido ao suicídio. De acordo com diversas agências e organizações estima-se que ocorram entre 20 a 40 tentativas de suicídio por cada suicídio consumado. Os custos associados ao suicídio, quer humanos quer económicos são enormes e estendem-se à família, emprego, economia e finanças. Os números oficiais do suicídio em Portugal indicam uma taxa ligeiramente acima dos 10 por cada 100 000 habitantes mas comportando regiões onde são observadas taxas muito elevadas, como no Sudoeste de Portugal onde se observam regularmente taxas 3 vezes acima da média nacional.

Investigámos o fenómeno com os objetivos de validar a técnica de autópsia psicológica em contexto comunitário nunca realizado em Portugal, e dar um contributo para uma compreensão mais alargada deste problema de saúde pública, especialmente nesta região de Odemira. A autópsia psicológica consiste em reunir detalhadamente informação sobre a personalidade e vida de alguém que morreu em circunstâncias equívocas (por suicídio, homicídio ou acidente) recorrendo ainda a registos e documentação, bem como procedendo a entrevistas com familiares, colegas ou amigos. Foi feita uma adaptação de uma entrevista semi-estruturada para o efeito. Foram recrutados 2 grupos de participantes: um grupo de familiares de pessoas que cometeram suicídio (n=30) e um grupo de familiares de pessoas que morreram de causas naturais (n=24). O estudo decorreu em 3 momentos com sessões de apresentação (i), sessões de preparação (ii) e entrevistas para recolha de informação e monitorização.

Os principais resultados mostram que existiram dificuldades na obtenção da informação a partir dos entrevistados, a maioria dos suicidas eram homens acima dos 40 anos de idade, afetados por lesões graves ou doenças graves no período adulto embora apresentassem condições válidas para trabalhar, reformados, vivendo em família, com traços de personalidade amargurados, tristes ou pessimistas, com escassas atividades nos tempos de lazer, sem problemas somáticos significativos ou perturbações mentais que comunicaram a intenção de morrer previamente e provenientes de famílias sem dificuldades económicas ou relações familiares desadequadas.

Tendo em conta a literatura, algumas das características parecem ser muito particulares desta população. Aparentemente o suicídio poderá ter implicações genéticas que deveriam ser tidas em conta em futuras investigações.

A integração da saúde mental nos cuidados de saúde primários afigura-se urgente tendo em conta que a escassez de profissionais de saúde mental é enorme numa parte do país onde ocorre o maior número de suicídios. Mudar de modelo e reorganizar os serviços de forma a poder dar uma resposta ao défice de tratamento de saúde mental e ter em conta os determinantes sociais da saúde para fazer face ao isolamento é fundamental.

*To be, or not to be: that is the question:
Whether 'tis nobler in the mind to suffer
The slings and arrows of outrageous fortune,
Or to take arms against a sea of troubles,
And by opposing end them? To die: to sleep;
No more; and by a sleep to say we end*

William Shakespeare, Hamlet

CHAPTER ONE (1): Definitions and evolution of the concept of Suicide

First things first, the definitions must come forward, and defining suicide is the proper way to begin this thesis. The words of Edwin Shneidman (1985) couldn't be better addressed when he stated that "the genesis of wisdom lies in the clear and distinct ideas: In the beginning is the definition". And that is precisely what we are going to do now.

According to Shneidman (1993), "Suicide is a complex malaise". And he pointed out some different perspectives coming from other fields of knowledge about suicide: "Sociologists have shown that suicide rates vary with factors like war and unemployment; psychoanalysts argue that it is rage toward a loved one that is directed inward; psychiatrists see it as a biochemical imbalance. No one approach holds the answer: It's all that and much more".

In fact, the so-called father of modern suicidology, captured the problem of suicide as a confluent never ending cross of variables. Suicide is associated to a wide number of variables and its concept has changed over time as we shall see ahead. But what matters now is to characterize the type of self-inflicted death studied in this thesis.

Self-inflicted death comes in many ways and forms, and featuring the one kind studied here is therefore a must. The type of death and the concept of suicide to be studied in this thesis do not include physician assisted death, euthanasia, or some kind of self-inflicted death to terminally ill patients in the way, for instance, the American pathologist Jack Kevorkian¹ did it.

It is neither sustained on religious grounds, nor on fundamentalist grounds, in order to achieve previously settled objectives, like Tibetan monk, as an example, did, and still do sometimes, by self-immolation in a "suicide protest" in order to achieve the homecoming of the 14th Dalai Lama in exile since 1959; or

¹ Jack Kevorkian (1928-2011) was an American pathologist that helped terminally ill patients to end their lives through physician-assisted death. Some 130 patients were pointed out as people Kevorkian helped to die in the 1990's (Schneider June 3, 2011).

terrorists do, whether hijacking airplanes or other radical attitudes, to reach their objectives by spreading terror.

Also, the type of suicide in this thesis is within no kind of selective deaths that are determined by extreme circumstances: for instance, when someone chose to die by hypothermia, or burned to death, if and when circumstances determine so. People jumping from the Twin Towers, in New York on September 11, fleeing from fire chose between burning to death and falling down. Rommel in World War II chose death to preserve his family lives².

It is neither an indirect suicide³ that may happen when people, in a less obvious way than in overt suicide, behave in a way that life expectancy is shortened, like smoking, taking risks driving or ignoring medical advising. Nor is a murder-suicide sequence, when someone kills someone committing suicide afterwards.

Moreover, does not concerns to suicide attempts and para-suicide, whose outcomes are the same in practice, coming to an end in which people survive⁴ (Santos 2007), as well as suicidal ideation, when ideas of self-death are present, are not included in the aim of this study.

1.1. Definitions of Suicide

The National Task Force on Suicide in Canada defined suicide as “intentional self-inflicted death” (1987, 1994).

² Erwin Johannes Eugen Rommel was a German Field Marshall of the 7th Panzer Division during World War II known as the ‘desert fox’. He was found to have previous knowledge of the July 20 Plot on Hitler’s life. He was threatened with public trial, execution as well as reprisals to his family unless he took his life. He did it with a cyanide pill (Brighton 2009).

³ Indirect suicide is studied in several populations. Garrison et al. (1993) studied American youths from twelve to fourteen years old and determined that 2.46 males and 2.79 females engaged in “non-suicidal physically self-damaging acts”, while those engaging in these behaviours had more suicidal ideation and were more likely to become in a major depression state.

⁴ In our previous work (Santos, 2007) suicide attempts and para-suicide are considered different behaviour while concepts, but with the same practical outcome, in which people survive. We have considered suicide attempts like a behaviour connected to “hic et nunc” or an immediate action, with stronger links to adolescent period of the life, while para-suicide was considered a most “dragged” action, more ruminative, and with stronger links to adulthood.

The World Health Organization (2012), states "suicide is the act of deliberately killing oneself. Risk factors for suicide include mental disorder (such as depression, personality disorder, alcohol dependence, or schizophrenia), and some physical illnesses, such as neurological disorders, cancer and HIV infection. There are effective strategies and interventions for the prevention of suicide"

The Centre for Disease Control and Prevention (2012a) defines suicide as "death caused by self-directed injurious behaviour with any intent to die as a result of the behaviour."

For the American Psychological Association (2013b) "suicide is the act of killing yourself, most often as a result of depression or other mental illness".

Encyclopaedia Britannica (2012) defines suicide as "the act of intentionally taking one's own life".

According to Oxford Dictionaries, suicide is "the action of killing oneself intentionally" (2012).

Psychology Dictionary (2013b) defines suicide as "action aimed to take one's own life. It usually is tried when person is going through depressive episode, but it can also be consequence of other mental illness, like schizophrenia, or as a result of drug abuse".

1.2. Evolution of the concept of Suicide

The word *suicide* appeared in Seventeenth century, curiously in a time when the rule was a ferocious opposition to self-killing. Everything was determined for men in the so-called time of the societies of orders. It was also a century of war, plague and famine. Religious reform was on the run with Luther in Germany, Calvin in Switzerland and Henry VIII in England. All Europe was in deep change, especially in religious grounds, and the matter of suicide was not particularly at discussion – medieval concepts of society, based on the grounds of Plato and Aristotle, concerning individual and society were recovered and put

to practice again – and it was forbidden at the light of these conceptions (Santos 2007).

The word came out to discussion in England. For the first time, a word composed by *sui* and *caedes*, from the original Latin – which means *self* and *death* –, came to define the action of taking one's own life: suicide. Some say it appeared in *Religio Medici*, a work by Sir Thomas Browne⁵, written in 1636 and later published in 1642 (Minois 1998).

In History, in general terms, the ancient world, did not condemned suicide the way it has been after the advent of Christianity, predominant all over Middle Age, to foresee a more complacent attitude in Renaissance, a new closure in Seventeenth century, and again a more tolerant attitude during Enlightenment to become later on, in Nineteenth and Twentieth century, a result for wide understanding and comprehension.

Today, existing humanization framework turns to the phenomena comprehension, and in the light of health systems, to intervene. Health systems worldwide call on attention of decision-makers and policies on suicide and its consequences. But let's take a brief look in history.

Ancient World

In Ancient World, in Egypt, Greece and Rome, suicide, or by then the pagan concept of self-killing, was thought in different terms originating the grounds for the evolution of the concept.

Egypt might very well be the source of the first historical documents concerning suicide. In an article titled "First suicide note?" Thomas (1980) brought to discussion some historical papers. Perhaps the oldest written reference to suicide in the world: a papyrus, whose date is estimated to be around 1991-

⁵ Sir Thomas Browne (1605-1682), was an English author committed to different fields of knowledge such as science, medicine, and religion – *Religio Medici*, (The religion of a doctor) sets his spiritual testament and a psychological self-portrait (Breathnach 2005).

1786 BC, from the Middle Kingdom of Ancient Egypt, and whose whereabouts is at Berlin Museum.

In that papyrus, a man discuss with his soul – ancient Egyptians believed that body and soul had a separate existence – that tries to persuade his owner to take his life, and pulls back when the author is on the brink of suicide arguing that if death is an answer to physical body, it is a disaster to itself, for no survivors would will to built a tomb and no one would wish to make offers to such a wretched person.

It is also known, that in the sequence of an attempt to life of Pharaoh Ramses III, in the Judicial Turin Papyrus, a number of conspirators condemned were given the option to die committing suicide.

In Greece several positions were found, according to different philosophical schools: as such, pythagorics were against suicide, whereas epicurists and stoics were not. Diversity was the word, whether in law, or citizens attitude towards suicidal people. In this period, the so called state-cities⁶ had their own autonomy as well as specific laws and suicide was a matter treated accordingly (Santos 2007).

The supreme value of individuals reckoned by cirenaics, cinics, epicurists and stoics, supposed that the freedom due to an individual was criteria enough to take their own lives. Several suicides are registered according to several motivations: the suicide of Aristodem out of remorse, or the suicide of Cleomenes by honour, Democrites and Speusippe suicides to escape to decrepitude of life and the suicides of Panteu, Hero, Safo for love, and the suicide of Hipo for chastity, all of them admitted suicide for a major motive (Minois 1998).

From the point of view of Epicurists, life should be stopped if not good at all. Pythagorics did oppose to suicide for a number of reasons, namely if a soul that

⁶ State-cities were particular forms of administrative organization in the same country in ancient times. In Greece, for instance Athens and Sparta, both cities of the Pan-Greek world, had their own sets of laws as well as political and social organizations. Cities were states as well.

had “dived” into a body in a sequence of a major sin should stay to the end, and because the association between body and soul was determined by numeric relations and suicide would disrupt this balance (Minois 1998).

Plato and Aristotle considered man as a social being in a community and society, and that should stop individual desire from stepping down on society. Above individual desire, there was a duty towards divinity, that had put them in life with a role (Plato); or facing duties towards the city in which had some role to play (Aristotle). Both opposed to suicide, and the enormous influence they had for the future was seen later, especially in the last days of Western Roman Empire falling down in 476 a. c., and during medieval period (Santos 2007).

In Rome, Greek culture prevailed in many aspects. In the words of Horatio⁷ the conquered Greece has conquered Rome. Stoic spirit of “one has to do what must be done” passed to Rome. In early days of the empire a free man was not prohibited to take his own life whether in law or society (Minois 1998).

However, this situation changed, especially in times of emperors Diocletian and Constantine. The expanding empire needed labour force, and demography both with economy made a contribution to change towards suicide prohibition. Demography, economy, neoplatonism or the rebirth of Plato’s philosophy, and oriental cults condemned suicide. The advent of Christianity would drive the empire in an opposite way of the early days, condemning suicide. Since emperor Antoninus, suicide ends up on property confiscation of suicidal people, or even family property. Suicides in the army are repressed. These factors altogether determined a shift, which will endure and will be reinforced by Saint Augustine⁸ and Saint Thomas Aquinas⁹ in the middle age.

⁷ Quintus Horatius Flaccus was a roman poet, known in English as Horace (65-27 BC) (Lyons 2010).

⁸ Saint Augustine (354-430) born in Namibia, was bishop of Hippo and Doctor of the Church, Latin philosopher and theologian from Roman Africa. His writings influenced largely Western Christianity, especially *Civita Dei* (City of God), a study on the relationship between Christianity and secular society inspired in the fall of Rome to Visigoths (410) (Bonner 1986).

⁹ Saint Thomas Aquinas (1225-1274), was an Italian Dominican friar and priest, philosopher and theologian Doctor of the Church and prominent Scholastic who wrote *Summa Theologica*, a compendium of all main theological teachings of Catholic Church (Davies 2004).

Middle Age

Suicide in middle age occurred in all social classes. Suicide was, most of the times, faced like work of the devil, and suicidal people were outlawed, in civil law and in ecclesiastic law, and punished severely, in earth and in heaven, with the confiscation of property both from the suicidal and his or her family.

Minois (1998), writes about the "Ancienne Coutume D' Anjou" illustrating quite well what we describe: "anyone being the murder of his or herself should be dragged and hanging down; all of his or her property is from then on property of Sire (...) to ensure that he or she receives all justice"

Thus, in Zurich the destiny of a suicidal body was determined accordingly to the way chosen to commit suicide. If the death occurred with a dagger, a piece of wood was swindled into the skull. If it was by means of fall, the corpse would be buried in a mount with three large stones upon the head. In Germany, the body was put hanging upside down to rotten, after being dragged in mud on the same position. The punishments were severe and intended to prevent future suicides. Meanwhile a cultural revolution was on the run: renaissance (Minois 1998).

Renaissance

This is the time of Copernicus, Luther, Erasmus, Montaigne and so many others. Suddenly, men fell in love to the ancient classical cultures, of Athens and Rome and decided to restore the fundamentals of the Western Civilization from the origin.

The respectable images of Lucretius, Cato, Brutus and Seneca emerged as this new culture was spreading. The issue of suicide came to discussion, firstly, among intellectuals, and later to a wider social debate. Thomas More came with the idea that a well and rationally organized society should include a right to suicide (Minois 1998). Nevertheless a most important matter left by renaissance is madness; and suicide has been put through madness or folly. An essay

written in Latin by Erasmus¹⁰ – *The Praise of Folly* – Folly, or *Moria* for Greeks and *Stultitia* for Romans, is represented like something that turns life better than it is, because with no madness “life would be dull and distasteful”, and Folly argues that “you’ll find no frolic or fortunate that it owes not to me”.

A reaction came in Seventeenth century, the so-called time of the societies of order or corporations it was a time of famine, plague and wars. Turning back to the concepts of Aristotle philosophy, this century is built upon the ruins of the renaissance. In the concept of Aristotle, individual has no right to put his or her life in cause, for the supreme interest of society is upon individual freedom. In theology condemnation of suicide is unanimous.

Enlightenment

The century of lights brought the discussion through intellectuals. This is the times of Montesquieu, Voltaire, and David Hume to name just a few important philosophers. Hume¹¹ wrote “Essays on Suicide and the Immortality of the Soul” published in 1757.

For the first time the conceptions of Saint Augustine and Saint Thomas Aquinas were put to discussion, at first among intellectuals, and later on society, stating arguments on suicide considering it not an offense to God, for He is the source of men faculties and to take one’s own life is a faculty itself; it is far from damaging society because no one is obliged to carry on with something that is hurting him or herself, and because when someone becomes a burden to society it is moral to stop life rather than the opposite. Finally, suicide is no offense towards oneself because no one has rejected life when it was good to live.

¹⁰ Desiderius Erasmus Roterodamus (1466-1536), was a Dutch humanist, catholic priest, social critic, teacher and theologian. A classical scholar writing in Latin he was a defender of religious tolerance (Latourette 1953).

¹¹ David Hume (1711-1776) was a Scottish philosopher, historian, economist and essayist (Atherton 1999).

Beyond this, Romanticism was progressing in arts, literature, in Western culture. Goethe¹² wrote *The Sorrows of Young Werther*, published in 1774, a story of an impossible love that ends in suicide, and had a tremendous influence in general public as well as spreading the issue.

Nineteenth and Twentieth Centuries

Nineteenth and Twentieth Centuries development in social sciences, and growing humanization to what concerns health and life, along with the development of health sector and health policies, tried to protect life rejecting suicide and considering it contrary to the species itself, and to the instinct of survival.

The evolution of the concept of suicide in social sciences came with Durkheim (1897). Setting the basis for the sociological perspective, Émile Durkheim defined suicide as "a positive or negative act played by the victim knowing that a fatal result will overcome"¹³. Deservedly, he represents a mark to sociology with his theory of suicide, which identifies main facts determining suicide on the more or less relationship between society and individuals. The author distinguishes four types:

- *egoistic suicide*, reflecting an attitude of outsider, with few connections to society, to community and with a general feeling of not-belonging or dis-belonging, giving back decreasing of social integration; it would be the result of *excessive individuation*;
- *altruistic suicide*, reflecting an orientation towards the group, where the needs of the whole are above individual ones; it is the opposite of egoistic suicide; in such society where high standards of social integration are established, individuals would have few reasons to

¹² Johann Wolfgang Goethe (1749-1832) was a German writer, poet and politician (Seehafer 1999).

¹³ With the terms positive or negative Émile Durkheim was introducing a distinction between true suicides and accidental deaths.

commit suicide, unless what he considers to be the exception – one could kill himself on behalf of society;

- *anomic suicide*, where lack of social orientation is prevalent, moral values are confused and moral deregulation occurs and disappointment prevails;
- *fatalist suicide*, reflects excess of regulation; oppressive discipline in a way that everything is ordered according to a frame of rigid rules, and subjects, rather choose to die than live, under constant regulation, neglecting their desires and wishes.

Durkheim's (1897) view of suicide stands in a theory that provides an explanation of the phenomenon in a social manner. Bigger or smaller, stronger or weaker, ties to society would provide a quite good explanation for suicide, and somehow this conception made its way.

Halbwachs (1930) agreed to Durkheim's definition but with some differences: sacrifice could not be suicide ever, because individual willingness was under control. Maurice Halbwachs followed Durkheim and brought to the conceptualization of suicide the notion of individual circumstantialities. By the same time, Ortega Y Gasset¹⁴ used to refer to the sentence in the core of his philosophy: "I am myself and my circumstance". Halbwachs¹⁵ was also interested in urbanization and the larger or smaller urbanization on society had an influence in suicide rates.

The individual view made its way, and for the American sociologist Jack Douglas (1967) suicide is a social construct; along with his colleague Maxwell Atkinson (1978), they both developed the argument that sources of individual behaviour are not outside the individual. People are who construct reality and

¹⁴ José Ortega y Gasset (1883-1955) was a Spanish philosopher standing with perspectivism, a philosophic school that defends that all ideations are based on particular perspectives (Dobson 1989).

¹⁵ Maurice Halbwachs, was strongly influenced by Durkheim. However, differences can be observed between the two authors. He brought the notion of individual circumstances to the sociological approach to suicide when the predominant view was oriented towards collective.

give meaning to others behaviour. And so the social world is a construction made by people who mean to make determined things and at the same time attribute meaning to other people's behaviour. And so, social world is a subjective experience made by social actors' day in day out. Douglas considers then that Durkheim used the so-called 'facts' to built simple definitions made by social actors (police, coroners and officials) in order to establish his theory (Douglas 1967).

Douglas (1967) in the field of sociology declares "suicide, far from being a 'social fact', is instead very much the product of meaningful categorization by officials investigating certain kinds of act, and it cannot be assumed that these officials share the same meanings on which they base their interpretations. Officials, no less than other members of society, necessarily operate with their respective stocks of common-sense knowledge which they cannot help but use to make sense of the reality which they encounter – in this case, suspicious death".

Phillips (1974), an American sociologist, compiled news on suicide after *The New York Times* (1946-1968) and noticed that subsequently a number of cases of suicide increased in the following month. He coined the term 'copycat suicide', and based in Goethe's "The Sorrows of Young Werther", he called it the Werther's effect.

Also, sociologist Baechler (1979) defines suicide, as searching-finding solution behaviour, existence-oriented in nature that ultimately attempts against the life of the subject. Jean Baechler identifies four types of suicide, along with eleven subtypes: (i) evasive or escapist, subdivided in escape, mourn and punishment; (ii) aggressive, subdivided in crime, vengeance, blackmail and appeal; (iii) oblativ, subdivided in sacrifice and passage; and (iv) ludic, subdivided in ordeal and game. He sets suicide as a response to a problem.

Sigmund Freud (2001), in 1917¹⁶, father of psychoanalysis, believed we have two basic instincts – *eros* and *thanatos* – which is to say that instincts were of two kinds: of love and of death. Around the “dancing” of these basic instincts, suicide could be interpreted as the materialization of *thanatos*, and so, the submission of ego to the powerful instinct of death. A rage self directed to annihilation. Sigmund Freud considered suicide as oriented rage towards a love object being self-directed and thus originating self-destruction, self-murder.

Psychoanalysis contributed to the evolution of concept also with Melanie Klein (1932, 1937), who developed the Kleinian object-relations theory. She developed therapeutic techniques for children with impact in child psychology and in contemporary psychoanalysis. After Freud she believed we born with two major drives – *eros* and *thanatos*. Suicide obeyed to a motion from the ‘good part’ towards the ‘bad part’ seeking its annihilation. Melanie Klein considered suicide as a selective strike towards the object, trying to maintain the ‘good part’ and annihilate the ‘bad part’.

Zilboorg and Henry (1941) and later Zilboorg (1975) underlined ethnic and cultural increase in value with the suicidal that would be some kind of impulse to a death wish for reunion.

Karen Horney (1937) looked to suicide as the result of a self-annihilation by a neurotic personality after conflicts in childhood.

Menninger (1938) saw suicide as self-murder. He was convinced that every suicidal host three desires: to kill, to be killed and to die. Karl Menninger speaks of murder-suicide as acts with interchange ability. Chronic suicide (i) played by someone that sets a self-destructible behaviour and can be seen in psychosis and anti-social disturbances; (ii) focal suicide as in the case of self-mutilators, and (iii) organic suicide as in the case of people carrying diseases that would have an unconscious desire to die. All forms of self-hurting were considered as forms of suicide.

¹⁶ The original manuscript dates from 1915, but it was not published until two years later. It was gathered in The Standard Edition of the Complete Psychological Works of Sigmund Freud (2001).

Hendin (1964) considered suicide as something to be interpreted as death by reunion expressing self-anger and renaissance.

Stengel (1967), states suicide as "a fatal act of self-injury undertaken with conscious self-destructive intent (...)". Erwin Stengel distinguished between committed and attempted suicide, supposing that a degree of suicidal intent was present in both populations and the ones that survived were "failed suicides".

Winnicott (1971) argued for the primacy of the relationship between children and their mothers as essential to the organization of the 'ego'. He speaks of the "true self" and "false self" and the issue of suicide coming from the failure of the self. Donald Winnicott was a paediatrician and psychoanalyst in the field of object-relations theory. For him, suicide is the failure of the self.

Kohut (1977) speaks of the relationship between parents and children and the quality of these relations in the anxiety of disintegration as children set their path from childhood to maturity. To Heinz Kohut a fragmented self may result in great anxiety and suicides can be seen an extreme form of narcissist rage directed against a fragmented self that has a shameful sense of self.

In a behavioural line Marsha Linehan (Linehan 1993a, b) stated suicidal behaviour is the product of emotional deregulation. She researched in the application of behavioural models to suicidal behaviours. She was interested in Cognitive-Behavioural Therapy (CBT). Later she developed Dialectical Behaviour Therapy (DBT). Its focus relies in a model that seeks to the work in the dialectical aspects of the mind and the knowledge of deficits in problems solving. It identifies two distinct subsystems: environment and behaviour.

Under a cognitive behavioural line Beck (1976) pointed out suicidal wishes, as extreme expression of desire to escape from uncontrollable, interminable and unbearable problems. Aaron Beck developed the cognitive triad, which represents three types of negative thoughts present in depression. The triad forms part of his cognitive theory of depression and includes negative thoughts

about (i) the self (i.e., the self is worthless); (ii) the world/environment (i.e., the world is unfair), and (iii) the future (i.e., the future is hopeless).

Schotte and colleagues (Schotte and Clum 1982, 1987, Schotte, Cools, and Payvar 1990) pointed out that suicidal ideation at first, and later suicidal behavior, are the result of despair in face of stressful events of life. They proposed a diathesis-stress model in which deficits of interpersonal problem-solving skills are supposed to predispose individuals in chronic stress to depression, hopelessness as well as to suicide. They concluded that interpersonal problem-solving deficits are concomitant rather than a cause of depression, hopelessness and suicide.

For Rosenberg et al (1988) suicide is "death arising from an act inflicted upon oneself with the intention to kill oneself". They set a definition with two clear contents: that lethality is self-inflicted and intentionally done. They focused on intention to die, and introduced the concept of explicit, verbal and/or non-verbal, and implicit or indirect evidence of intent. For them, intent requires that the decedent knew that a specific act would result in death.

As to Mayo (1992) "a suicide has taken place if death occurs" (...). "For a death to be a suicide, it must be one's own doing, in some straightforward sense. A death that is suicide must be a death that was intended by, and then effected by, the person who died". The definition of suicide for this author is composed of four elements: (i) death must occur; (ii) has to be after one's own act (iii) it can be done in an active or passive way; and (iv), it implies intention to die.

To Silverman and Maris (1995) suicide is no disease but a death caused by self-inflicted intentional action or behaviour.

Shneidman (1971, 1985) defined suicide as "a conscious act of self-induced annihilation, best understood as a multidimensional malaise in a needful individual who defines an issue for which the suicide is perceived as the best solution".

According to Harding (2009) "in his many books about suicide, Shneidman argued that suicide is not a drive towards death, but an escape from unbearable pain; for him, the therapist's goal was not to forbid suicide, but to work with the suicidal person to find other ways to ease their pain".

Rudd et al (2006), in the development of the line initiated by Beck, working in a biopsychosocial frame contributed to the discussion with the importance of warning signs of suicide and the need to uniform those signs among scientific community. On his Fluid Vulnerability Theory he starts from the principle – inspired in the mode theory – that suicidal crisis are limited in time, and the suicidal would have a physiological activation towards suicide, after an association to facilitators that would develop a suicidal crisis.

The evolution of the concept of suicide lies in annihilation and intention, and disturbance of the decision process with interference in judgement, when it comes to the constant features in a conceptual frame of definitions. Is intention pre-determined on psychopathological grounds? When is someone able to self-determination according to a previous intention in what concerns suicide? That is, sometimes, quite difficult to establish. Nevertheless, psychopathology plays an important role, and most of the times the involved psychopathology is depression. Some of the diagnostics in presence are connected to suicide in a stronger way, like major depressive disorder.

1.3. Relevance of depression

Psychopathology comes in many ways and forms. The American Psychiatric Association standard reference for psychiatry – the Diagnostic and Statistical Manual of Mental Disorders (DSM) – includes over 400 different definitions of mental disorders. The WHO standard reference – The International Statistical Classification of Diseases and Related Health Problems (ICD) – contains an important section on psychological and behavioural disorders.

These two documents are revised and updated every new version. DSM is currently in its fifth version (American Psychiatric Association 2013b). ICD is currently in version 10 (World Health Organization 1992, 1993).

An important concern to some professionals is whether some of the conditions should be classified as "mental illnesses". According to The Surgeon General (U. S. Department of Health and Human Services 1999) "mental illness is a term rooted in history that refers collectively to all of the diagnosable mental disorders (...) characterized by abnormalities in cognition, emotion or mood, or the highest integrative aspects of behaviour, such as social interactions or planning of future activities"

The same report focuses at the features of the disease process that are most common and characteristic in what concerns these disorders: "many of these symptoms may be relatively specific (...) for example, disturbances of thought and perception (psychosis) are most commonly associated with schizophrenia. Similarly, severe disturbances in expression of affect and regulation of mood are most commonly seen in depression and bipolar disorder. However, it is not uncommon to see psychotic symptoms in patients diagnosed with mood disorders or to see mood-related symptoms in patients diagnosed with schizophrenia. Symptoms associated with mood, anxiety, thought process, or cognition may occur in any patient at some point during his or her illness."

According to the same report "the thresholds of mental illness or disorder have, indeed, been set by convention (...)."

For Ruggeri et al (2000) "there is no internationally agreed definition of severe mental illness (SMI)." Inconsistencies have been found on how SMI are defined in practice (Schinnar et al. 1990, Slade, Powell, and Strathdee 1997). Finally, the widest measure of consensus was found to be the one from National Institute of Mental Health (1987), that categorised individuals with SMI if they met three criteria: a diagnosis of non-organic psychosis or personality disorder; duration with prolonged illness and long-term treatment, and over 2 years or

more of mental illness history or treatment and disability described as having at least 3 of the 8 specified criteria.

According to NIMH (1987) a little history on "Where did the term "SMI" come from?" allows to clarify circumstances: "in the 1992 ADAMHA Reorganization Act (P.L. 102-321), Congress directed the Secretary of Health and Human Services to develop a federal definition of SMI to aid in the estimation of SMI incidence and prevalence rates in states that were applying for grant funds to support mental health services."

That definition stated that "adults with a serious mental illness are persons: (1) age 18 and over, (2) who currently or at any time during the past year, (3) have a diagnosable mental, behavioral, or emotional disorder of sufficient duration to meet diagnostic criteria specified within the Diagnostic and Statistical Manual of Mental Disorders (DSM-III-R), (4) that has resulted in functional impairment which substantially interferes with or limits one or more major life activities... All of these disorders have episodic, recurrent, or persistent features; however, they vary in terms of severity and disabling effects."

Mental illnesses can go from mild to severe. SMI can foster paths to suicide in a more dangerous way. People with SMI are at higher risk to become victims of violence. Teplin et al (2005) found that those with SMI are more likely to be victims of violent crime than general population. The most common form of violence in relation to mental illness is against oneself, rather than against others. Suicide is a violent death. People carrying SMI are more prone to suicide, but it is depression, and especially major depression that kills most.

Depression, whether alone or in co-morbidity, is the one most associated to suicide, because even facing others possible diagnostics, it is under the depressive phase that a person is most vulnerable to commit suicide.

And so, among mental disorders, we focused in depression to illustrate this item of psychopathology, taking into account the nature, the prevalence and the most commonly association to suicide.

Currently, the form of Major Depressive Disorder (MDD) is admitted to be the most hazardous psychopathological condition that can lead to suicide. But depression is much wider and it takes eventually all states of mind where morbidity is in mood. Any kind of depression can turn out to be complicated by suicide, because of the associated psychological suffering. The psychological suffering brought to people by depression is many times another morbid factor to be joined with previous ones. Co-morbidity is frequent and enhances potential acts of self-annihilation, but it is depression that triggers the action: it is in the depressive side of a disease that people kill themselves; it is depression that delivers a blow in the mood.

According to WHO (2013) depression is a "common mental disorder, characterized by sadness, loss of interest or pleasure, feelings of guilt or low-self worth, disturbed sleep or appetite, feelings of tiredness, and poor concentration." But depression is also a treatable condition, either in co-morbidity or alone, depending on the case features, once is properly identified and reliably diagnosed. Its treatment, as well as other mental disorders, should begin in primary care, whose structures are closer to populations unlike specialists in hospital facilities. A movement of integration of mental health into primary care, aiming along the treatment of mental disorders, have been developed since the declaration of Alma-Ata (World Health Organization 1978) aiming health promotion to all people worldwide starting precisely after primary care.

Universal health care concept would be in the right centre of this movement and ensure that also depression could and should have another way to be diagnosed and treated.

According to the WHO Global Burden of Disease (Murray, Lopez, and Cambridge 1996, Mathers and Loncar 2006, Murray et al. 2013) depression is

the most common mental disorder, and the burden it carries is quite considerable: 350 million people live with it turning out to be the leading cause of disability in the world. It affects people and their relatives, friends, and eventually other people with no familial or friendship links (Gusmão et al. 2005). Also in Portugal, the high prevalence of depression yields a substantial burden (Gusmão et al. 2005, Caldas de Almeida and Xavier 2013).

According to NIMH (2013), several forms of depressive disorders are identified:

- Major depressive disorder is a set of symptoms interfering “with a person’s ability to work, sleep, study, eat and enjoy once-pleasurable activities.” In practice, a person is affected seriously in his or her regular activity, mood stays deep down and psychological suffering is set at an individual but also a social, family and professional level with a wide impact;
- Dysthymic disorder with long-term symptoms that can be not so severe to disable a person, but affecting normal functioning and having possible to experience a MDD;
- Minor depression characterized to be a milder form but in need of care, because of the risk of developing the other heavier forms;
- Psychotic depression which is a combination of severe-like depression and psychotic features (delusions, hallucinations);
- Postpartum depression, a serious condition some women experience after giving birth, and;
- Seasonal affective disorder, a form of depression that regularly onsets during winter and fall months, associated to light conditions sometimes.

According to CDC (2013) depression “is characterized by depressed or sad mood, diminished interest in activities which used to be pleasurable, weight gain or loss, psychomotor agitation or retardation, fatigue, inappropriate guilt, difficulties concentrating, as well as recurrent thoughts of death.” Major

depression and dysthymia are considered as eminent forms of depression with impact in one's life.

According to the American Psychiatric Association (2013a) depression is something you should worry about, because it's more than just feeling sad for a few days – "is a serious medical illness that negatively affects how you feel, the way you think and how you act."

Symptoms are mostly marked loss of interest or pleasure in activities, but changes in appetite and weight, insomnia, fatigue, restlessness, thinking and thoughts of death are among other important ones as well.

Again in the same way the American Psychological Association (2013a) states that "depression is more than just sadness". It takes lack of interest and pleasure in what concerns everyday activities, insomnia, weight loss, too much sleep, lack of energy, worthlessness feelings, recurrent thoughts of death and suicide.

It is somehow a global condition of the organism that affects brain and body functioning in a systemic way that can turn out to be quite dangerous when thoughts of death and especially if there is some kind of structural thinking towards self-annihilation.

Depression is the variable of psychopathology most strongly associated to death by suicide, for it is even during the depressive moments in time that people commit suicide no matter if other conditions are present.

Psychopathology of suicide is not drained in depression. Other forms of disease or syndromes are present in suicide, but nevertheless the objectivity of our study is first focused to it since it's been the widest basis of psychopathology in suicide, for even in co-morbidity it is in depressive phase that lies vulnerability to suicide.

Suicide depicted here was happening in a rural area of a southern Europe country, where a number of features could be observed, namely, wide

geographical dispersion and general living conditions in great isolation, in a region facing eventual scarce number of health services or eventual misconception mode of organization in their functioning¹⁷. Environmental conditions had for sure some influence, as well as social determinants of health. The kind of suicide depicted here was, most of the times, committed under isolation circumstances, with the intention not to be seen, by hanging, or more rarely, by pesticide poisoning.

¹⁷ It is rather usual to think of scarcity of services of health like local populations point out, such as health centres or hospitals and clinics, when major health problems like suicide, are diagnosed. In the region of Odemira, where the study described ahead was performed, suicide is a major public health problem but considering that 5 major health centres plus their advanced smaller local stations and a hospital available for a population around 26.000 in 2011, a discussion should be made most likely in terms of organization.

CHAPTER TWO (2): Psychological Autopsy

2.1. What is Psychological Autopsy

“The psychological autopsy is no less than a reconstruction of the motivations, philosophy, psychodynamics, and existential crises of the decedent.”
- Edwin Shneidman -

One can say that psychological autopsy is a rather dynamic technique for investigation of the motives, causes and reasons in relation to someone’s death. It is an open technique using structured, as well as semi-structured instruments aligned in a framework designed to obtain information, in different ways of investigation and research in order to capture precious information, ultimately able to reconstruct circumstances that drove someone to death.

In fact, it is method of gathering relevant information using the widest possible number of information sources with a broader application.

According to the Concise Medical Dictionary (Segen 2012) it is “a procedure for investigating a person's death by reconstructing what the person thought, felt, and did before death, based on information gathered from personal documents, police reports, medical and coroner's records, and face-to-face interviews with families, friends, and others who had contact with the person before the death”.

Psychological autopsy is an oral examination of a deceased person's family, friends, colleagues, and acquaintances to determine the deceased person's state of mind at the time of death, and whether suicide can be ruled as the official cause. The psychological autopsy is a process designed to assess a variety of factors including behaviour, thoughts, feelings, and relationships of an individual who is deceased. It is a relatively unstructured clinical technique in which a mental health professional attempts to discern the mental state of a deceased person at some previous point in time. [State v. Hill, 1997 ML 19, 6 (Mont. Dist. Ct. 1997)].

In accordance, Silverman et al. (1994) hoped that collectively, the information obtained resulted in "a postdictive analysis yielding an opinion giving a logical understanding of the relationship between the deceased and the events and behaviors that preceded the death".

According to Psychology Dictionary (2013a), psychological autopsy is the examination of a subject's mental state prior to death. It is called for in the event of unusual or inexplicable circumstances present at the time of death.

Shneidman (1977) in a paper developed for the National Crime Justice Reference Service (NCJRS) points out that "psychological autopsy is defined as 'a thorough retrospective investigation of the intention of the decedent where the information is obtained by interviewing individuals who knew the decedent's actions, behaviour, and character well enough to report on them.' The main function of the psychological autopsy is to clarify an unclear or uncertain mode of death by arriving at the correct classification of the mode of death, i.e., natural, accident, suicide, or homicide (NASH). It is pointed out that drug-related deaths are among the most uncertain or equivocal as to the mode of death. A history of death reporting practices and death certificates stresses the historical importance of certifying the mode of death in terms of inheritance laws. The author describes how to conduct a autopsy and presents two case reports of drug-related deaths to illustrate the function of such 'psychiatric inquests.' suggestions are presented for the conceptual improvement of the death certificate: in addition to the NASH classification, it is recommended that a measure of lethality on the part of the decedent be added to the death certificate, which would indicate the decedent's role in his/her own death".

Thus, psychological autopsy is based upon a method designed for reconstruction of a death preceding circumstances, using a specific framework. It can be seen as a gathering of several means in order to reach an end: that end is information, collected and organized in a way able to clarify circumstances of death, whose application can occur in several domains, like forensics and research.

Psychological autopsy was born in the Twentieth century. It all started by chance, like so many other important achievements in science: Edwin Shneidman was once asked to write condolence cards to the wives of two suicidal men, while working at the Los Angeles Veterans Administration (Harding 2009).

This action made him look for these two files at LA County Coroner's Office and led to a vault of suicide notes: the game was afoot and "he never looked back" (Leenars 2010).

Next thing, Shneidman and Farberow were making a comparison between genuine suicide notes with simulated ones from non-suicidal people (Shneidman and Farberow 1957). The idea was that suicidal notes could be a path to the understanding of the suicidal phenomena (Harding 2009, Leenars 2010). According to Harding (2009) that synergy and collaboration between "Schneidman and Farberow continued fruitfully for many years".

2.2. Review Studies on Psychological Autopsy

Psychological autopsy has been a tool of utmost importance to forensics and medical examiners-coroners (Botello et al. 2013), to courts of law (Litman 1984, Jacobs and Klein-Benheim 1995), to research on suicide (Cavanagh et al. 2003, Hawgood, Milner, and De Leo 2010, Chachamovich et al. 2013) (Hawton et al. 2012) and prevention of suicide (Appleby et al. 1999) since it came up in the 1950's.

According to Isometsä (2001) this method synthesizes information, from multiple informants and records, and in its early generations established that more than 90% of completed suicides suffered from co-morbid mental disorders being mostly mood disorders and/or substance abuse disorders, and revealed that a considerable under treatment was taking place.

In a systematic review Cavanagh et al (2003) identified 144 reports whereas 76 met inclusion criteria. Accordingly results indicated as well that mental disorders were present as the variable of those that have been studied. Furthermore they

claim that future studies should put their focus on specific disorders and psychosocial factors. Along efficacy, on the grounds of suicide prevention is said to be dependent on the focus of treatment of mental disorders.

Studying the evolution of the method of psychological autopsy, Botello et al (2013) found its initial use in the field of equivocal deaths investigations which according to Geberth (2000) "equivocal deaths investigations are those inquiries that are open to interpretation." In the context of a police forensic investigations the author indicates that cases in which doubts about how a person died emerge the concept of equivocal death is present. In the case described there could be 2 or more meanings, namely homicide or suicide, in order to achieve an explanation to the death of a military. Deaths can resemble homicides, suicides, accidents or naturals. Later, it was used in cases of doubts emerging from Medical Examiner-Coroner's determinations of suicide.

In a collective expert report from the Institut National de la Santé et de la Recherche Médicale (INSERM 2008), in France, experts outlined that from the methodological point of view, the major role of psychological autopsy, as a meticulous, complex and multidimensional tool to the investigation of suicide and refer some aspects in the evolution of the method also.

The first ones to implement psychological autopsy, did so for medical and legal reasons, concerning to ill-defined causes of death. Later, it was used in suicide prevention, crisis intervention or research to improve knowledge or to identify at-risk people for commit suicide. The collection of information by interviewing people connected to the subject who committed suicide, is a crucial part and appears the most likely to provide accurate and reliable information, allowing identification of recurrent factors associated with suicide.

Despite offering a wide picture on suicide, psychological autopsy was developed by a limited number of teams in some 15 countries but remained somehow unpublicized in a major number of other countries, including France.

From 1975 on case-control designs compared series of subjects coming from general population matched for age, sex and one or two major characteristics of particular interest. In time, interviews became more structured and standardized around the existence of mental disorders, comorbidity and history of suicide attempts, family history and individual's social environment.

Yet according to the above French mentioned report it was thanks to this methodology that the difference between suicide cases (90% mental disorder) and controls (27% mental disorder) was confirmed.

In the same line that psychological autopsy was gradually increasing in time, since the 1950's, as a research tool, it is today and remains perhaps as the one method able to collect more precise information whether it is applied to forensics or research fields in efforts finding causes of death.

More recently its use lies in case-control studies thus as pointed out by Isometsä (2001) becoming better to estimate the role of several risk factors for suicide. In spite of psychological autopsy being one of the most important tools for investigation of suicide (Isometsä 2001, Cavanagh et al. 2003) it contains some limitations: a recall bias can be present because of the possible underreport of major personal events unknown by informants (Heikkinen, Aro, and Lonnqvist 1993, Cavanagh et al. 2003), or the more likeliness that medical examiners or coroners can have to associate suicide verdicts in those with known psychiatric disorders (Cavanagh et al. 2003).

CHAPTER THREE (3): Global Glimpse

3.1. Worldwide Suicide Rates

"If you think research is expensive, try disease"
- Mary Lasker -

Increasing attention on suicide goes worldwide. Studies have shown increasing global numbers all over the last decades. A million deaths per-year captured global attention (World Health Organization 2001). Per-annum global average rate (16.0/100 000), points out a death by suicide every 40 seconds. At this pace, 1.5 million yearly deaths by suicide are expected to occur around 2020. It is a big figure, but nevertheless, may even rely underestimated, for a major concern come from different registry practices. These differ significantly across countries. Sources from where one gets suicide figures are under permanent somewhat unreliable features over time. Suicide and undetermined death figures, for example, do not dance alone. One might say they dance side by side. In Portugal, it is rather frequent to observe lower rates of suicide whenever figures for undetermined death go higher, and the contrary is frequent to be observed also. But abroad the same is observed. Somehow, they are both connected, and in order to see it clearly there is need to get deeper. Reasons exist to believe that in general a number of suicides are hidden among undetermined deaths (Ohberg and Lonqvist 1998). Although the issue of suicide, as well as the numbers attributed to it, are more and more investigated, there is still a lot to be done. But whatever numbers are, they are high, and demand for action.

WHO global data on suicide show suicide rates increased some 60% over the last 45 years, estimating suicide worldwide in 1.8 of the total global burden of disease in 1998 (World Health Organization 2001). Figures concerning para-suicide or suicide attempts, estimated to be about 20 times more frequent than completed suicide, are not included. Higher rates are observed in male elderly, but young rates have increased, expressing the highest risk group in a third of countries. Mental health disorders are a major risk factor in Europe and North

America. In Europe, northern countries have regular higher rates than southern ones, and eastern have also higher rates than western countries. Africa data on suicide is scarce, and Islamic world sees it usually as a crime, probably influencing rates. Among Chinese, where at least 30% of suicide worldwide take place uniform registration procedures are unfound – available figures bring something up that is different from any other country worldwide. China is the only country in the world where one can see higher numbers in women than in men, at least in what concerns the figures available for specific wide regions. And most deaths come from developing countries, but most research comes from developed ones (Schmidtke et al. 1999, Värnik 2012).

Nevertheless we are in presence of a public health problem. International organizations developed policies, programmes and strategies to address this public health problem. WHO has developed several resources as well as available guidelines and a framework to face the problem has been developed (World Health Organization 2000). CDC developed a program activities guide to prevent suicide through monitoring, research and enhancing prevention (Centers for Disease Control and Prevention 2010). Along, whether governmental or not, other organizations have been issuing guidelines, as well as programmes, to make their own contribution towards prevention. It is the case of many countries/regions authorities developing local or wider suicide-oriented prevention plans that we shall illustrate below, and ultimately, brings us to the financial and social implications of suicide.

3.2. Suicide Burden

In this item, we solely attain on social as well as financial implications, for those seem to be greater issues, and thus, ought to be taken in a sole scope. Nevertheless, other issues are always connected to suicide, like religious, moral or political. The fact is suicide ravages human feelings and perspectives of living for it goes deep into individual, family, professional and social aspects of life. In what concerns costs in a material way, according to the CDC (Centers for Disease Control and Prevention 2012b), suicide is supposed to represent a cost

of (circa) 34.6 billion dollars a year, when one combines both medical and work loss costs.

Also an estimate for what concerns an average of each suicide costs stands for 1.061.170 million dollars (both figures presented hereby and above were estimated for the year 2005).

For Japan, a cost of 32 billion dollars was estimated for 2009. These costs were estimated, taking into account both suicides and depression, on the grounds of lost incomes and cost of treatment. Japan official suicide figures indicate a total of 32 000 deaths in 2009. Over the last 12 years figures were permanently over 30 000 deaths by suicide each year.

Also, assessing the economic and social costs of suicide and attempted suicide for Ireland, Scotland, New Zealand and England (Kennelly 2007, Platt et al. 2006, Knapp, McDaid, and Parsonage 2011, O’Dea and Tucker 2005) indicate overwhelming figures:

- Ireland: £1,400,000 per case in 2001/02
- Scotland: £1,290,000 per case in 2004
- New Zealand: £1,158,768 per case in 2005
- England: £1,450,000 per case in 2009

Research is an investment carrying preventable features on resources, both human and material. But, in what way research can help? – According to the cited report, NIH funded researchers have found the importance of educating primary care doctors on depression, in order to improve older depressed patients as well as fewer suicidal thoughts (Bruce et al. 2004).

High school students dropped on suicide attempts by 40% following their participation on the Signs of Suicide (SOS) program – designed for teens depression screening and teaching recognition as well as responding to teens in need for help (Aseltine and DeMartino 2004).

Again, according to the same report, research saves lives but saves money as well, if one just thinks of the saved billions (estimation of 70 billion dollars for a 20 years period, both in medical costs as well as lost productivity to suicide) after the use of lithium on patients with bipolar disorder for example.

Evidence-based research remains as ground zero presiding to policies, interventions design and programmes to approach suicide, with further reproducibility and effectiveness in a framework towards prevention.

CHAPTER FOUR (4): Prevention

The World Health Organization has a leading role preventing suicide, but beyond WHO and related institutions or consortiums — other institutions like CDC, NIMH, mental health institutions both formal and informal, non-governmental organizations, foundations, all have somehow developed, either general or specific guidelines and actions to prevent suicide. Many countries developed their own prevention plans – examples can be obtained from across Europe with country-like or region-like interventions, designed through prevention-oriented plans/strategic documents. Also from the United States a number of prevention plans are available and assessments in progress, in order to reach efficacy levels of intervention on suicide.

The Mental Health Gap Action Programme (World Health Organization 2008) from WHO towards a wide variety of mental, neurological and substance disorders with the objectives to reinforce commitment of governments, international organizations and stakeholders to increase allocation of financial and human resources to this disorders, and to achieve a wider coverage to intervene in low and middle income countries is an example of guidelines available. Strategies are based on the best available scientific and epidemiological evidence attempting to delivery in a priority level, integrated packages of intervention. Suicide is included. The programme's intervention guide (version 1.0, 2010) includes self-harm/suicide and a protocol is issued to guide intervention making of it a tool for assessment and treatment of conditions related to suicidality.

4.1. Prevention programmes in North America

In United States of America, Surgeon General David Satcher, has declared suicide a serious public health concern and issued a call to action for each state to implement strategies to prevent suicide (U. S. Department of Health and Human Services 1999). Levels of intervention were also considered involving schools, work places, and communities. Some examples of prevention plans can be ascertained.

In Alaska Suicide Prevention Plan (Statewide Suicide Prevention 2005), guidelines were issued and several goals pointed out:

- Population responsibility to prevent suicide;
- Appropriate response to people at risk;
- Communication, cooperation and coordination of suicide prevention efforts;
- Access to prevention, treatment and recovery;
- Healing support to survivors;
- Research basing planning, implementation and evaluation of suicide prevention efforts.

Involvement of population is searched and responsibility of all in improving health and well-being of children, elder, families, communities to achieve reduction on suicide rates. Annual reports measure the effects. Overall indicators: rate of suicide (2010): 22.6/100 000; rate of suicide attempt (2001 – 2008): 98.11/100 000.

In Idaho's suicide prevention plan (2011), the guide is directed to agencies, organizations and individuals at a state, regional and local levels that develop their own specific plans and actions. Goals, Outcomes and Strategies are comprised into the plan concerning:

- Infrastructure;
- Awareness;
- Implementation;
- Methodology.

Reduction of suicide rates is targeted in a State that usually presents higher rates than United States as a whole and especial figures for high risk groups when closer look is taken into account (e.g. Elderly males 81.2/100 000), despite period between 1999 -2001, Idaho rate was 14.4/100 000 against 10.7/100 000 in US alone for 2000.

Suicide prevention plan for Michigan (Coalition 2005) included the setting of 10 goals:

- Reduce incidence of suicide attempts and deaths across lifespan;
- Develop broad based support for suicide prevention;
- Promote awareness and reduce the stigma;
- Develop and implement community-based suicide prevention programmes;
- Promote efforts to reduce access to lethal means and methods of suicide;
- Improve the recognition of and response to high risk individuals within communities;
- Expand and encourage use of evidence-based approaches to treatment;
- Improve access to and community linkages with mental health and substance abuse services;
- Improve and expand surveillance systems;
- Support and promote research on suicide and suicide prevention.

Reduction of suicide and attempted suicide are targeted all over lifespan. Involvement of organizations, government leaders at state and local levels, community leaders, private sector leaders, private citizens is seek to be effective on plan implementation.

Overall indicators: Rate of Suicide (1990-2003): Michigan rate parallels national oscillating between 9.0 and 12.0 for the years above; suicide rates, methods, risk factors and at-risk populations for Michigan follow national trends and statistics. Completed and attempted suicide is estimated to have over a \$1.1 billion impact annually.

In Montana, a Strategic Suicide Prevention Plan (Services, amp, and Human 2013) with several goals and measurable objectives were listed:

- To reduce suicide. Measurable objectives: out of top 5 nation rates, 10% decrease in youth reporting suicide attempt (for 2009), 10% decrease on adults reporting attempting suicide;
- To dedicate sufficient personnel/fiscal resources to address prevention issue activities in a structured long-term manner. Measurable objectives: keeping \$ 400,000 annual allocation for suicide prevention, identify & apply for future suicide prevention grants.
- To increase people awareness/concern about the issue as a leading cause of death. Measurable objectives: campaign addressing to 75% population, policy makers education, gatekeeper curriculum to 50% of American Indian population, gatekeeper curriculum to 10% of State population, crisis intervention training.
- To increase evidence-based suicide prevention curriculum implemented in high schools. Measurable objectives: 50% evidence-based suicide prevention curriculum implemented and 50% students exposed to evidence-based suicide prevention curriculum in their high schools by 2013.
- To implement multilevel work, local, regional, tribal, state to best strategies implementation. Measurable objectives: state suicide prevention coordinator and specialists meetings in annual basis to follow progress, accomplishments, etc.

Prevention: Mental health addressing stigma and awareness on youth suicide prevention, and social coping skills. Develop community networks. Increase training amidst law enforcement agencies and hospital staff. Gatekeepers training, screening programs, implemented evidence-based curricula to schools.

Intervention focus on the increase accessibility to mental health services, development of clinical screening programs, standard screening tools. Develop statewide crisis response system.

Postvention: reduce access lethal means, improve services to survivors, provide support/resources to families/persons at high-risk, improve media reporting.

Coordination: improve communication and community linkages with MH services aiming youth and young adults, demonstrate collaboration. Overall indicators: Rate of Suicide (last 10 years): 19.74/100 000 – 2007 ranked #2 in US.

“Preventing suicide in Colorado” (Colorado) general overview of suicide and related phenomena are gathered into a picture, first national and subsequently on a state level. Prevention and Intervention on the field took several levels starting on:

- school-based programs;
- suicide prevention centers;
- telephone crisis lines and hotlines;
- limitations to access to lethal means;
- training of professionals;
- training of community gatekeepers;
- media and public information/cluster suicides;
- postvention follow up of suicide/programs for suicide survivors;
- spiritual and ethical issues;
- mental health programs for attempters;
- suicide prevention in correctional facilities;
- programs for special at-risk populations.

A special task force took place and a set of recommendations were issued: a lead entity would take place to ensure the whole of the ongoing system; a state-wide comprehensive public information and education campaign; train individuals to screen, refer, treatment and follow-up of at-risk people; encourage “community suicide prevention resource plans”. The set of recommendations as well as specific implementation tasks were designed to be spread at a community and state levels. A “one size fits all” approach was discarded for a framework encouraging individual communities to customized strategies to implement it in a way to fit community.

Taking action with adequate planning and resources is the way to make a difference and reduce suicides. Overall indicators: Rate of Suicide remained relatively constant over the last 16 years with a current rate around 16.6. Since 1910, when the first figures were compiled, Colorado has always exceeded national figures.

4.2. Preventing Suicide in Europe

In Europe, a number of actions took place over the last years: reducing suicide and improve care to depressed patients. That was the main concept to the development of the Nuremberg Alliance Against Depression in 2001, after the German Research Network on Depression and Suicidality. The development of these ideas gained broader impact and turned into an international level organization (EAAD) as well as further developments like Optimizing Suicide Prevention Programs and their implementation in Europe (OSPI Europe) (Hegerl et al. 2008, Hegerl, Wittenburg, and European Alliance Against Depression Consortium 2009, Hegerl et al. 2009).

OSPI Europe is an evidence-based intervention implemented in Portugal, Ireland, Germany and Hungary, at the same time comprising a four level model of intervention: primary care, public addressing, social agents training and targeting high risk groups (Hegerl et al. 2009).

In Portugal, the project involved a number of community (City Halls, NGO's, Associations) and society partners (Health Sector Authorities, Hospitals, Teachers, Priests and Police). The scientific validation has been made for these countries, according to a pre-post and case-control design (Hegerl et al. 2008, Gusmão and de Almeida 2009, Hegerl et al. 2009, Hegerl, Wittenburg, and Consortium 2009, Székely et al. 2013) with the best evidence-based research available (van der Feltz-Cornelis et al. 2011).

OSPI is the sole study in Portugal concerning suicide prevention as we write, whose effects have been assessed, with both instruments as well as adequate measures, at the level of reduction of non-lethal suicidal behaviours and more,

providing an instrument for political decision unavailable till now (Gusmão 2013).

According to Gusmão (2013) results achieved are preliminary, but indicate a consistent reduction occurring in what concerns non-lethal suicidal behaviour. Suicidal behaviour results remain on analysis. Results also indicate a shifting in the attitude, knowledge and skills of family doctors, as well as to all of the community gatekeepers, to what concerns depression and suicidal behaviour; and as to general population. A major shifting involving all these professionals could be observed after preliminary results.

4.3. Suicide Prevention status in Portugal

Also in Portugal a recent development on suicide prevention took place: the national suicide prevention plan (NSPP) published by the Direção-Geral de Saúde (DGS), integrated in the National Programme for Mental Health.

Portugal has had relatively moderate rates taking into account available data and recent studies (Gusmão and Quintão 2013, Ramalheira 2013). Official data from statistical national office (INE; Instituto Nacional de Estatística) between 1902 and 2000 show figures of 4.3 and 12.8 as minimum/maximum rates respectively (Campos and Leite 2002). Some regions have highest rates like Baixo Alentejo, where high rates are observed – between 1999 and 2008 lowest rate was observed in 2006 (23.8) and highest in 2007 (37.7) according to data edited on Department of Psychiatry available from police authorities.

In 2012 a group of experts was gathered to the development of the NSPP. In our discussions, one of the major questions was about the figures involved in suicide. Reasons exist to believe that the numbers of suicide in Portugal are far from reality. Undetermined deaths and number of suicides, registry practices, differences in terminology were some of those reasons.

At the same time, a pilot experience to test a new model for registration of deaths. The “Sistema de Informação de Certificados de Óbito” – SICO – Information System for Death Certification – was developed by the Directorate-

General of Health with the aim to give a proper instrument, in what concerns the knowledge of citizens death in a country, and to provide a regular uniformed instrument for death certification.

The National Suicide Prevention Plan

The NSPS identified several major issues to be addressed: impact of suicide in public health; increasing figures over the last decade, doubts surrounding numbers involved and risk factors. Moreover, uniform terminology unobserved for different kind of acts (suicidal acts and self-injury acts) connected also to the registry practice. Finally, the need to connect different institutions as well as organizations of society, in order to built a synergic working net.

Once the values and principles of accessibility, multicultural, multidisciplinary, proximity, sustainability, best practice and evidence-based research, were observed, objectives were set. Several levels were considered also (general population, health professionals, teenagers, elder, prison population, security forces, lesbian, gay, bisexual and transsexual populations, intellectual deficit population, individual strategies, monitor and evaluation).

On a first moment (2013-2014):

- to uniform terminology and registry practices of suicidal acts as well as self-injury acts;
- featuring the situation pursuing the better identification of those behaviours;
- increasing of psychological welfare;
- reducing access to lethal means;
- improving follow-up post hospital;
- getting mental health information and education better;

- reduce stigma over depression, suicidal ideation, self-injury and suicidal acts;
- media placement towards the situation;
- monitoring and evaluation.

On a second moment (2014-2017):

- increasing psychological welfare;
- reducing self-injury and suicidal acts;
- increasing mental health information and education;
- increasing following of persons under suicidal ideation, self-injury and suicidal acts through primary care;
- increasing access to specialized care and specialized consultations at a district level (districts are the main administrative territory division in Portugal);
- increasing scientific investigation;
- monitoring and evaluating the plan.

The NSPP is an adequate and extensive list of 'what do do' by important national experts. Nevertheless, situational diagnosis, and especially, 'how to do it', and 'how to measure it', as well as prioritization of interventions, need further development and refinement. Though these are more policy-oriented, nevertheless, steps were already taken in those paths (Sampaio and Telles-Correia 2013, Gusmão 2013, Sónia Quintão et al. 2013, Gusmão and Quintão 2013).

4.4. Evidence-based interventions

Reducing handy lethal means like firearm restrictions (Loftin et al. 1991) (Leenars 1996, Carrington 1999, Brigham 2003), physicians' education (Lehfeld et al. 2004) on recognizing and treating depression (Thompson et al. 2000), along with a multi-level pan-programmatic approaches works. A number of studies say so (Mann et al. 2005, Hegerl et al. 2008, Hawton and van Heeringen 2009, Hegerl, Wittenburg, and European Alliance Against Depression Consortium 2009, Hegerl et al. 2009, Gusmão 2013). At population level, some strategies revealed rates containment, like changing gas supply (Wiedenmann and Weyerer 1993) from toxic coal origin to non-toxic north-sea gas in UK, or introduction of catalysers in cars (McClure 2000), safety barriers in bridges/high places (Beautrais 2001), gun-control law (Bridges and Kunselman 2004), access restriction to pesticides (Bowles and Webster 1995).

Programmes on primary care education for detection/treatment of depression effectively reduce suicide (Värnik 2012, Hawton and van Heeringen 2009, Mann et al. 2005). School programmes on psychological wellbeing improvement show suicidal preventive effects in young people and media responsible reporting or internet responsible presentations must come along (Hawton and van Heeringen 2009).

High-risk groups level screening for depressive persons should aim measure of suicide risk. Should it be present, further assessment must target imminent suicidal behaviour imminence. Sudden action may be needed, when imminent act is supposed to occur: vigilance, supervision, controlled placement (Hospital, Clinic), methods brought to unhandy status, close-treatment (Hawton and van Heeringen 2009).

Drug related issues and last resort therapies, antidepressants (Olfson et al., 2003), lithium (Thies-Flechtner et al. 1996), clozapine (Glick et al. 2004), electroconvulsive therapy (Group 2003, Rose et al. 2005). Immediate admission-discharge periods require particular focus, and intensive clinical care, on suicide attempters (Rotheram-Borus et al. 2000). Post self-harm/attempted

suicide need follow-up care (Aoun 1999) and ought to come along with prevention programmes as well as psychological treatment (Crits-Christoph et al. 2011, Boyce et al. 2003). All these strategies are literature reported (Hawton and van Heeringen 2009) fulfilling an evidence-based research intervention.

At general public level, educating campaigns to improve recognizing suicide, seek for help and stigma reduction on mental health in general and suicide in particular seems appropriate (Mann et al. 2005, van der Feltz-Cornelis et al. 2011).

Evidence-based show immediate (though modest) effects from this educational campaign approach in Germany, UK, Australia and New Zealand. This approach need more work in its effects but has some promising features to be developed and its impact can be much larger in time.

Also, concerning to a gate-keeping level (gatekeepers include clergy, first responders, pharmacists, staff in institutions – schools, prisons, shelters) community-based interventions can reach and identify at-risk individuals bringing them to assessment and treatment (Mann et al. 2005).

Treatment level interventions suggest pharmacotherapeutic approach and psychological approaches for start. Follow-up care is needed upon recurrence. Post-intervention decrease of suicide rates shows positive impact from a continuum of care featuring potential for prevention (Mann et al. 2005).

Media level can contribute to a larger public education and to set responsible approaches to suicide. Systematic evaluation on media impact must go, but nevertheless, media blackout probably impacts rates for coincidence is observed between blackout and rate (Mann et al. 2005). Multilevel approaches enclosure promising and effective outcomes for prevention. Several programmes running in several levels may tackle a lot and provide a good frame to prevention (Gusmão 2013).

CHAPTER FIVE (5): Study description and Methods

5.1. Study setting, design and aim

High rates of suicide, according to available data, are somewhat permanently observed in the Portuguese region of Alentejo, particularly in Baixo Alentejo, Portugal (24.0 in 2006; 37.9 in 2007; 31.0 in 2008; 27.3 in 2009; 32.3 in 2010)¹⁸.

Particularly in the council of Odemira, suicide rates are particularly high and affecting mostly the oldest. The council is the largest in Portugal but simultaneously one with the lowest population density. Population of Odemira, according to the INE estimation for 2012 is 25.835.

Whereas the average crude death rate in Portugal for the 5-year period, from 2008 to 2012 is 9.92 per 100.000 inhabitants, in Odemira it reaches 38.39 per 100.000 inhabitants¹⁹.

The Odemira council actually bears the highest suicide rates in the country for a number of years (Ramalheira 2013) and this was crucial for our decision to implement our psychological autopsy study.

We devised a case-control design to study a group of relatives of people committing suicide (n=30), and a group of relatives of people whose death was after natural causes (n=24), with the aims of (i) validation of psychological autopsy technique in a community environment, adapting an instrument earlier developed for forensic purposes (Costa Santos 1998), and (ii) study the suicidal

¹⁸ Available data provided by the Observatory of Suicide and Para-suicide of Baixo Alentejo, that we coordinated since its beginning, between 2009 and 2011. The Observatory was integrated in Department of Psychiatry of Beja and has been developed as an "Innovative Project for Mental Health" (Projectos Inovadores de Saúde Mental – PISM – in the original) in 2009, with technical support from Faculty of Medical Sciences in Lisbon, and financial resources from the National Coordination of Mental Health and Local Health Unit of Baixo Alentejo (Unidade Local de Saúde do Baixo Alentejo in the original).

¹⁹ Courtesy of data: Professor Ricardo Gusmão, Suicide and Affective Disorders Prevention line of research in CEDOC, FCM-UNL.

population in this region to contribute for the understanding of its high-suicide magnitude.

5.2. Recruitment of participants

A convenience sample of cases and controls was selected from the knowledge health professionals had directly connected to their work in the field. This was facilitated since it is a region where everyone knows everyone. Seventy participants – family members of deceased people by suicide and by natural death causes residing in Odemira at the time of their death – were earlier contacted, and invited to be interviewed. Most deaths had occurred in the last 5 years. Sixteen refused to integrate the study. The remaining 54 were interviewed between May and September 2013. Written informed consent was collected along with interviews (annexed). Variables of race and specific amount of income were suppressed for reasons of personal data protection, according to demands of CNPD. Distribution of instruments to collect required information in the field was made in May, to the previously recruited and trained health professionals involved.

5.3. Administrative and ethical concerns

Recruitment of participants was carried out after the contacts previously made by the local Health Centre, aiming full anonymity thus fulfilling the demands established by National Commission for Personal Data Protection (Comissão Nacional de Proteção de Dados, CNPD). Also, a declaration was issued by the National Head Director for Mental Health from the Directorate-General of Health (Direção Geral da Saúde) recognizing the public interest of the study to be performed.

The ethical committee of the NOVA Medical School was also informed of the study and its suggestions were followed.

5.3. Preparation for collection of data

Contacts were established with the Board of the Unidade Local de Saúde do Litoral Alentejano, which is the equipment of health with the responsibility to

provide healthcare to populations living in this geographical area in Southwest Portugal. The necessary permits were obtained both from the main structure and the local health centre in the region of Odemira where the study took place.

Different moments presided to the organization of the study in the field, as well as the preparations to do it. Three moments can be distinguished: (i) presentation sessions; (ii) preparation sessions; (iii) collection and monitoring.

The (i) presentation sessions took place in September 20, November 22, 29, December 6 of 2012, in Odemira, using local facilities accessed by City Hall and with the participation of all professional staff of local Health Centre. On January 9 (2013) the presentation took place in another Health Centre (Grândola) of the same region. Both Health Centres, in Odemira and Grândola, are parts of the larger organization of health equipments of the region, including one hospital and five (5) health centres (Santiago do Cacém, Sines, Odemira, Alcácer do Sal e Grândola). On these sessions the study was presented and people were asked to step forward to participate in the study. The design case-control was presented, as well as all the features concerning to its progression in the field.

(ii) Along with the preparation sessions in April 17, 29, and May 13 staff was formerly recruited. A number of twenty-one (21) persons were eligible to integrate the activities in the field, including us. These sessions were designed to present the scientific instruments, and formation to the staff was provided, in order to operate the study in the field. Work has been assigned and the perspective in time was assessed. A synopsis of the study was provided to interviewers as well as general guidelines in a step-by-step approach and a model of written informed consent was delivered.

(iii) Recruit of participants begun in late May/early July. Permanent contact was established with interviewers, and ultimately we joined to the tasks also, interviewing participants (in August 1, 8, 15, 22, 29; and September 2 and 9).

5.4. Instruments

The study was performed using psychological autopsy technique in a community context, in Portugal for the first time, using "semi-structured interview for family members of index individual", developed and adapted after the original instrument by Costa Santos (1998), in his "Suicide and psychological autopsy: comprehensive study and redefinition of categorization strategies in self-inflicted death", in a forensic-oriented study (permission granted by the author).

Semi-structured interview for family members of index individual is divided into. (9) groups of variables: (I) variables of generic information, (II) variables of information about the interviewees, (III) variables on social and demographics, (IV) variables of characterization of the individual in terms of biography and social functioning, (V) variables of characterization of health, (VI) variables of characterization of origin family, (VII) variables of recent significant events of life, (VIII) variables of recent changes in behaviour, and (IX) variables of characterization of death circumstances.

Health Centre database was a secondary source consulted to provide additional information about the deceased.

The adapted instruments are annexed.

5.5. Analysis Plan

Statistical Package for Social Sciences (SPSS) was used to process information for statistics.

SPSS was used to process information obtained. Statistical tests Chi-square and t-test were used to find statistical significance established at $P < 0.05$ for all variables compared. Death circumstances variables were described. Two groups of participants (suicide/natural cause) were compared to find statistically differences between them. A total of 254 variables were analysed for each group. Variables were joined according to different kinds of information:

variables with information about the interviewees, on social and demographics, of personal biography and social integration, about health condition, about characterization of blood family, indicative of detachable recent life events (occurring mostly over the last six months), indicative of recent changes in behaviour (especially over the last month), and variables characterizing death circumstances.

CHAPTER SIX (6): Results

6.1. Information about the interviewees

We looked differences between the family interviewees of people that died by suicide and natural causes.

Table 1. Information about the interviewees

	Suicide (N=30)		Natural cause (N=24)		χ^2
	N	%	N	%	
Age					14.800*
15-24	1	3.3	1	4.2	
25-34	1	3.3	8	33.3	
35-44	4	13.3	6	25.0	
45-54	7	23.3	1	4.2	
55-64	8	26.7	3	12.5	
65-74	4	13.3	4	16.7	
≥75	5	16.7	1	4.2	
Parental relationship					6.716
Father	3	10.0	5	20.8	
Mother	4	13.3	1	4.2	
Brother	5	16.7			
Son/Daughter	6	20.0	6	25.0	
Other relative	12	40.0	12	50.0	
Cohabited with the deceased					5.834*
Yes	3	10.0	9	37.5	
No	27	90.0	15	62.5	
Cohabited in the past					.132
Yes	19	63.3	15	68.2	
No	11	36.7	7	31.8	
If yes, when?					.132
Childhood	3	16.7	3	20.0	
Adolescence	5	27.8	3	20.0	
Adulthood	8	44.4	8	53.3	
Elder	2	11.1	1	6.7	
Reaction to the interview					3.880
Fully Understood No Reservations	25	83.3	21	100.0	
Fully Understood Some Reservations	3	10.0			
Not Understood & Accepted No Reservations	1	3.3			
Not Understood & Accepted With Reservations	1	3.3			
Evaluation/Colaboration					.202
Good & Completed With Additional Details	24	80.0	17	85.0	
Enough Sufficient/NoAdditional Details	6	20.0	3	15.0	

* $p \leq .05$.

Results are presented in Table 1.

Most of participants were aged between 25 and 74 years (85.2%), parental relationship as son/daughter or other relative (not father, mother or brother) (66.7%), didn't cohabited with the diseased (77.8%), but cohabited in the past (65.4%), most of them during adolescence or adulthood (72.7%).

Concerning reaction to interview, the majority fully understood, with no reservations (90.2%), and showed good collaboration, completing the interview with additional details (82.0%).

Statistically significant differences were found between groups for age with $\chi^2(6) = 14.800$; $p = .022$ and for Cohabited with the deceased with $\chi^2(1) = 5.834$; $p = .016$.

Results show that in the suicide group interviewees were older and most didn't live together with the deceased, compared to natural cause's group.

6.2. Social and demographic characteristics

Aiming to study differences between both groups (suicide/natural cause) on social and demographics Chi-square test was used.

Results are presented in Table 2.

Table 2. Social and demographics

	Suicide (N=30)		Natural cause (N=24)		χ^2
	N	%	N	%	
Gender					.397
Male	20	66.7	14	58.3	
Female	10	33.3	10	41.7	
Age of death					4.357
0-39	4	14.8			
40-59	8	29.6	5	22.7	
60-79	9	33.3	10	45.5	
≥80	6	22.2	7	31.8	
Marital status					7.546
Single	6	20.0			

	Suicide (N=30)		Natural cause (N=24)		χ^2
	N	%	N	%	
Married	17	56.7	18	75.0	1.328
Common law partnership	2	6.7			
Widow	5	16.7	6	25.0	
Number of biologic sons/daughters					1.274
None	5	16.7	2	8.3	
1	2	6.7	2	8.3	
2	8	26.7	5	20.8	
3	7	23.3	7	29.2	
>3	8	26.7	8	33.3	
Number of adopted sons/daughters					7.877
None	30	100.0	23	95.8	
1			1	4.2	
Profession					11.112
None	3	10.7	4	17.4	
Unskilled Worker	17	60.7	10	43.5	
Skilled/Semi-Skilled Worker	1	3.6	1	4.3	
Farmer/Small Holder	6	21.4	2	8.7	
Private Firm/Public Executive	1	3.6	2	8.7	
Handicraft/Small Industry/Trader			3	13.0	
Private Firm/Public High Executive/Entrepreneur			1	4.3	
Work status					7.083
Term Employee	7	23.0	3	12.5	
Family Worker	1	3.6			
Employee	4	14.3	3	12.5	
FreeLancer	5	17.9	7	29.2	
Boss			3	12.5	
Housewife	3	10.7	5	20.8	
Conscription			1	4.2	
Invalid	1	3.6			
Retired	7	25.0	2	8.3	
Degree /Level of education					3.615
Illiterate	23	79.3	11	45.8	
Former Primary School(Incomplete)	1	3.4	2	8.3	
Former Primary School(Complete)	4	13.8	9	37.5	
General Secondary School(Complete-9thgrade)			1	4.2	
Complementary Secondary School(Complete)11thorUniFrequency	1	3.4	1	4.2	
Professional training					
None	28	96.6	18	81.8	
Unlicensed Handwork(mechanics,	1	3.4	2	9.1	

	Suicide (N=30)		Natural cause (N=24)		χ^2
	N	%	N	%	
electricity, etc)					
Licensed Technical Professionalizing Course			1	4.5	
Other Specified Type			1	4.5	
Residence area (Freguesia)					13.921
Colos Luzianes-Gare	2	7.4			
Odemira-Santa Maria	2	7.4	4	25.0	
Odemira-São Salvador	1	3.7	2	12.5	
Relíquias	1	3.7	1	6.3	
Sabóia	6	22.2	5	31.3	
SãoLuís	2	7.4	1	6.3	
São Martinho Amoreiras	4	14.8			
SãoTeotónio	9	33.3	1	6.3	
Vila Nova Milfontes			1	6.3	
Zambujeira Mar			1	6.3	
Residence outside Odemira					6.226
Situated North	1	3.4	1	4.2	
Situated Centre			3	12.5	
Situated Alentejo	1	3.4	2	8.3	
Situated Algarve	2	6.9	1	4.2	
Situated Autonomic Regions			1	4.2	
Previously Reported In Odemira	25	86.2	16	66.7	
Place of birth (Freguesia)					4.980
South Countryside Urban Aggregate			1	4.3	
South seaside rural aggregate	27	93.1	17	73.9	
North countryside rural aggregate	1	3.4	1	4.3	
Centre countryside rural aggregate			1	4.3	
South countryside rural aggregate	1	3.4	2	8.7	
Autonomic region urban aggregate			1	4.3	

p > .05.

All the deceased were Portuguese and most male (63.0%), over 40 years old (91.8%), married (64.8%), with more than two biologic sons/daughters (55.5%), without adopted sons/daughters (98.1%), unskilled worker (52.9%), freelancer, term employee or retired (59.6%), illiterate (64.2%) and without professional training (90.2%).

The most frequent residence areas were Sabóia (25.6%) and São Teotónio (23.3%) and, for those who lived outside Odemira, 77.4% lived in areas

previous reported in Odemira. Most were born in South seaside rural aggregate (84.6%).

No differences were found between both groups for any of the variables under study ($p > .05$).

6.3. Personal biography and social integration

To study differences between both groups (suicide/natural cause) about personal biography and social integration Chi-square test was used.

Results are presented in Table 3.

Table 3. Personal biography and social integration

	Suicide (N=30)		Natural cause (N=24)		χ^2
	N	%	N	%	
Sibling position					3.288
Singleton			2	8.3	
Older	5	17.9	6	25.0	
Middle	20	71.4	13	54.2	
Younger	3	10.7	3	12.5	
Disease/injury in childhood					1.184
Yes	4	17.4	1	5.9	
No	19	82.6	16	94.1	
Psychological treatment in childhood					1.187
Yes			1	5.3	
No	22	100.0	18	94.7	
Disease/injury in adulthood					3.496
Yes	10	38.5	10	65.2	
No	16	61.5	8	34.8	
Invalidity/unable to work					13.365***
Yes	2	6.9	12	52.2	
No	27	93.1	11	47.8	
Retirement					5.965*
Yes	9	34.6	16	69.6	
No	17	65.4	7	30.4	
Psychological treatment in adulthood					.627
Yes	1	3.8	2	9.5	
No	25	96.2	19	90.5	
Change of marital status					.889
Yes	2	33.3			
No	4	66.7	2	100.0	

	Suicide (N=30)		Natural cause (N=24)		χ^2
	N	%	N	%	
Number of previous marriages					.179
None	20	83.3	20	87.0	
1	3	12.5	2	8.7	
>1	1	4.2	1	4.3	
Unemployment duration					3.004
Between 1-3 months	2	11.8	1	4.8	
Between 3-6 months	1	5.9			
Between 6-12 months			1	4.8	
Between 1-5 years	2	11.8	4	19.0	
> 5 years	10	58.8	13	61.9	
Not applicable	2	11.8	2	9.5	
Principal source of income					4.867
Salary	7	25.0	2	8.3	
Freelancer income	7	25.0	5	20.8	
Unemployment benefit			1	4.2	
Pension or equivalent	14	50.0	15	62.5	
Subvention or family income			1	4.2	
Accommodation and housing company					5.763
Sole In Flat Study or Rent Room	5	17.9	4	16.7	
Sole In Degraded Inhabitation	1	3.6			
Sole With No Usual Place	1	3.6			
In Companionship of Constituted Family Members In Flat or Similar	15	53.6	17	70.8	
In Companionship of Origin Family Members In Degraded Inhabitation	1	3.6	1	4.2	
In Friend Colleague Lodger or Butler			1	4.2	
Companionship in Flat or Similar					
In Constituted Family Members	1	3.6			
Companionship In Degraded Inhabitation					
Other Specified	4	14.3	1	4.2	
Nature and quality of relationships with family of origin					2.139
Close Contact Satisfactory Relationship	18	72.0	13	68.4	
Close Contact Conflicting Relationship	2	8.0			
Regular Contact Satisfactory Relationship	4	16.0	5	26.3	
Rare Contact Conflicting Relationship	1	4.0	1	5.3	

* p ≤ .05; *** p ≤ .001.

Most of deceased had the middle sibling position (63.5%), had no disease/injury in childhood (87.5%), haven't done psychological treatment in childhood (97.6%) or in adulthood (93.6%), but had a disease/ severe injury in adulthood (51.0%), were not invalid or unable to work (73.1%), were retired (51.0%), unchanged marital status (75.0%), no previous marriages (85.1%),

unemployed for more than five years (60.5%), with pension or equivalent as main source of income (55.8%), lived in companionship of constituted family members in flat or similar (61.5%) and with close contact satisfactory relationship with family of origin (70.5%).

Statistically significant differences were found between groups for Invalidity/unable to work with $\chi^2 (1) = 13.365$; $p < .001$ and for Retirement $\chi^2 (1) = 5.965$; $p = .015$.

Results show that the suicide group had lower frequencies of invalidity/unable to work and retirement, compared to the natural cause's sample.

Table 4 shows the differences between the two groups (suicide/natural cause) concerning the usual personality traits of the deceased.

Regarding the deceased's usual way of being, 56.9% were very communicative, 50.0% had normal communication, 22.0% were uncommunicative, 74.5 % were calm and relaxed, 27.5% were anxious/tense/unstable, 11.8% were aggressive and violent, 71.4% were euthymic/cheerful/optimist, 25.0% were sad/bitter/pessimistic, 52.3% made plans for the future, 73.5% were emotionally stable, 27.1% were emotionally labile/unstable and 2.2% were impossible to characterize.

Statistically significant differences were found between groups for Normal communication with $\chi^2 (1) = 5.128$; $p = .024$, for euthymic/cheerful/optimist with $\chi^2 (1) = 5.121$; $p = .024$ and for sad/bitter/pessimistic $\chi^2 (1) = 7.111$; $p = .008$.

Results show that suicide group were more sad/bitter/pessimistic, and less normal communication and were less euthymic/cheerful/optimist.

Table 4. Usual way of being of the deceased

	Suicide (N=30)		Natural cause (N=24)		χ^2
	N	%	N	%	
Very communicative					.870
Yes	17	63.0	12	50.0	
No	10	37.0	12	50.0	
Normal communication					5.128*
Yes	9	34.6	16	66.7	
No	17	65.4	8	33.3	
Uncommunicative					2.427
Yes	8	30.8	3	12.5	
No	18	69.2	21	87.5	
Calm and relaxed					.539
Yes	22	78.6	16	69.6	
No	6	21.4	7	30.4	
Anxious/tense/unstable					.997
Yes	9	33.3	5	20.8	
No	18	66.7	19	79.2	
Aggressive/violent					.514
Yes	4	14.8	2	8.3	
No	23	85.2	22	91.7	
Euthymic/cheerful/optimist					5.121*
Yes	15	57.7	20	87.0	
No	11	42.3	3	13.0	
Sad/bitter/pessimistic					7.111**
Yes	10	41.7	2	8.3	
No	14	58.3	22	91.7	
Made plans for the future					.091
Yes	11	50.0	12	54.5	
No	11	50.0	10	45.5	
Emotionally stable					1.857
Yes	17	65.4	19	82.6	
No	9	34.6	4	17.4	
Emotionally labile/unstable					2.101
Yes	9	36.0	4	17.4	
No	16	64.0	19	82.6	
Impossible to characterize					1.169
Yes			1	4.8	
No	24	100.0	20	95.2	

* $p \leq .05$; ** $p \leq .01$.

Table 5 shows differences between the two groups (suicide/natural causes) concerning leisure time activities.

Table 5. Leisure time activities

	Suicide (N=30)		Natural cause (N=24)		χ^2
	N	%	N	%	
Work investment					.112
Yes	19	73.1	17	77.3	
No	7	26.9	5	22.7	
Bricolage/painting					.181
Yes	9	33.3	9	39.1	
No	18	66.7	11	60.9	
Watch TV/magazines/radio					.987
Yes	8	32.0	11	45.8	
No	18	66.7	11	60.9	
Receptions to family/friends					6.443*
Yes	8	30.8	16	66.7	
No	18	69.2	8	33.3	
Local urban socialization					.703
Yes	11	42.3	13	54.2	
No	15	57.7	11	45.8	
Walk/shopping/shows					2.904
Yes	4	16.0	9	37.5	
No	21	84.0	15	62.5	
Sport/fishing/hunting					8.908**
Yes			7	30.4	
No	25	100.0	16	69.6	
Writing/photography					.004
Yes	1	4.0	1	4.3	
No	24	96.0	22	95.7	
Community activities					3.077
Yes	2	8.0	6	27.3	
No	23	92.0	16	72.7	
Scarce leisure time					5.855*
Yes	2	8.7	9	39.1	
No	21	91.3	14	60.9	

* $p \leq .05$; ** $p \leq .01$.

The use of leisure time activities of the deceased were 75.0% work investment, 36.0% bricolage/painting, 38.8% watch TV/magazines/radio, 48.0% receptions to family/friends, 48.0% local urban socialization, 26.5% walk/shopping/shows, 14.6% sport/fishing/hunting, 4.2% writing/photography, 17.0% community activities and 23.9% had scarce leisure time.

Statistically significant differences were found between groups for Receptions to family/friends with $\chi^2 (1) = 6.443$; $p = .011$, for Sport/fishing/hunting with χ^2

(1) = 8.908; $p = .003$ and for Scarce leisure time $\chi^2 (1) = 5.855$; $p = .016$. Results show that suicide group used less their leisure time with the activities receptions to family/friends and sport/fishing/hunting and reported less scarce leisure time.

6.4. General health status

To study differences between the two groups (suicide/natural cause) for the health conditions Chi-square test was used.

Table 6. Diagnosed somatic diseases

	Suicide (N=30)		Natural cause (N=24)		χ^2
	N	%	N	%	
Infectious and parasitic diseases					.934
Yes	1	4.3			
No	22	95.7	21	100.0	
Neoplasms					.980
Yes	3	12.5	5	23.8	
No	21	87.5	16	76.2	
Endocrine, nutritional and metabolic immune deficiencies					4.375*
Yes	2	8.3	7	33.3	
No	22	91.7	14	66.7	
Nervous system and sense organs					.001
Yes	10	38.5	8	38.1	
No	16	61.5	13	61.9	
Cardiovascular					5.275*
Yes	5	20.0	11	52.4	
No	20	80.0	10	47.6	
Digestive					.465
Yes	2	8.0	3	14.3	
No	23	92.0	18	85.7	
Genito-urinary					.571
Yes	1	4.0	3	14.3	
No	24	96.0	19	90.5	
Musculoskeletal system and connective tissue					.058
Yes	3	12.5	3	15.0	
No	21	87.5	17	85.0	
Other specified					.062
Yes	2	11.1	1	8.3	
No	16	88.9	11	91.7	

* $p \leq .05$.

Somatic diseases with diagnosis reported were 2.3% infectious and parasitic diseases, 17.8% neoplasms, 20.0% endocrine, nutritional and metabolic immune deficiencies, 38.3% nervous system and sense organs, 34.8% cardiovascular, 10.9% digestive, 6.5% genito-urinary, 13.6% musculoskeletal system and connective tissue and 10% other specified.

Statistically significant differences were found between groups for Endocrine, nutritional and metabolic immune deficiencies with $\chi^2 (1) = 4.375$; $p = .036$ and for Cardiovascular $\chi^2 (1) = 5.275$; $p = .022$. Results show that the suicide group reported less endocrine, nutritional and metabolic immune deficiencies and less cardiovascular diseases compared to the natural cause's sample.

Results concerning mental disorders and toxic habits are presented in Table 7.

Table 7. Mental disorders and substance abuse

	Suicide (N=30)		Natural cause (N=24)		χ^2
	N	%	N	%	
Axis I DSM-III					5.023
None	21	87.5	22	91.7	
Mental Organic Disorder			2	8.3	
Major Affective Disorders	2	8.3			
Anxiety Somatic Dissociative Disorders	1	4.2			
Axis II DSM-III					
None	24	100.0	24	100.0	
Alcohol use (last 6 months)					6.129
None Alcoholic Beverages or Extraordinary Consumption	22	78.6	18	75.0	
Regular Consumption Under 1 Wine Liter Day	2	7.1	6	25.0	
Alcohol Abuse at Least 1 Month with Social Problems	3	10.7			
Alcohol Dependence With Previous Treatment	1	3.6			
Other toxic habits (last 6 months)					.869
Inexistent Toxics Consumption	26	93.2	23	100.0	
Occasional Consumption Medications	1	3.7			

$p > .05$.

Most of the deceased didn't present any mental disorders in Axis I (89.6%) or Axis II (100.0%), didn't present extraordinary alcohol consumption (76.9%) and had no toxics consumption (98.0%).

Statistically significant differences were not found between groups ($p > .05$).

Results related to verbalization of ideas of death and/or suicide, are presented in Table 8.

Table 8. Verbalization of ideas of death and/or suicide

	Suicide (N=30)		Natural causes (N=24)		χ^2
	N	%	N	%	
Ideas of death or suicide - occasional					.504
Yes	5	20.0	3	12.5	
No	20	80.0	21	87.5	
Ideas of death or suicide - frequent					3.714
Yes	6	24.0	1	4.3	
No	19	76.0	22	95.7	
Warnings/threats death or suicide - occasional					1.875
Yes	4	16.7	1	4.3	
No	20	83.3	22	95.7	
Warnings/threats death or suicide - frequent					3.714
Yes	6	24.0	1	4.3	
No	19	76.0	22	95.7	
Communication death or suicide six months preceding					4.825*
Yes	7	28.0	1	4.3	
No	18	72.0	22	95.7	
Communication death or suicide on an unspecified date					5.805*
Yes	7	31.8	1	4.3	
No	15	68.2	22	95.7	

* $p \leq .05$.

Ideas of death or suicide were reported as occasional in 16.3% and frequent in 14.6% of the cases. Warnings/threats of death were reported as occasional in 10.6% and frequent in 14.6% of the cases.

Communication of death or suicide six months preceding death was reported in 16.7% of the cases and communication of death or suicide on an unspecified date was reported in 17.8% of the cases.

Statistically significant differences were found between groups for communication death or suicide six months before with $\chi^2 (1) = 4.825$; $p =$

.028 and for communication death or suicide on an unspecified date $\chi^2 (1) = 5.805$; $p = .016$.

Results show that communication of death or suicide (six months preceding death or on an unspecified date) was higher in the suicide sample.

Taking into account all the deceased, there are an average of .69 (SD = 1.08) suicide attempts, with a minimum of 0 and a maximum of 3.

Table 9 shows the differences between the two groups (suicide/natural causes) for the number of suicide attempts. The t test for two independent samples was used.

Table 9. Number of suicide attempts

	Suicide (N=30)		Natural cause (N=24)		t
	M	DP	M	DP	
Number of suicide attempts	1.13	1.25	.25	.71	1.727

$p > .05$.

Statistically significant differences between groups were unfound ($p > .05$).

Results concerning severity degree of previous suicide attempts and their chronology are presented in Table 10.

The severity degree of previous suicide attempts reported was 8.3% of mild severity, 4.3% of medium severity, 4.3% of important severity and 4.3% gravity is not determined due to insufficient data.

Concerning their chronology, 4.3% reported Attempt (s) Date (s) previous (es) at 6 months before death, 2.2% Attempt (s) during the previous 6 months (except last month) and 7.0% Attempt (s) on dates not specified.

Statistically significant differences between groups were unfound ($p > .05$).

Table 10. Severity of previous suicide attempts and their chronology

	Suicide (N=30)		Natural cause (N=24)		χ^2
	N	%	N	%	
Attempt (s) of mild severity					1.091
Yes	3	12.5	1	4.2	
No	21	87.5	23	95.8	
Attempt (s) of medium severity					.004
Yes	1	4.5	1	4.2	
No	21	95.5	23	95.8	
Attempt (s) of important severity					.004
Yes	1	4.5	1	4.2	
No	21	95.5	23	95.8	
Attempt (s) gravity is not determined due to insufficient data					.004
Yes	1	4.5	1	4.2	
No	21	95.5	23	95.8	
Attempt (s) Date (s) previous (es) at 6 months before death					.001
Yes	1	4.3	1	4.2	
No	22	95.7	23	95.8	
Attempt (s) during the previous 6 months (except last month)					.937
Yes			1	4.2	
No	22	100.0	23	95.8	
Attempt (s) on dates not specified					.527
Yes	2	10.0	1	4.3	
No	18	90.0	22	95.7	

p > .05.

Results concerning medical care are presented in Table 11.

Concerning medical outpatient visits, 39.5% had more than two consultations in the last six months before death, 27.5% had a last visit during the week preceding death, 44.2% had a last consultation during the previous month (except last week) and 47.6% had a last consultation of recent date, not specified.

Concerning psychiatric consultations, 2.1% had more than two consultations in the last six months, 2.1% had a last visit during the week preceding death, 2.1% had a last consultation during the previous month (except last week) and 6.4% had a recent date last consultation unspecified in time.

Table 11. Medical care

	Suicide (N=30)		Natural cause (N=24)		χ^2
	N	%	N	%	
Medical outpatient - more than two visits					2.833
Yes	6	27.3	11	52.4	
No	16	72.7	10	47.6	
Medical outpatient - last visit in the week preceding death					7.166**
Yes	2	9.5	9	47.4	
No	19	90.5	10	52.6	
Medical outpatient - last consultation during the previous month (except last week)					4.968*
Yes	7	29.2	12	63.2	
No	17	70.8	7	36.8	
Medical outpatient - last consultation of recent date, not specified					9.450**
Yes	6	26.1	14	73.7	
No	17	73.9	5	26.3	
Hospital admissions for somatic illness (last 6 months)					16.586**
None	18	85.7	6	27.3	
One Short-Term Admission 15 Days	2	9.5	3	13.6	
One Long-Term Admission More 15 Days	1	4.8	9	40.9	
One Unspecified Admission in Time			1	4.5	
2 or More Short-Term Admissions			2	9.1	
2 or More Long-Term Admissions			1	4.5	
Psychiatric consultations - more than two					1.313
Yes			1	4.8	
No	27	100.0	20	95.2	
Psychiatric consultations - last visit during the week preceding death					1.265
Yes			1	4.8	
No	26	100.0	20	95.2	
Psychiatric consultations - last consultation during the previous month (except last week)					1.265
Yes			1	4.8	
No	26	100.0	20	95.2	
Psychiatric consultations - last consultation of recent date, not specified					.627
Yes	1	3.8	2	9.5	
No	25	96.2	19	90.5	
Psychiatric hospitalizations (last 6 months)					2.026
None	26	96.3	23	100.0	
OneShortTermAdmission30Day	1	3.7			

* p ≤ .05; ** p ≤ .01.

The majority had none hospital admissions for somatic illness (last 6 months) (55.8%) and none psychiatric hospitalizations (last 6 months) (98.0%).

Statistically significant differences were found between groups for medical outpatient for last visit during the week preceding death with $\chi^2 (1) = 7.166$; $p = .007$, last consultation during the previous month (except last week) with $\chi^2 (1) = 4.968$; $p = .026$ and for last consultation of recent date, not specified $\chi^2 (1) = 9.450$; $p = .002$ and for Hospital admissions for somatic illness (last 6 months) with $\chi^2 (5) = 16.586$; $p = .005$.

Results show that the suicide sample reported less hospital admissions for somatic illness (last 6 months), and concerning medical outpatient less frequencies of last visit during the week preceding death, last consultation during the previous month (except last week) and last consultation of recent date, not specified.

6.5. Original family characteristics

To study differences between the two groups (suicide/natural cause) for the characterization of blood family variables, Chi-square test was used.

The results concerning characterization of blood family variables are presented in Table 12.

Most of parents were married (66.7%), with families with three or more sons/daughters (68.0%).

Half of the fathers were unskilled workers (50.0%) and most of the mothers were housewives (58.7%).

Major financial distress or basic needs were absent in 36.0% of the families and in 66.7% of the families there was a good relationship.

No statistically significant differences were found between groups ($p > .05$).

Table 12. Blood family characteristics

	Suicide (N=30)		Natural causes (N=24)		χ^2
	N	%	N	%	
Parents marital status					5.180
Married	18	78.3	12	54.5	
Common Law Partnership	2	8.7	6	27.3	
Widow	1	4.3	3	13.6	
Single Mother	1	4.3			
Single Father	1	4.3	1	4.5	
Number of brothers					.371
1	1	7.1	1	9.1	
2	4	28.6	2	18.2	
≥3	9	64.3	8	72.7	
Father's profession					6.671
Unskilled Worker	11	42.3	11	61.1	
Skilled Operator	2	7.7			
Skilled Employee	1	3.8			
Farmer/Small Holder	10	38.5	4	22.2	
Private Firm/Public Executive			1	5.6	
Handicraft/Small Industry/Trader	1	3.8	2	11.1	
Private Firm/Public High Executive/Entrepreneur	1	3.8			
Mother's profession					5.307
Housewife	17	63.0	10	52.6	
Unskilled Worker	9	33.3	4	21.1	
Farmer/Small Holder	1	3.7	4	21.1	
Handicraft/Small Industry/Trader			1	5.3	
Prevailing economic situations of family of origin					.189
Major Financial Distress/Basic Needs Absent	10	37.0	8	34.8	
Some Financial Distress/Modest Life	8	29.6	6	26.1	
Inexistent/Rare Financial Distress	7	25.9	7	30.4	
Good High Financial Level	2	7.4	2	8.7	
Relationship in the family of origin					1.404
Good Relation Ship Shared Life	19	67.9	15	65.2	
Reasonable Relationship/Regular No Conflicts	6	21.4	7	30.4	
Ongoing Relationship/Minimal Share Frequent Conflicts	2	7.1	1	4.3	
Bad Relationship/Permanent Conflicts	1	3.6			

p > .05.

The results related to serious somatic diseases, chronic or disabling of 1st degree relatives are presented in Table 13.

Table 13. Serious somatic diseases, chronic or disabling, in 1st degree relatives

	Suicide (N=30)		Natural cause (N=24)		χ^2
	N	%	N	%	
Neoplasms					.448
Yes	6	27.3	6	37.5	
No	16	72.7	10	62.5	
Endocrine, nutritional and metabolic immune deficiencies					3.027
Yes	2	9.1	5	31.3	
No	20	90.9	11	68.8	
Nervous system and sense organs					.020
Yes	7	29.2	5	31.3	
No	17	70.8	11	68.8	
Cardiovascular					1.872
Yes	4	16.7	6	35.3	
No	20	83.3	11	64.7	
Digestive					1.467
Yes	2	8.7			
No	21	91.3	16	100.0	
Other specified					1.786
Yes	2	10.5			
No	17	89.5	16	100.0	

p > .05.

Figures for serious, chronic or disabling, somatic diseases affecting first degree relatives were reported: 37.5% neoplasms, 18.4% endocrine diseases, nutritional and metabolic immunity deficiencies, 30.0% central nervous system and sense organs, 24.4% cardiovascular, 5.1% gastrointestinal, and 5.7% other specified.

There were no statistically significant differences between the two groups aggregating people that died either by suicide or natural deaths (p > .05).

Results related to serious mental disorders and toxic abuse of first degree relatives are presented in Table 14.

Table 14. Mental disorders and toxic abuse, in 1st degree relatives

	Suicide (N=30)		Natural cause (N=24)		χ^2
	N	%	N	%	
Mental disability					.890
Yes	1	4.3			
No	22	95.7	20	100.0	
Organic mental disorders					2.415
Yes			2	10.0	
No	23	100.0	18	90.1	
Disorders by the use of alcohol					
No	23	100.0	20	100.0	
Disorders by using other toxic					
No	22	100.0	20	100.0	
Schizophrenic disorders					
No	22	100.0	20	100.0	
Major affective disorders					.890
Yes	1	4.3			
No	22	95.7	20	100.0	
Psychotic disorder not otherwise specified					
No	22	100.0	20	100.0	
Neurotic disorders					1.824
Yes	2	8.7			
No	21	91.3	20	100.0	
Disorders not otherwise specified					.907
Yes	3	13.6	1	5.0	
No	19	86.4	19	95.0	
Alcohol abuse/addiction - father					1.246
Yes	5	20.8	1	7.1	
No	19	79.2	13	92.9	
Alcohol abuse/addiction - mother					.024
Yes	2	8.0	1	6.7	
No	23	92.0	14	93.3	
Alcohol abuse/addiction – brother/sister					1.812
Yes	3	12.5	5	29.4	
No	21	87.5	12	70.6	
Alcohol abuse/addiction - grandparents					1.795
Yes	3	13.6			
No	19	86.4	12	100.0	
Alcohol abuse/addiction – other family members					.581
Yes	1	4.3			
No	22	95.7	12	100.0	
Alcohol abuse/addiction – son/daughter					1.709
Yes			1	6.7	
No	25	100.0	14	93.3	

	Suicide (N=30)		Natural cause (N=24)		χ^2
	N	%	N	%	
Alcohol abuse/addiction - grandchildren					
No	24	100.0	15	100.0	
Other toxic abuse/addiction - father					.088
Yes	1	4.2	1	6.3	
No	23	95.8	15	93.7	
Other toxic abuse/addiction - mother					1.506
Yes			1	5.9	
No	25	100.0	16	94.1	
Other toxic abuse/addiction – brother/sister					3.197
Yes	1	4.2	4	22.2	
No	23	95.8	14	77.8	
Other toxic abuse/addiction - grandparents					
No	25	100.0	16	100.0	
Other toxic abuse/addiction – other family members					1.709
Yes			1	6.7	
No	25	100.0	14	93.3	
Other toxic abuse/addiction – son/daughter					
No	25	100.0	17	100.0	
Other toxic abuse/addiction - grandchildren					
No	24	100.0	17	100.0	

p > .05.

The mental disorders and toxic abuses of first degree relatives reported were 2.3% mental disability, 4.7% organic mental disorders, 2.3% major affective disorders, 4.7% neurotic disorders, 9.5% disorders not otherwise specified, 15.8% alcohol abuse/addiction – father, 7.5% alcohol abuse/addiction – mother, 19.5% alcohol abuse/addiction – brother/sister, 8.8% alcohol abuse/addiction – grandparents, 2.8% alcohol abuse/addiction – other family members, 2.5% alcohol abuse/addiction – son/daughter, 5.0% other toxic abuse/addiction – father, 2.4% other toxic abuse/addiction – mother, 11.9% other toxic abuse/addiction – brother/sister, 2.5% other toxic abuse/addiction - other family members and 0% disorders by the use of alcohol, disorders by using other toxic, schizophrenic disorders, psychotic disorder not otherwise specified, alcohol abuse/addiction – grandchildren, other toxic abuse/addiction – grandparents, other toxic abuse/addiction – son/daughter and other toxic abuse/addiction - grandchildren.

No statistically significant differences were found between groups ($p > .05$).

Table 15. Suicide attempts and suicide, in 1st degree relatives

	Suicide (N=30)		Natural cause (N=24)		χ^2
	N	%	N	%	
Suicide attempts - Father					
No	23	100.0	20	100.0	
Suicide attempts - mother					.853
Yes	1	4.2			
No	23	95.8	20	100.0	
Suicide attempts - brother/sister					.890
Yes	1	4.3			
No	22	95.7	20	100.0	
Suicide attempts - other family members living together					3.344
Yes	4	16.0			
No	21	84.0	20	100.0	
Suicide attempts - son/daughter					.890
Yes	1	4.3			
No	22	95.7	20	100.0	
Suicide attempts - grandchildren					
No	21	100.0	20	100.0	
Suicide - Father					1.913
Yes	2	8.7			
No	21	91.3	21	100.0	
Suicide - mother					.934
Yes	1	4.3			
No	22	95.7	21	100.0	
Suicide - brother/sister					4.210*
Yes	4	18.2			
No	18	81.8	21	100.0	
Suicide – more than 1 brother/sister					
No	22	100.	21	100.0	
Suicide - grandparents					2.683
Yes	3	12.5			
No	21	87.5	20	100.0	
Suicide - other family members					7.449**
Yes	8	30.8			
No	18	69.2	20	100.0	
Suicide - son/daughter					.977
Yes	1	4.5			
No	21	95.7	21	100.0	
Suicide - grandchildren					
No	22	100.0	21	100.0	

* $p \leq .05$; ** $p \leq .01$.

Results concerning suicide attempts and suicide of 1st degree relatives are presented in Table 15.

Only members of the suicide group had 1st degree relatives with suicide attempts or committed suicide. In suicide group, concerning suicide attempts results are: 4.2% mothers, 4.3% brother/sister, 16.0% other family members and 4.3% son/daughter.

Concerning committed suicide results are: 8.7% fathers, 4.3% mothers, 18.2% brother/sister, 12.5% grandparents, 30.8% other family members and 4.5% son/daughter.

Statistically significant differences were found between groups for suicide - brother/sister with $\chi^2 (1) = 4.210$; $p = .040$ and for suicide - other family members with $\chi^2 (1) = 7.449$; $p = .006$.

The results show that the suicide group reported significantly more suicides by brother/sister and by other family members.

6.6. Recent life events (occurring mostly during the last six months before death)

In order to study differences between both groups (suicide/natural cause) for the variables concerning recent life events detachable (occurring mostly over the last six months) Chi-square test was used.

Results concerning variables indicative of recent life events detachable - health sphere are presented in Table 16.

As for the health sphere, 46.9% had somatic illness or disabling, 12.0% had of a key person or close relative with a serious illness and 7.1% with other specified.

Statistically significant differences were found between groups for somatic illness or disabling with $\chi^2 (1) = 14.872$; $p < .001$.

Results show that suicide group reported significantly less somatic illness or disabling.

Table 16. Health sphere

	Suicide (N=30)		Natural cause (N=24)		χ^2
	N	%	N	%	
Somatic illness or disabling					14.872***
Yes	5	20.0	18	75.0	
No	20	80.0	6	25.0	
Serious illness of a key person or close relative					2.683
Yes	5	20.0	1	4.3	
No	20	80.0	22	95.7	
Sexual problems					
No	22	100.0	21	100.0	
Pregnancy					
No	24	100.0	24	100.0	
Abortion					
No	24	100.0	24	100.0	
Birth of a child					
No	24	100.0	24	100.0	
Other specified					2.937
Yes	3	13.6			
No	19	86.4	20	100.0	

*** $p \leq .001$.

The results concerning variables indicative of recent life events detachable - couple sphere are presented in Table 17.

Concerning the couple relationship, percentages reported were: 50.0% married, 11.1% purported an extra-marital relationship, 25.0% a deteriorating relationship, 10.6% were described with alleged domestic violence, 14.6% had suffered an affective rupture or separation due to conflicts, 18.8% had a boyfriend, spouse or marital death, and 5.6% presented other specified characteristics.

No statistically significant differences were found between the two groups.

Table 17. Couple sphere

	Suicide (N=30)		Natural cause (N=24)		χ^2
	N	%	N	%	
Marriage					.751
Yes	11	44.0	13	56.5	
No	14	56.0	10	43.5	
Extra-marital relationship					1.361
Yes	4	16.0	1	5.0	
No	21	84.0	19	95.0	
Deteriorating relationship					.028
Yes	6	24.0	6	26.1	
No	19	76.0	17	73.9	
Domestic violence					.179
Yes	3	12.5	2	8.7	
No	21	87.5	21	91.3	
Sexual dysfunction					
No	21	100.0	19	100.0	
Break affective or separation due to conflicts					.084
Yes	4	16.0	3	13.0	
No	21	84.0	20	87.0	
Divorce					
No	24	100.0	22	100.0	
Boyfriend, spouse or marital death					.944
Yes	6	24.0	3	13.0	
No	19	76.0	20	87.0	
Other specified					.061
Yes	1	4.8	1	6.7	
No	20	95.2	14	93.3	

p > .05.

Results concerning variables indicative of recent life events detachable - family sphere are presented in Table 18.

Regarding family sphere percentages reported are: 2.1% dating or engagement of a child or grandchild, 4.3% marriage of a son or grandchild, 17.0% serious conflict or break with a family member, 4.3% leaving of a family member home, 14.6% death of a family member and 2.9% other specified.

No statistically significant differences were found between groups.

Table 18. Family sphere

	Suicide (N=30)		Natural causes (N=24)		χ^2
	N	%	N	%	
Dating or engagement of a child or grandchild					.979
Yes	1	4.2			
No	23	95.8	23	100.0	
Marriage of a son or grandchild					.001
Yes	1	4.2	1	4.3	
No	23	95.8	22	95.7	
Serious conflict or break with a family member					2.210
Yes	6	25.0	2	8.7	
No	18	75.0	21	91.3	
Leaving of a family member home					.001
Yes	1	4.2	1	4.3	
No	23	95.8	22	95.7	
Death of a family member					3.714
Yes	6	24.0	1	4.3	
No	19	76.0	22	95.7	
Other specified					1.030
Yes			1	5.9	
No	17	100.0	16	94.1	

p > .05.

Regarding school sphere no one reported that the deceased had problems.

Results concerning variables indicative of recent life events detachable - work sphere are presented in Table 19.

Concerning work sphere percentages reported are: 2.5% unemployed for more than a month, 31.0% disabled for the usual work for more than one month, 45.0% Retirement and 2.5% other specified.

Statistically significant differences were found between groups for disabled to the usual work for more than one month with $\chi^2 (1) = 5.459$; p = .019.

The results show that suicide group reported significantly less disabled to the usual work for more than one month.

Table 19. Work sphere

	Suicide (N=30)		Natural cause (N=24)		χ^2
	N	%	N	%	
Starting a new type of job					
No	18	100.0	19	100.0	
Major changes in work					
No	20	100.0	20	100.0	
Promotion					
No	20	100.0	20	100.0	
Demoting					
No	20	100.0	20	100.0	
Dismissal					
No	20	100.0	20	100.0	
Unemployed for more than a month					.028
Yes	6	24.0	6	26.1	
No	19	76.0	17	73.9	
Disabled to the usual work for more than one month					5.459*
Yes	3	14.3	10	47.6	
No	18	85.7	11	52.4	
Retirement					3.636
Yes	6	30.0	12	60.0	
No	14	70.0	8	40.0	
Economic setback					1.026
Yes	1	5.0			
No	19	95.0	20	100.0	
Other specified					
No	16	100.0	13	100.0	

* $p \leq .05$.

Regarding variables indicative of recent life events detachable for the social sphere, results are presented in Table 20.

Concerning social sphere percentages reported are: 2.1% of decedents had debts, 8.3% had changed place of residence, 12.5% had recently changed their living conditions and/or ingrained habits, and 2.9% had had other specified changes in life.

No statistically significant differences were found between groups of deaths for suicidal cause or natural reasons.

Table 20. Social sphere

	Suicide (N=30)		Natural cause (N=24)		χ^2
	N	%	N	%	
Loss of social status					
No	25	100.0	23	100.0	
Debts					.940
Yes	1	4.0			
No	24	96.0	23	100.0	
Transplantation sociocultural (migration intra-or extra-borders)					
No	25	100.0	23	100.0	
Change place of residence					1.283
Yes	1	4.0	3	13.0	
No	24	96.0	20	87.0	
Change living conditions and/or ingrained habits					.966
Yes	2	8.0	4	17.4	
No	23	92.0	19	82.6	
Other specified					.813
Yes	1	5.3			
No	18	94.7	15	100.0	

p > .05.

Results concerning variables indicative of recent life events detachable within the legal sphere are presented in Table 21.

Percentages reported for legal sphere are: 4.2% target investigation of police or judicial authorities, 4.1% legal action and 2.0% appearance at trial.

No statistically significant differences were found between groups.

Table 21. Legal sphere

	Suicide (N=30)		Natural cause (N=24)		χ^2
	N	%	N	%	
Target investigation of police or judicial authorities					.004
Yes	1	4.0	1	4.3	
No	24	96.0	22	95.7	
Legal action					.008
Yes	1	3.8	1	4.3	
No	25	96.2	22	95.7	
Appearance at trial					1.154
Yes			1	4.3	
No	26	100.0	22	95.7	
Detention					
No	26	100.0	23	100.0	
Serving time in prison					
No	26	100.0	23	100.0	
Other specified					
No	21	100.0	21	100.0	

p > .05.

6.7. Recent changes of behaviour (especially during the last month before death)

To study differences between both groups (suicide/natural cause) for the variables indicating recent changes of behaviour (especially during the last month), Chi-square test was used.

Results concerning variables indicating recent changes of behaviour (especially during the last month) are presented in Table 22.

Concerning emotions, percentages reported were: 46.8% nervous, anxious, tense, inappropriate, 53.3% sad, dejected, bored, depressed, 15.2% irritable, angry and 4.4% violent.

Concerning thoughts, percentages reported were: 28.3% cognitive difficulties, 23.4% volitional difficulties, 8.5% verbalization of delusions of guilt, ruin, etc., 2.1% verbalization of hypochondriac ideas and 26.1% verbalization of death ideas or suicide.

Table 22. Recent changes of behaviour

	Suicide (N=30)		Natural cause (N=24)		χ^2
	N	%	N	%	
Emotions - Nervous, anxious, tense, inappropriate					.030
Yes	12	48.0	10	45.5	
No	13	52.0	12	54.5	
Emotions - Sad, dejected, bored, depressed					.230
Yes	12	50.0	12	57.1	
No	12	50.0	9	42.9	
Emotions - Irritable, angry					1.227
Yes	5	20.8	2	9.1	
No	19	79.2	20	90.9	
Emotions - violent					.009
Yes	1	4.2	1	4.8	
No	23	95.8	20	95.2	
Thought – Cognitive difficulties					3.327
Yes	4	16.7	9	40.9	
No	20	83.3	13	59.1	
Thought – Volitional difficulties					3.875*
Yes	3	12.0	8	36.4	
No	22	88.0	14	63.6	
Thought – Verbalization of delusions of guilt, ruin, etc.					.018
Yes	2	8.0	2	9.1	
No	23	92.0	20	90.9	
Thought – Verbalization of hypochondriacal ideas					.899
Yes	1	4.0			
No	24	96.0	22	100.0	
Thought – Verbalization of ideas of death or suicide					5.498*
Yes	10	40.0	2	9.5	
No	15	60.0	19	90.5	
Somatic – Sleep disorders					2.066
Yes	5	19.2	8	38.1	
No	21	80.8	13	61.9	
Somatic – Anorexia, weight loss					6.226*
Yes	4	16.0	11	50.0	
No	21	84.0	11	50.0	
Somatic – Constipation, menstrual disorders, decreased libido					3.501
Yes			3	13.6	
No	24	100.0	19	86.4	

	Suicide (N=30)		Natural cause (N=24)		χ^2
	N	%	N	%	
Somatic – Easy fatigability					13.143***
Yes	3	13.0	15	65.2	
No	20	87.0	8	34.8	
Behaviour – Episodes of crying for no apparent reason					.860
Yes	5	20.0	7	31.8	
No	20	80.0	15	68.2	
Behaviour – Tendency for isolation					.022
Yes	7	28.0	6	26.1	
No	18	72.0	17	73.9	
Behaviour – Inhibition, apathy, slowness of movements					7.624**
Yes	3	12.5	11	50.0	
No	21	87.5	11	50.0	
Behaviour – Agitation, restlessness					1.592
Yes	3	12.5	6	27.3	
No	21	87.5	16	72.7	
Behaviour – Increased consumption of alcohol or other toxic					1.917
Yes	2	8.3			
No	22	91.7	22	100.0	
Behaviour – Suicide attempt(s)					4.016*
Yes	4	16.7			
No	20	83.3	22	100.0	
Behaviour – Unexpected changes in the context of normal functioning					.915
Yes	3	12.5	1	4.5	
No	21	87.5	21	95.5	

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$.

Concerning somatic, percentages reported were: 27.7% sleep disorders, 31.9% anorexia, weight loss, 6.5% constipation, menstrual disorders, decreased libido and 39.1% easy fatigability.

Concerning behaviour, percentages reported were: 25.5% crying episodes with no apparent reason, 27.1% tendency for isolation, 30.4% inhibition, apathy, slowness of movements, 19.6% agitation, restlessness, 4.3% increased consumption of alcohol or other toxic, 8.7% suicide attempt(s) and 8.7% unexpected changes in the context of normal functioning.

Statistically significant differences were found between groups for thoughts - volitional difficulties with $\chi^2 (1) = 3.875$; $p = .049$, thoughts - verbalization of ideas of death or suicide with $\chi^2 (1) = 5.498$; $p = .019$, somatic - anorexia, weight loss with $\chi^2 (1) = 6.226$; $p = .013$, somatic - easy fatigability with $\chi^2 (1) = 13.143$; $p < .001$, behaviour - inhibition, apathy, slowness of movements with $\chi^2 (1) = 7.624$; $p = .006$ and behaviour - suicide attempt(s) with $\chi^2 (1) = 4.016$; $p = .045$.

Results show that the suicide group reported significantly less thoughts - volitional difficulties, somatic - anorexia, weight loss, somatic - easy fatigability and behaviour - inhibition, apathy, slowness of movements and significantly more thoughts - verbalization of ideas of death or suicide.

Only suicide group reported behaviour - suicide attempt(s).

6.8. Information on the death's circumstances and context

Table 23. Occurrence of death described information

	N	%
Acquisition of potentially lethal instruments or products without apparent justification		
Yes	1.9	2.2
No	83.3	97.8
Violent argument during the preceding 24 hours		
Yes	3	6.7
No	42	93.3
Farewell gesture		
Yes	3	6.4
No	44	93.6
Prior notice of intention to terminate life		
Yes	7	14.6
No	41	85.4
Request for assistance after the attempt		
No	48	100.0
Acceptance of aid unopposed resistance, if discovered conscious		
Yes	1	2.1
No	47	97.9
Suggestive evidence of special precautions to avoid third part intervention		
Yes	14	28.6
No	35	71.4
Suggestive suicide objects on the corpse itself or nearby		
Yes	27	51.9
No	25	48.1
Other evidence suggestive of suicide in the vicinity of the corpse		
No	47	100.0
Usual paraphernalia of consumers who inject drugs		
No	48	100.0
Letter, note or farewell message		
Yes	1	2.1
No	47	97.9

Death surrounding circumstances were analysed for the suicide group only.

Table 23 presents frequencies and percentages of the occurrence of death described information.

Suicidal group reported, 2.2% acquisition of potentially lethal instruments or products without apparent justification, 6.7 % violent argument during the preceding 24 hours, 6.4% farewell gesture, 14.6% prior notice of intention to terminate life, 2.1% acceptance of aid unopposed resistance, if discovered conscious, 28.6% suggestive evidence of special precautions to avoid third part intervention, 51.9% suggestive suicide objects on the corpse itself or nearby and 2.1% letter, note or farewell message.

No one reported request for assistance after the attempt, other evidence suggestive of suicide in the vicinity of the corpse and usual paraphernalia of consumers who inject drugs.

The Chi-square test was used to assess if the categories were distributed uniformly in each dimension. Results show that the categories only distribute uniformly for the dimension 'Suggestive suicide objects on the corpse itself or nearby' ($p < .05$) and most respondents stated 'No' in the remaining dimensions.

Figure 1 shows the distribution by season, with most occurrences in Summer (38%), and the least number of occurrences in Autumn (12%).

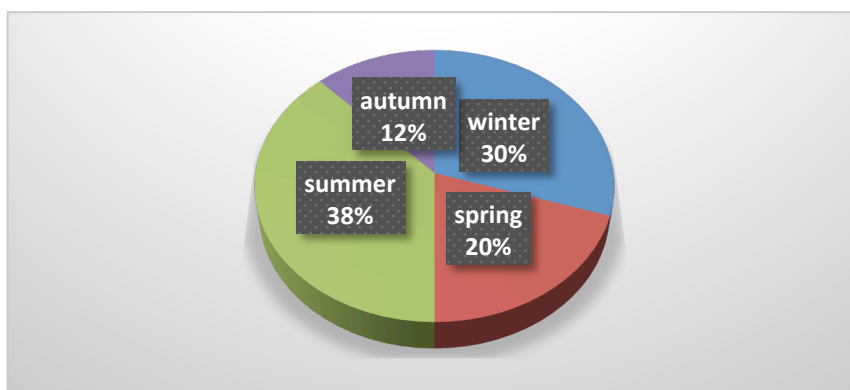


Figure 1 – Season

Figure 2 shows the distribution by month. August registered the upper percentage (14%) and July registered the lowest (2%).

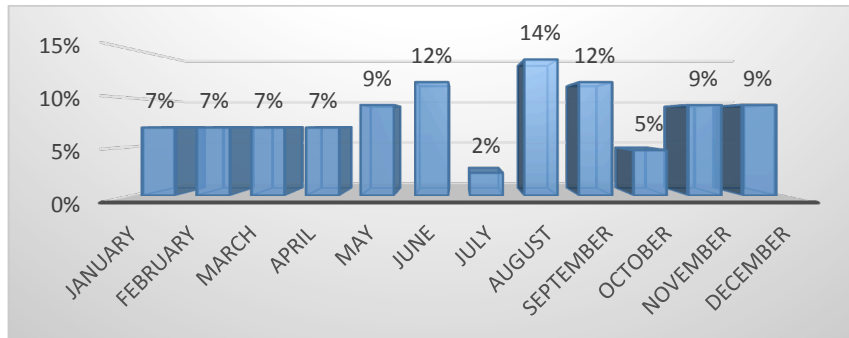


Figure 2 – Month

Figure 3 shows the distribution by weekday. Thursday register the upper percentage (30%). Both Tuesday and Wednesday register the lower.

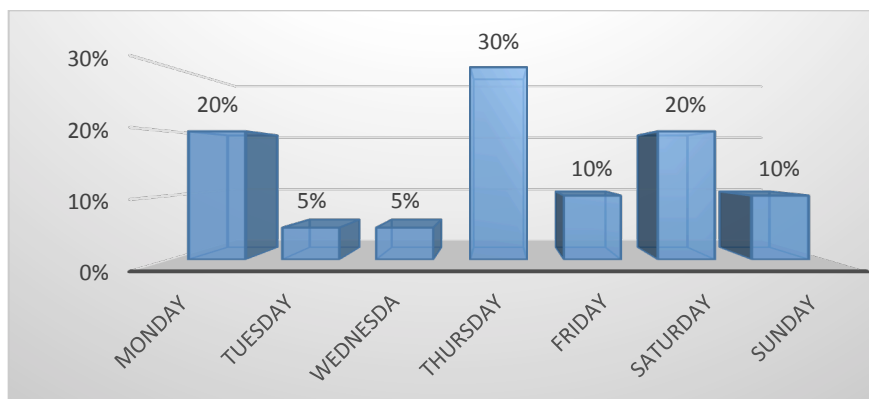


Figure 3 – Weekday

Figure 4 shows the distribution by period of the day. Most of occurrences of suicide happen in the afternoon, and the less number of occurrences is by night.

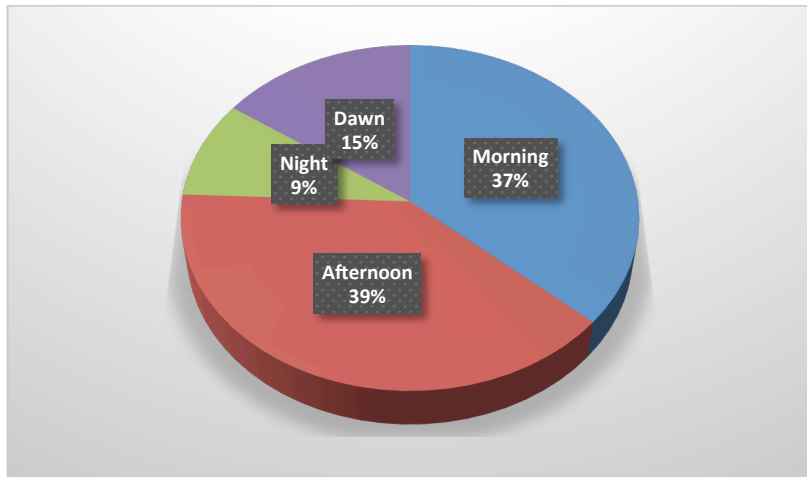


Figure 4 – Period of the day

Figure 5 shows the distribution by method of suicide. Hanging is largely used (73%), compared to pesticide intoxication (3%) or car crash (3%).

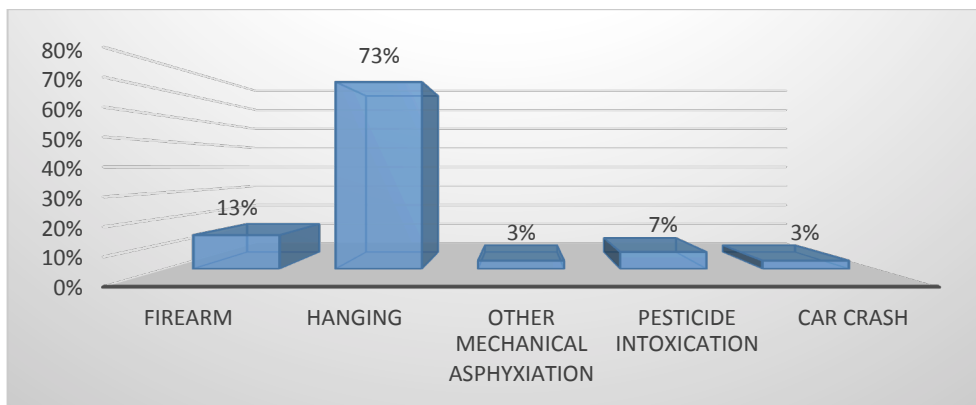


Figure 5 – Method

Figure 6 shows the distribution by location where the event occurred. The upper percentages are registered in side parts of the house (27%) and hospital (24%). Lower ones are registered in work sites, retirement homes, other people's house and living room (4%).

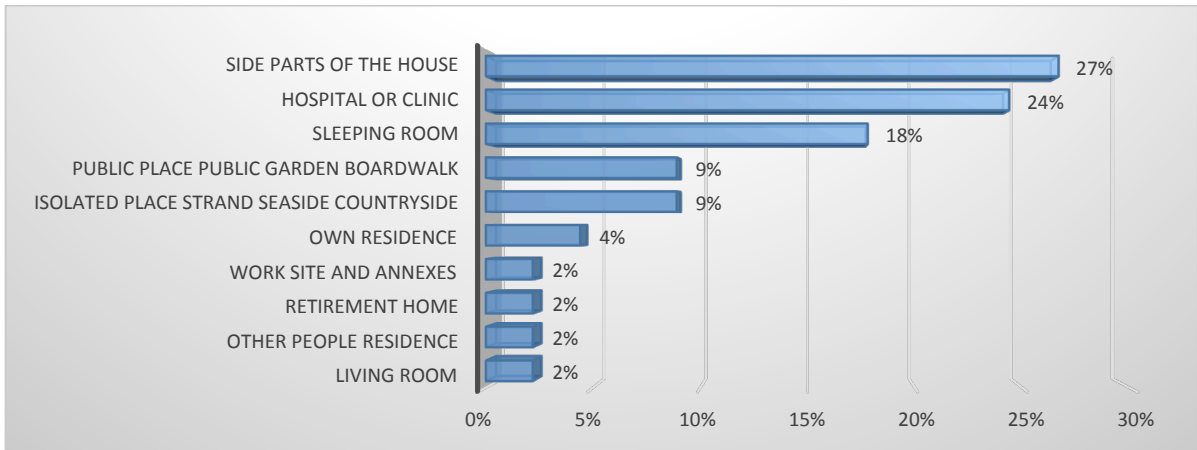


Figure 6 – Location where the event occurred

Figure 7 shows the distribution by time period between suicide attempt and death. People were mostly found dead with no other indication (56%). Between 1 to 6 hours and 7 to 24 hours registered both the lower percentages (2%).

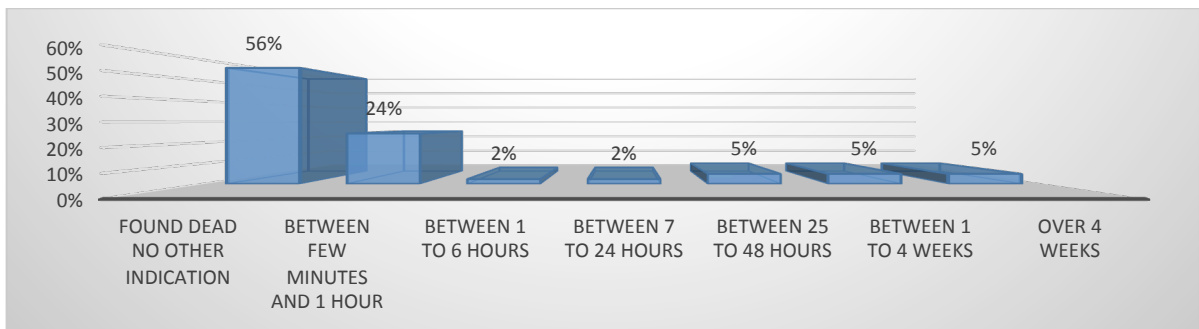


Figure 7 – Time period between suicide attempt and death

Figure 8 shows the distribution by medical and/or hospital intervention in the period between the suicide attempt and the death. Mostly there were none intervention (62%). Emergency care only death verification with no additional info and emergency care more than 24 hours with additional information registered both the lower percentage (3%).

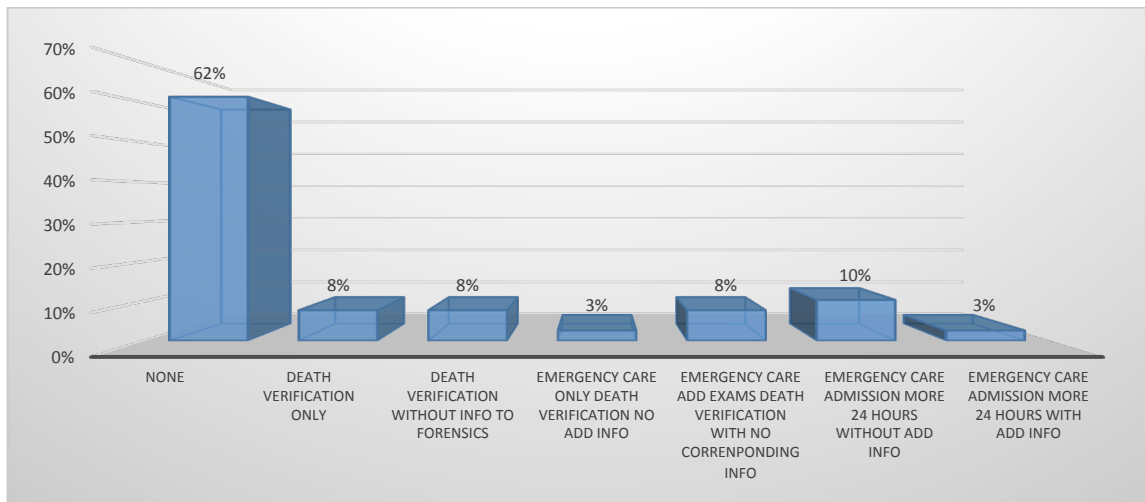


Figure 8 – Medical and/or hospital intervention in the period between the suicide attempt and the death

In relation to the dimensions present in the figures and with the purpose of testing if the categories distribute uniformly in each dimension, the Chi-square test was applied. Results show that categories distribute uniformly in the dimensions by season, month and weekday ($p < .05$).

CHAPTER SEVEN (7): Discussion and Conclusions

Discussion and conclusions will include a summary of core results of the study, integration of mental health into primary care, scaling up services and social determinants of health.

7.1. Study results

As to what concerns the information on interviewees, family members of suicidal people were older and most didn't live together with the deceased, compared to the natural cause's group. This fact can be important once the proximity of the relationship is not quiet the closest one, and therefore many parts of the information provided are built upon memory recollection in a distant basis.

Nevertheless, the information obtained is still precious but does not carry a more close involvement able to produce a more complete picture. This may point out to the need of more interviewees for each case in future approaches, instead of one as it did occurred with the present study for a number of reasons, not only the hazards of recruitment, including also the emotional difficulties to people responding as well as their performance in the moment of interview which may have had implications in the quality of the information obtained. This was unanimous among interviewers.

A number of difficulties have been identified earlier by Hawton et al (1998), including difficulties of conducting psychological autopsy interviews with relatives. Chachamovich et al (2013), described informants as appreciating the opportunity to discuss the loss of a family member or friend and readily identify psychiatric disorders though this didn't happen with the present study as difficulties arose many times before and during the interviews whether because of emotional grounds or because memory difficulties, especially in details. But beyond interviewees and concerning deceased people, on social and demographics, they were all Portuguese, most males over 40 years old, married and having more than two biologic sons/daughters, no adopted

sons/daughters, unskilled workers, freelancers, term employees or retired, illiterate with no professional training. In general terms this shows the regular profile for the region adding the fact that most people committing suicide are males and as they become older suicide increases. Gradiz (Gradiz 1990), an author working in Alentejo for years and studying the profile of local populations had already presented age and male sex as distinctive characteristics on the profile of people committing suicide for that region of the country. As middle age progresses, suicide risk increases.

Sabóia and São Teotónio were the most frequent residence areas and, for those who lived outside Odemira, most of them lived in areas previously reported in Odemira region. The majority were born in a south seaside rural aggregate. No differences were found between both groups for any of the variables under study for social and demographics.

Concerning personal biography and social integration deceased people were reported in middle sibling position, did not have any disease or injury in childhood and no psychological treatment both in childhood and adulthood. But in adulthood they were reported to become seriously ill or severely injured. Most were retired in an unchanged marital status with no previous marriages. Most were also unemployed for more than 5 years with a pension or equivalent as main income. Usually lived in company of some constituted family members in a flat or similar having a close and satisfactory contact with the original family. Nevertheless results show they were not invalid or carrying any incapacity to work in general terms. People in suicide group significantly reported lower frequencies for invalidity/unable to work and retirement when compared to the death by natural causes group. In the literature consulted no such characteristics were found which may mean that this can be particular for this region.

Personality traits for the suicide people were found to be more sad or bitter and pessimistic, less communicative and less euthymic, cheerful or optimistic. This may highlight the role of traits and their importance in the context of suicide. In a case-control study using psychological autopsy Harwood et al (2001)

concluded that personality factors and depression as well are risk factors for suicide in older people, after interviews informants in 100 suicides in older people in a case-control study that used a subgroup of 54 cases and matched control group.

Leisure time was not so much fulfilled for the suicide group. They had less activities concerning reception of family or friends or hobbies like sport, fishing or hunting which may have to do with reinforcement of isolation in a region known for that. But it can also cover mental disorders like depression which has many times characteristics like the ones described above and though it is a treatable condition it has to be recognized as early as possible to make treatment effective. Though we collected scarce information in what concerns mental disorders, including mood disorders, this can be a sign of unrecognized, undiagnosed and untreated cases. Mental disorders were not reported to the suicide group as well as alcohol abuse or other toxics abuse which in this context can be some kind of misinformation provided by interviewees somehow blocked whether by emotional difficulties or by reasons of unwilling exposure.

Health conditions reported for suicide group reported less endocrine as well as less nutritional and metabolic immune problems and less cardiovascular problems. These disease features seem not to be implicated in suicide.

Communication of death or suicide (six months preceding death or on an unspecified date) was higher in the suicide group. Suicide attempts showed no significant differences between groups but suicides and suicide attempts happened in the suicide group only as results show but only in this group attempts were due to people deceased or family members. And (multiple) attempts showed to be strongly predictive as Zonda (2006) concluded. Moreover there is a predicting role of these actions like Kessler et al (1999) demonstrated. Kőlves & De Leo (2012) also found strong predictive value in prior attempts.

Somehow recent medical consultations occurred prior to death, most during the previous month to death or in a recent not specified date. Psychiatric

consultations were scarce in any time prior to death. There's a treatment gap for mental disorders, and especially in a region where mental health professionals are quite scarce as we shall see ahead, it seems that this reinforces the gap exposing the need to scaling up services in the absence of mental health professionals.

The suicide group reported less hospital admissions for somatic illness (last 6 months) and in medical outpatient less frequencies of last visit during the week prior to death, last consultation during the previous month (except last week) and last consultation of unspecified recent date. Somatic illnesses seem to be absent in most of the cases, showing short implications to suicide.

Most of the parents were married, having 3 or more sons/daughters. Half of fathers were unskilled workers and most of mothers were housewives and unrelated to financial distress with a good relationship in the family. It seems that if these psychosocial conditions are not concurring to suicide in this region, it might be that further studies should take in account genetics. Facing the information provided in general for psychosocial factors an explanation could rely on genetic profile for the characteristics collected for the families of deceased are not so different from the ones they have.

Kurihara et al (2009) showed psychosocial factors are implicated in suicide as well as clinical and/or religious factors which are features unfound in the study. De Leo et al (2013), in a case-control psychological autopsy study compared suicidal older adults to sudden death controls and middle-aged suicides during the period between 2006 and 2008, involving 261 suicides (73 aged 60+) and 182 sudden deaths (79 aged 60+). The study highlighted the need to increased attention in psychosocial, environmental and general health aspects in later life factors other than mood disorders even representing an important target on suicide prevention in old age. Taking into account the information obtained one cannot conclude for the involvement of this kind of factors in suicide in this part of the country.

In original family reports for somatic disease either chronic or disabling no differences were observed between groups as well as for mental disorders and toxics abuse, but reported significantly more suicides by brother/sister and by other family members, and less somatic illness. In what concerns couple relationship data reported no differences as well as to family context. No school problems were observed for the deceased. In working context suicide group reported less disabling to usual work for more than a month. For social and legal contexts data provided no specific differences between groups. A characteristic like this one may be particular for the region once suicide seems to come out of the blue.

A study in Australia by Kolves & De Leo (2012) concerning assessment of suicide predictors in rural and urban areas, using a psychological autopsy approach came to compare suicides to sudden death controls, involving 50 suicides and 26 sudden death controls from rural areas and 150 suicides and 108 sudden death controls from urban areas. No significant differences were found concerning marital status, living arrangements, education or employment between two suicide groups. Prior suicide attempts and previous psychiatric disorder were significant predictors for both areas. Rural suicides showed more prevalence in what concerned psychiatric diagnoses. These features are not observed in our study. The only relevant feature comes from suicide attempts but not in an expressive way.

Finally, results show that suicide group reported significantly less thoughts - volitional difficulties, somatic - anorexia, weight loss, somatic - easy fatigability and behaviour - inhibition, apathy, slowness of movements and significantly more thoughts - verbalization of ideas of death or suicide. Only suicide group reported behaviour - suicide attempt(s).

As to the circumstances of death involved suicides happened mostly in summer and less in autumn, during august month, on Thursday and during the afternoon. The main mean or method of suicide is hanging in side parts of the

house, and usually people are found dead with no other indication and without medical/hospital intervention.

7.2. Integration of mental health into primary care

Integration of mental health into primary care is an utmost important issue countless times shown by evidence-based research and it would be of great help for the region of Odemira. A psychiatrist attends people in psychiatric consultations once a week. Scaling up of services should be taken into account in order to shift model of intervention widening access for mental disorders to a group of professionals with mental health training. The general absence of mental health professionals makes very difficult to have a picture of the situation. Further assessments and research should be addressed to populations in Odemira.

Some concepts should be developed and applied: empowerment, health equity, role of health professionals, and in what kind of framework should work be done – a biomedical framework or a biopsychosocial framework, or even a mix of both.

The somewhat fragmented mental health puzzle, must be put together starting on (i) political will, that in turn shows lack of influence by mental health advocacy on politics, and consequently financing is representing one main barrier. People/families with mental disorders are not lobby-organized, along with social stigma (“a mad man/woman”) getting no interest from public opinion (prone to exclusion) and spreading a wrong idea of cost-ineffective care. Change/shift from exclusion to inclusion is needed for people with mental disorders that are aside together with their families and could/must do some to ‘get in’. Liability is all over.

A core of international (setting a clear contribution to help things change) qualitative surveys from experts/leaders identified barriers on prevailing public-health priority agenda with funding reflexive consequences. Also decentralization of mental health services and implementation on primary care

along with training/supervision and together with the scarcity of public-health perspectives in mental health leadership were identified/considered barriers to shift.

A (ii) change/shift in services must also go, especially because of slow development on services in 'low and middle-income countries' and regions alike as Odemira, where we performed the study, and because main resources are in big cities/large institutions – community-based services should lead a whole mental frame to shift from professional nested interests in larger hospitals, bringing technicians out of hospital to community (thus reducing internship-time lowering health expenses), along with explanations based in evidence-based research. The pyramid for optimal services mix is a good proper example (where self-care is on the basis - and informal community care, mental health services delivered by primary care, psychiatric departments and community services in a higher position and at the other end specialist services and mental hospitals).

If people gets psychiatric treatment inside mental hospitals and alike together with the model submitted to these institutions, then there will be no resources enough (in money and people) to deal with (non-stopping) growing deficit symptoms, isolation, adequate treatment on cost-effectiveness basis, which are factors far away, where they should be, from the community comprehensive long-term care, that can return family support, housing, (protected) employment and continuity of care provided by multi-professionalized teams able to point out and develop skills needed for both sides. One has to shift from bio-medic to psychosocial approach; taking people out of mental bed to run opportunities in a model based on long-term care, rather than immediate short-one, focusing rehabilitation (which is something really important) aiming comprehensive care (in-community).

And for that, one needs (iii) integration of mental health into primary care also, beyond or along with the development of community-based services. This key issue of integration is something facing difficulties identified: overburdened

primary care staff with few training/supervision and lack of psychotropics needed both in quantity and maintenance for a proper continuous care.

Nevertheless, in primary care settings, as identified by international knowledge/guidance, investment must be along with prior/post development and training (respectively) under a model of community mental health services in order to reach sustainability. Mental health advocacy is also lacking involvement of people with mental disorders and respective families.

Moreover leading positions on mental health lack general health skills/experience most of times (people are mostly trained in just clinical management, and public health training does not come along with mental health).

A glimpse over personnel shows (iv) scarce number and type of workers getting training/supervision in mental health care – it starts in working conditions as well as in status linked to mental health professions and geodemographic design: most of people in low and middle-income countries, as well as the region of Odemira, tend to live in rural areas and incentivation for mental health professionals is aside working conditions proportionated. On one hand people do not feel that a professional option for mental health is a good one, and in another hand for the ones in this professional frame there is no incentives at all. This mix is quite serious and has broad consequences. Training and supervising is a key issue when it comes to development of mental health care delivery in low and middle-income countries. Along (v) leadership in the context of public mental health is lacking appropriate integrated skills to deal with problems. In spite of all this growing consciousness, results will just be reached by changes in policy, planning, advocacy, general participation and leadership whether political or else.

International support is able to provide the frame where changes must go along with guidance both technical itself and a vision-policy-planning-services model to enable effective results.

A set of utmost important events is essential in order to bring up issues as well as building of critical mass to ensure enough synergy to help change and cope with the magnitude of the issue.

The WHO mhGAP was launched in 2008 (World Health Organization 2008). A network of individuals/institutions can be a very important tool provided by international support agencies/projects to help and to point out a way to cope/solve difficulties on mental health issues in low and middle-income countries (and worldwide as well).

A word on WHO/mhGAP is important: program issued around low and middle-income countries and respective need to change underinvestment and underdevelopment of community models in order to proceed to mental reform. No intervention other than supported by mental hospitals model is rather frequent. More than an existing gap, existing conditions do even turn that gap deeper with obvious consequences no matter the issue concerned: people, social-economics and countries. There might be difficulties as we have seen but the one thing 'low and middle-income countries' and regions alike need last is precisely doing nothing for it will bring a price to much high to pay.

These are major issues to be considered, and proper to the reality we found in the region of the country where most suicides occur.

Access to mental health care becomes real, if people have the chance to be assisted by the one equipment of health that is closer to populations: primary care – health centres. The region of Odemira has no specialized services of mental health to assist populations, and a region with such needs, gets all the advantages integrating mental health in this way. Thirty (30) Km away in the Hospital of Santiago, a psychiatrist attends to people once a week, and the great majority of people have no means or transportation system to allow consultations in time, or any consultations at all.

Populations have better access to health, which means better access to deliver care: a number of reasons can be significant along with the access, namely

better social integration and all the surrounding issues of functioning in a community. People are in contact with their community, and get treatment in a faster way, which is something that can and will avoid often the progression of mental disorders outside the stigma always connected to larger psychiatric institutions.

Being in the community able to maintain emotional support with better chances to progress connected to jobs and social life and ultimately saving money, especially in communities with low economic resources. Economic savings both from transportation needs and health expenses must also be seen in a wider context beyond individuals for it is also positive for the community involved as for the country. Primary care is often economic saving than other structures able to provide care.

Evidence based research has also found that good outcomes in what concerns treatment can be achieved in a primary health care setting. Task-shifting in services can also bring psychosocial treatments and options of rehabilitation, often away from sceneries like the one where we had our study performed. Formation is needed for such an enterprise, but it is possible to do so with little expenses if it is in a continued way.

Barriers to deliver mental health care can be a problem, for usually the overburdened and shortened human and economic resources are present. But the trend is normally to dump money and people into a problem and that can be another problem and an obstacle to solving dynamics.

Many resources are available, from national to international organizations: WHO/WONCA report on integration is a good example when the need to organize is of utmost importance. In the end, there are a number of interventions able to modify the conditions found in the field through integration of mental health into primary care.

7.3. Social determinants

To complete the whole picture a word on social determinants of health and mental health (WHO, 2003) is necessary.

The social gradient: people further down the social ladder, usually run at least twice the risk of serious illness and premature death, as those at the top. Even among middle-class office workers, lower ranking staff appears to have much more disease and earlier death than higher-ranking staff.

Stress: continuing anxiety, insecurity, low self-esteem, social isolation and lack of control over work and home life increases the chances of poor mental health and premature death .It affects both cardiovascular and immune systems. Under continuous stress people became more vulnerable to infections, diabetes, high-blood pressure, heart attack, stroke, depression and aggression.

Early life: Slow growth, and poor emotional support in early life, raise the risk of poor physical health and reduce physical, cognitive and emotional functioning in adulthood. Insecure emotional attachment and poor stimulation can lead to reduced readiness for school, low educational attainment, and problem behaviour, and the risk of social marginalization in adulthood. Slow or retarded physical growth in infancy is associated with reduced cardiovascular, respiratory, pancreatic and kidney development and function, which increase the risk of illness in adulthood.

Social exclusion: poverty, relative deprivation and social exclusion have a major impact on health and premature death.

Work: having a job is better for health than having no job. But the social organization of work, management styles and social relationships in the workplace all matter for health. Evidence shows that stress at work plays an important role in contributing to the large social status differences in health, sickness absence and premature death.

Unemployment: higher rates of unemployment cause more illness and premature death. Job insecurity has been shown to increase effects on mental health (particularly anxiety and depression), self-reported ill health, heart disease. Because very unsatisfactory or insecure jobs can be as harmful as unemployment, merely having a job will not always protect physical and mental health; job quality is also important

Social support: along with social relations make an important contribution to health. Social support helps give people the emotional and practical resources they need. Social isolation and exclusion are associated with increased rates of premature death and poorer chances of survival after a heart attack.

Addiction: individuals turn to alcohol, drugs and tobacco and suffer from their use, but use is influenced by the wider social settings. Alcohol dependence, illicit drug use and cigarette smoking are all closely associated with markers of social and economic disadvantage. In some of the transition economies of central and Eastern Europe, for example, the past decade has been a time of great social upheaval.

Food and nourishments: a good diet and adequate food and nourishments supply are central for promoting health and wellbeing. Food shortage and lack of variety cause malnutrition and deficiency diseases. Excess intake contributes to cardiovascular diseases, diabetes, cancer, degenerative eye diseases, obesity and dental caries. Food poverty exists side by side with food plenty.

Transport: Healthy transport means less driving and more walking and cycling, backed up by better public transport. Cycling, walking and the use of public transport promote health in four ways. They provide exercise, reduce fatal accidents, increase social contact and reduce air pollution.

Transport can play a key role in combating sedentary lifestyles Regular exercise protects against heart disease and, by limiting obesity, reduces the onset of diabetes. It promotes a sense of well-being and protects older people from depression.

Urbanization and rural life: the nature of modern urbanization may have deleterious consequences for mental health through the influence of increased stressors and adverse life events, such as overcrowded and polluted environments, poverty and dependence on a cash economy, high levels of violence, and reduced social support (Desjarlais et al. 1995).

Technological change: the extraordinary scale and rapidity of technological change in the late 20th century is another factor that has been associated with the development of mental and behavioural disorders. These technological changes, and in particular the communication revolution, offer tremendous opportunities for enhanced diffusion of information and empowerment of users. Telemedicine now makes it possible to provide treatment at a distance.

Final considerations

In a country that seems to have rates of suicide considered not particularly high though reasons exist to believe that underscoring is going on, some regions present very high rates like Baixo Alentejo and Odemira.

Gusmão (2013), about the epidemiology of suicide, tells us that in recent years Portugal presented permanently a reduced incidence on the mortality by suicide when compared to other countries (WHO, 2002), and usually pointed out as a country where rates were coming down until a 7.5 rate per 100 000 inhabitants, according official statistics far under the European average of 10 per 100 000 inhabitants (Chishti et al. 2003, Levi et al. 2003, Carta et al. 2004, Stone et al. 2006).

Moreover, Portugal was identified by the OECD within a group of countries where rates are growing in the last 15 years though that probably stems from a series-break in 2002-2004 by change of death register criteria (Gusmão and Quintão 2013).

Besides that, Portugal had the particular feature, along with most of countries concerning available data in WHO whose quality of death statistics is considered far from good, that some 20% of deaths were barely defined (Mathers et al. 2005).

There are a number of reasons why statistics about suicide are supposed to be far from precise. These are some, but since long the problem of registries has shown curious phenomena, like the 'dance', that undetermined death numbers and deaths pointed out to be suicide, make together.

Thus, in spite of all these possibilities to bias official records, figures found for that particular area of the country – Odemira – is sky-high when compared to national figures. For the period above (1993-2010) the year with the lower registry is 23.2 in 2005, being the upper figure of 46.1 in 1993.

These numbers were derived from the authorities statistics made on site usually together with photographic report, that for the cases itself did not bring firm doubts to the counting. The nature of those reports were usually quite clear, as people were hanging from ceilings, or sitting in front of weapons, as the registers from psychiatric problems was compiled.

So, or better, even so, reasons exist to believe that underscoring could also be happening, namely in the cases that the method of death was not hanging, which was the main method used, or by lethal weaponry.

Nevertheless, numbers are high and this is a very big problem of public health in the country but especially, as to nowadays available data allows to the conclusion, in this particular region of the country.

Having said this, we can see the background of the region in which our study did take place. The region of Odemira is situated in Southwest Portugal. The administrative division stands in districts and Odemira belongs to the district of Beja.

The district of Beja is the widest in the country, detaining the major geographical area with 10.225 Km². The district population is dispersed all over this area, and according to official numbers at the National Statistics Office (INE) is of 148.794 for the year 2010. This number includes the council of Odemira with a population of 25.835 for the year 2012.

Beyond dispersion in a wide area, transportation system is scarce. Many people are old. Youngsters left to big cities in pursuit of jobs. Mortality is high, as well as unemployment, education in what concerns level of instruction is low. Traditionally, the Department of Psychiatry of Beja Hospital (Unidade Local de Saúde do Baixo Alentejo) attended the psychiatric population of Odemira, under protocols that has been established over the years. In this moment there are none, though the issue is under study in order to reactivate such service to populations. A shift should be considered to the region of the country where higher rates of suicide are permanently observed.

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Annexes

I. Entrevista semi-estruturada dirigida a familiares de sangue do indivíduo índice

II. Colheita de informação clínica e médico-legal do indivíduo índice

AUTÓPSIA PSICOLÓGICA*

Entrevista semi-estruturada dirigida a **familiares de sangue** do indivíduo índice

Indivíduo Index	
Familiar	
Contacto do Familiar	
Entrevistador	
Data da Entrevista	
Local da Entrevista	

* Autópsia psicológica: Entrevista semi-estruturada dirigida a familiares de sangue do indivíduo índice. Adaptado com permissão de: Costa Santos, J. M. M. d. (1998). Suicídio e autópsia psicológica : estudo compreensivo e redefinição das estratégias de categorização das mortes auto-infligidas. Faculdade de Medicina. Lisboa, Universidade Clássica de Lisboa. Dissertação de Doutoramento em Medicina: 859.

I. Variáveis de informação genérica

Identificação do falecido _____

I.01. Ano da morte

I.02. Mês da morte

I.03. Dia da morte

I.04. Houve autópsia? Sim Não

I.05. Dados acessíveis? Sim Não

I.06. Há dados clínicos objetivos acessíveis? Sim Não

I.07. Circunstâncias da morte: foi uma morte violenta? Sim Não

I.08. De que tipo?

1. Morte sem assistência (cadáver encontrado na residência, via pública, abandonado, etc)
2. Morte súbita
3. Suicídio
4. Homicídio
5. Overdose de estupefacientes e/ou outras substâncias tóxicas ilícitas
6. Morte violenta especificada (queimaduras, afogamento, trucidação, intoxicação, queda, tiro de arma de fogo, etc.)
7. Outra especificada. Qual _____
8. Acidente. Qual _____
9. Morte de causa natural
99. NR/Desconhecida

II. Variáveis de informação sobre os entrevistados

II.01. Número de familiares entrevistadas para o presente caso

II.02. Familiar nº – Identificação (nome completo)

II.03. Idade

II.04. Área de residência (freguesia e concelho)

II.05. Naturalidade (freguesia e concelho)

II.06. Relação entre a pessoa entrevistada e o falecido

1. Pai
2. Mãe
3. Irmão
4. Cônjuge/companheiro marital
5. Filho
6. Outro parente. Qual _____
7. Namorado, amigo
8. Colega, chefe, patrão
9. Vizinho, conhecido, outro

II.07. Coabitava com o falecido? Sim Não

II.08. Alguma vez coabitou? Sim Não

II.09. Se sim, em que período? _____

II.10. Desenhar Genograma (em folha inteira neste caderno) e identificar relação de sangue.

II.11. Leu e assinou o consentimento informado (no início deste caderno) Sim Não

II.12. Apreciação do modo como o entrevistado reagiu à entrevista

1. Compreendeu a finalidade e aceitou sem reserva aparente
2. Compreendeu a finalidade, mas aceitou com alguma reserva
3. Compreendeu a finalidade, mas recusou justificando-se
4. Compreendeu a finalidade, mas recusou sem apresentar justificação
5. Não compreendeu a finalidade, mas aceitou sem reserva aparente
6. Não compreendeu a finalidade, mas aceitou com alguma reserva
7. Não compreendeu a finalidade e recusou justificando-se
8. Não compreendeu a finalidade e recusou sem apresentar justificação
9. Não integrável em nenhuma das alíneas anteriores

II.13. Apreciação global do grau de colaboração do entrevistado durante a entrevista

1. Boa (procura informar com pormenor, excedendo mesmo o âmbito das questões colocadas)
2. Suficiente (limita-se a responder às questões sem tergiversar, mas evitando entrar em pormenor)
3. Insuficiente (tenta iludir algumas questões, recorre a subterfúgios, responde ao lado, contradiz-se ou alega com alguma frequência não saber responder a questões compatíveis com o seu grau de conhecimento do falecido)
4. Má (adopta uma atitude de manifesta oposição, não respondendo ou declarando não saber responder à maioria das questões. incluindo as mais elementares)
5. Não classificável, dado o estado de manifesta perturbação emocional em que se encontrava
6. Não integrável em nenhuma das alíneas anteriores

III. Variáveis sociodemográficas do caso índice (na altura da morte)

III.01. Sexo

1. Masculino
2. Feminino

III.02. Idade à data da morte

(99 se NR/Desconhecida)

III.03. Data de nascimento (se conhecida dd/mm/aaaa) / /

III.04. Estado civil

1. Solteiro(a)
2. Casado(a)
3. Divorciado(a)/separado(a)
4. União de facto
5. Separado de facto
6. Viúvo(a)
7. NR/Desconhecido

III.05. Número de filhos biológicos adoptivos

("99" se NR/Desconhecido)

Identificação e contactos dos filhos biológicos (escrever abaixo e colocar no genograma, no fim deste caderno)

1.

2.

3.

4.

5.

III.06 Profissão

Qual (descrever por extenso) _____

(siga a orientação em baixo)

1. Nenhuma
2. Trabalhador indiferenciado (da agricultura, indústria, pesca, serviços domésticos ou actividades ocasionais).
3. Operário qualificado ou semi-qualificado
4. Empregado qualificado ou semi-qualificado
5. Agricultor ou pequeno empresário rural
6. Quadro médio de uma empresa particular ou da Função Pública
7. Artesão, pequeno industrial ou comerciante de retalho
8. Quadro superior de empresa particular ou da Função Pública, grande empresário, profissional liberal ou similar
99. NR/Desconhecido

III.07. Situação perante o trabalho

1. Assalariado a prazo
2. Trabalhador familiar
3. Empregado por conta de outrem. Qual indivíduo ou empresa? _____
4. Independente
5. Patrão
6. Doméstica (dona de casa)
7. Estudante/em formação
8. A cumprir o serviço militar
9. Desempregado
10. Inválido
11. Reformado.
12. Outro especificado
99. NR/Desconhecido

III.08. Nível de estudos

1. Ilétrado (nã sabe ler, nem escrever)
2. Antiga instruã primária incompleta (inferior à 4ª classe)
3. Antiga instruã primária completa (4ª classe)
4. Ensino básico incompleto (inferior à 6ª classe)
5. Ensino básico completo (6ª classe)
6. Ensino secundário geral incompleto (entre 6 e 9 anos de escolaridade)
7. Ensino secundário geral completo (antigo 5º ano dos liceus ou actual 9º ano de escolaridade)
8. Ensino secundário completar incompleto (entre 9 e 11 anos de escolaridade)
9. Ensino secundário complementar completo (antigo 7º ano dos liceus ou actual 11º ano) ou frequência universitária
10. Curso médio ou superior nã universitário (diploma de Escola Comercial, Industrial, de Artes oi habilitaçã equivalente)
11. Curso universitário completo
12. Bacharelato
13. Licenciatura
14. Mestrado
15. Doutoramento
99. NR/Desconhecido

III.09. Formaã profissional

1. Nenhuma
2. Aprendizagem manual (mecânico, electricista, etc.) sem certificado
3. Aprendizagem nã manual (empregado de escritório, oficial administrativo, etc.) sem certificado
4. Curso técnico-profissionalizante, com certificado
5. Outro tipo especificado
99. NR/Desconhecido

III.10. Raça/Etnia

1. Branca
2. Negra
3. Cigana
4. Outra
5. 99. NR/Desconhecida

III.11. Nacionalidade

1. Portuguesa
2. Países da Comunidade Europeia
3. Outros países da Europa
4. Países da América do Norte (EUA e Canadá)
5. Países da América Central
6. Brasil
7. Outros países da América do Sul

8. Países Africanos de Língua Oficial Portuguesa
9. Outros países africanos
10. Países da Ásia
11. Países da Oceânia
99. NR/Desconhecida

RESIDÊNCIA (tentar obter com maior precisão possível a freguesia, o concelho, o distrito; algumas variáveis são para cotar após a entrevista)

Freguesia da área de residência

Qual (descrever por extenso) _____

Onde (descrever região ou outras terras próximas ou cidade maior das redondezas por extenso)

III.12. Freguesias do concelho de Odemira

1. Bicos
2. Colos Luzianes – Gare
3. Odemira – Sta Maria
4. Odemira – São Salvador
5. Pereiras – Gare
6. Relíquias
7. Sabóia
8. Santa Clara-a-Velha
9. São Luís
10. São Martinho das Amoreiras
11. São Teotónio
12. Vale de Santiago
13. Vila Nova de Milfontes
14. Zambujeira do Mar

III.13. Freguesias de fora do concelho de Odemira

1. Situada no Norte
2. Situada no Centro
3. Situada no Alentejo
4. Situada no Algarve
5. Situada Região Autónoma
6. Situada em divisão administrativa de País Estrangeiro
- 99.NR/Desconhecida

III.14. Concelho da área da residência

Qual (descrever por extenso) _____

Onde (descrever região ou outras terras próximas ou cidade maior das redondezas por extenso)

III.15. Distrito da área da residência

Qual (descrever por extenso) _____

Onde (descrever região ou outras terras próximas ou cidade maior das redondezas por extenso)

NATURALIDADE (tentar obter com maior precisão possível a freguesia, o concelho, o distrito; algumas variáveis são para cotar após a entrevista)

III.16. Nacionalidade

Qual (descrever por extenso) _____

1. Portuguesa
2. Países da Comunidade Europeia
3. Outros países da Europa
4. Países da América do Norte (EUA e Canadá)
5. Países da América Central
6. Brasil
7. Outros países da América do Sul
8. Países Africanos de Língua Oficial Portuguesa
9. Outros países africanos
10. Países da Ásia
11. Países da Oceânia
99. NR/Desconhecida

III.17. Freguesia da área de onde era natural

Qual (descrever por extenso) _____

Onde (descrever região ou outras terras próximas ou cidade maior das redondezas por extenso)

III.18. Concelho de onde era natural

Qual (descrever por extenso) _____

Onde (descrever região ou outras terras próximas ou cidade maior das redondezas por extenso)

III.19. Tipo de localidade de onde era natural

Qual (descrever por extenso) _____

Onde (descrever região ou outras terras próximas ou cidade maior das redondezas por extenso)

1. Cidade metropolitana (Grande Lisboa, Grande Porto)
2. Grande cidade do litoral (capital de distrito, à excepção de Lisboa e Porto ou outra com mais de 100.000 habitantes)
3. Grande cidade do interior (definida como em 2.)
4. Agregado urbano (1.000 <> 100.000 habitantes) do litoral norte
5. Agregado urbano do litoral centro

6. Agregado urbano do interior centro
7. Agregado urbano do interior sul
8. Agregado rural (< 1.000 habitantes) do litoral norte
9. Agregado rural do litoral centro
10. Agregado rural do litoral sul
11. Agregado rural do interior norte
12. Agregado rural do interior centro
13. Agregado rural do interior sul
14. Agregado urbano (> 1.000 habitantes) das Regiões Autónomas dos Açores e Madeira ou Território de Macau
15. Agregado rural (< 1.000 habitantes) das Regiões Autónomas dos Açores e Madeira
16. Cidade de País Africano de Língua Oficial Portuguesa
17. Cidade Metropolitana ou grande cidade de outro país estrangeiro
18. Outra localidade de país estrangeiro
99. NR/Desconhecida

IV. Variáveis de caracterização do sujeito (biografia pessoal e inserção social)

IV.01. Posição na fratria

1. Filho(a) único(a)
2. Gémeos(as), sem outros irmãos
3. Mais velho (a)
4. Posição intermédia
5. Mais novo(a)
99. NR/Desconhecida

IV.02. Acontecimentos de vida relevantes na infância (até aos 11 anos)

Acontecimento	Sim=1	Não=0	NR/Desconhecido= 99
Doença ou lesão somática grave			
Tratamento psicológico e/ou psiquiátrico			

(Nota: Várias respostas possíveis – sim=1; não=0; NR/Desconhecido= 99)

IV. 03. Acontecimentos de vida relevantes

Acontecimento	Sim=1	Não=0	NR/Desconhecido=99
Doença ou lesão somática grave			
Invalidez ou incapacitação para o trabalho			
Reforma ou aposentação			
Tratamento psicológico e/ou psiquiátrico			

(Nota: Várias respostas possíveis – sim=1; não=0; NR/Desconhecido= 99)

IV.04. Alteração do Estado Civil

Caso tivesse mudado de estado civil, período de tempo decorrido desde a última alteração

1. Menos de 1 mês
2. Entre 1 a 3 meses
3. Entre 3 e 6 meses
4. Entre 6 meses e 1 ano
5. Entre 1 e 5 anos
6. Mais de 5 anos

99. NR/Desconhecido

(* Nota: Se solteiro, marcar "0")

IV.05. Número de situações matrimoniais anteriores

("99" se NR/Desconhecido)

IV.06. Caso se encontrasse desempregado, incapacitado ou reformado, período de tempo decorrido desde que deixou de exercer a última actividade profissional*

1. Menos de 1 mês
2. Entre 1 a 3 meses
3. Entre 3 e 6 meses
4. Entre 6 meses e 1 ano
5. Entre 1 e 5 anos
6. Mais de 5 anos
99. NR/Desconhecido

(*Nota: Caso não preenchesse uma destas condições ou se encontrasse à procura do 1º emprego, marcar como "0")

IV.07. Principal fonte de rendimentos (últimos 12 meses)

1. Salário
2. Rendimentos de trabalho independente
3. Rendimentos de bens próprios (rendas, juros de aplicação de capitais, etc)
4. Subsídio de desemprego
5. Pensão de reforma ou equivalente
6. Assistência social
7. Subvenção ou proventos familiares
8. Outro especificado
99. NR/Desconhecido

IV.08. Quanto ganhava? _____

IV.09. Alojamento e companhia na habitação (situação dominante nos últimos 12 meses)

1. Sozinho, em apartamento, estúdio, ou quarto alugado
2. Sozinho, em barraca ou habitação degradada
3. Sozinho, sem domicílio fixo
4. Acompanhado por membros da família constituída, em apartamento ou similar
5. Acompanhado por membros da família de origem, em barraca ou habitação degradada
6. Acompanhado por amigo, colega, hóspede ou empregada, em apartamento ou similar
7. Acompanhado por amigo ou colega, em barraca ou habitação degradada
8. Acompanhada por membros da família constituída, em barraca ou habitação similar
9. Em instituição (internato, quartel, estabelecimento prisional, asilo, lar para a 3ª idade, etc.)
10. Outro especificado
99. NR/Desconhecido

IV.10. Natureza e qualidade da relação com a família de origem *

1. Contacto próximo, relacionamento satisfatório (vivem em conjunto ou nas proximidades, sem conflitos significativos)

2. Contacto próximo, relacionamento conflituoso
3. Contacto regular, relacionamento satisfatório
4. Contacto regular, relacionamento conflituoso
5. Contacto raro, relacionamento satisfatório
6. Contacto raro, relacionamento conflituoso
7. Contacto nulo ou excepcional
99. NR/Desconhecida

(* Nota: Caso já não possuísse família de origem, marcar "0")

IV.11. Modo de ser habitual do falecido* (traços mais salientes do temperamento/carácter)

Traço	Sim=1	Não=0	NR/Desconhecido=99
Expansivo, muito comunicativo			
<i>Normal</i> , comunicativo			
Reservado, pouco comunicativo			
Calmo, descontraído			
Ansioso, tenso, irritável			
Agressivo, violento			
Eutímico, alegre, optimista			
Triste, amargo, pessimista			
Fazia planos para o futuro			
Emocionalmente estável			
Emocionalmente lábil ou instável			
Caracterização impossível por insuficiência ou contradição dos testemunhos			

(*Nota: Várias respostas possíveis – sim=1; não=0; NR/Desconhecido= 99)

IV.12. Interesses pessoais, contactos sociais e actividades de tempos livres *

Interesse/contacto/actividade	Sim=1	Não=0	NR/Desconhecido=99
Investimento no trabalho ou ocupação (rendimento satisfatório, absentismo ou atitude negligente raros ou insignificante)			
Actividades domésticas expressivas (fazer trabalhos de <i>bricolage</i> ou de artesanato, pintar, desenhar, escrever um diário, contos, poemas, etc.)			
Actividades domésticas receptivas (ler jornais e revista, ouvir rádio, ver televisão e vídeo, etc.)			
Actividades domésticas comunitárias (receber familiares e/ou amigos, visitar amigos, jogar às cartas, damas, xadrez, etc.)			
Actividades de sociabilidade local ou urbana (ir a cafés, cervejarias, bares, pastelarias, discotecas, ir à missa, a cerimónias religiosas, a festas populares, etc.)			
Actividades espetaculares de participação expressiva e/ou informativas (passear, ir às compras, ir a feiras, assistir a espetáculos desportivos, musicais, cinema, teatro, bailado, visitar museus, exposições, etc.)			
Actividades de expressão desportiva ou de ar livre (futebol, atletismo, caça, pesca, campismo, etc.)			

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Actividades de expressão artística (dedicar-se à escrita, pintura, teatro amador, dança, fotografia, etc.)			
Actividades sociais e comunitárias regulares (clubes, sociedades recreativas, partido político, sindicato, paróquia, bombeiros, associação de moradores, etc.)			
Escasso tempo de lazer (vida profissional intensa)			
Outros especificados			

(*Nota: Várias respostas possíveis – sim=1; não=0; NR/Desconhecido= 99)

V. Variáveis de caracterização do estado de saúde

[CONFERIR PROCESSO CLÍNICO e preencher instrumento COLHEITA CLÍNICA]

V.01. Doença somática com diagnóstico médico * (estabelecido ou confirmado pelo menos nos últimos 6 meses) [CONFERIR PROCESSO CLÍNICO]

Doença somática	Sim=1	Não=0	NR/Desconhecido=99
Infeciosas e parasitárias			
Neoplasias			
Glândulas endócrinas, nutrição e metabolismo, e deficiências imunitárias			
Sistema nervoso e órgãos dos sentidos			
Aparelho cardiovascular			
Aparelho digestivo			
Aparelho genito-urinário			
Sistema osteomuscular e tecido conjuntivo			
Outras especificadas			

(*Nota: Várias respostas possíveis – sim=1; não=0; NR/Desconhecido= 99)

V.02. Distúrbio mental com diagnóstico psiquiátrico codificável no Eixo I do DSM-III (estabelecido ou confirmado pelo menos nos últimos 6 meses) [CONFERIR PROCESSO CLÍNICO]

1. Nenhum
2. Distúrbios que aparecem habitualmente na infância ou na adolescência (se menor que 18 anos), incluindo deficiência mental
3. Distúrbios mentais orgânicos
4. Distúrbios de utilização de álcool
5. Distúrbios pela utilização de outros tóxicos (alucinogénios, opiáceos, cocaína, etc.)
6. Distúrbios esquizofrénicos
7. Outros distúrbios psicóticos
8. Distúrbios afectivos maiores
9. Outros distúrbios afectivos
10. Distúrbios de ansiedade, somatoformes ou dissociativos
11. Distúrbios psicosexuais
12. Outros distúrbios especificados
99. NR/Desconhecido

V.03. Distúrbio mental em diagnóstico psiquiátrico codificável no Eixo II do DSM-III (estabelecido ou confirmado pelo menos nos últimos 6 meses) [CONFERIR PROCESSO CLÍNICO]

1. Nenhum
2. Distúrbios da infância ou da adolescência
3. Distúrbio da personalidade especificado
4. Distúrbio da personalidade não especificado
99. NR/Desconhecido

V.04. Hábitos alcoólicos (assinalar apenas a situação que melhor traduza o padrão habitual de consumo nos últimos 6 meses) [CONFERIR PROCESSO CLÍNICO]

1. Não consumia bebidas alcoólicas ou só o fazia excecionalmente
2. Consumia regularmente, mas em quantidades inferiores a 1 litro de vinho corrente/dia
3. Consumo superior a 1 litro de vinho corrente/dia ou 1 dl de aguardente, com raros episódios de intoxicação, mas sem que se verifiquem as condições resumidas nas restantes alíneas
4. Abuso de álcool (consumo patológico durante pelo menos um mês, implicando perturbações do funcionamento social ou profissional)
5. Dependência do álcool (critérios anteriores acrescidos do aumento da tolerância e de sintomas de abstinência), sem tratamento anterior
6. Dependência do álcool, com tratamento anterior
7. Alcoolismo, sem outra indicação
99. NR/Desconhecido

V.05. Outros hábitos tóxicos (assinalar apenas a situação que melhor traduza o padrão habitual de consumo nos últimos 6 meses) [CONFERIR PROCESSO CLÍNICO]

1. Não consumia substâncias tóxicas
2. Consumo ocasional de sedativos ou hipnóticos sem prescrição médica
3. Consumo ocasional de substâncias alucinogénias ou psicomiméticas (anfetaminas ou *cannabis*)
4. Consumo ocasional de psicofármacos ou outros medicamentos não especificados
5. Abuso ou dependência de barbitúricos, sedativos ou hipnóticos de acção similar (consumo patológico durante pelo menos um mês, implicando perturbações do funcionamento social ou profissional, sem ou com aumento da tolerância e de sintomas de abstinência)
6. Abuso ou dependência de substâncias alucinogénias ou psicomiméticas (anfetaminas ou *cannabis*)
7. Abuso ou dependência de cocaína
8. Abuso ou dependência de opiáceos (heroína, morfina ou similares sintéticos)
9. Abuso ou dependência de substâncias mistas, incluindo opiáceos
10. Abuso ou dependência de fármacos e/ou drogas não especificados
99. NR/Desconhecida

V.06. Verbalização de ideias de morte e/ou suicídio * (assinalar apenas as situações testemunhadas pelo informante ou que este seja capaz de descrever com algum pormenor)

Verbalização	Sim=1	Não=0	NR/Desconhecido=99
Verbalização ocasional de ideias de morte e/ou suicídio			
Verbalização frequente de ideias de morte e/ou suicídio			
Verbalização ocasional de avisos/ameaças de suicídio			
Verbalização frequente de avisos/ameaças de suicídio			
Comunicação nos 6 meses precedentes (excepto último mês)			
Comunicação(ões) em data(s) não especificadas			

(*Nota: Várias respostas possíveis – sim=1; não=0; NR/Desconhecido= 99);

V.07. Número de tentativas de suicídio anteriores (assinalar apenas as situações testemunhadas pelo informante ou que este seja capaz de descrever com algum pormenor)
("3" se 8 ou mais tentativas e "99" se NR/Desconhecido) □

V.08. Grau de gravidade das tentativas de suicídio anteriores e sua cronologia* (assinalar apenas as situações testemunhadas pelo informante ou que este seja capaz de descrever com algum pormenor)

Tentativa Suicídio	Sim=1	Não=0	NR/Desconhecido=99
Tentativa(s) de gravidade ligeira (sem que tivesse havido assistência médica)			
Tentativa(s) de gravidade média (com assistência médica de urgência, cuja duração não excedeu as 24 horas)			
Tentativa(s) de gravidade importante (com internamento hospitalar superior a 24 horas)			
Tentativa(s) de gravidade não determinada por insuficiência de informação			
Tentativa(s) em data(s) anterior(es) aos 6 meses que precederam a morte			
Tentativa(s) durante os 6 meses precedentes (excepto último mês)			
Tentativa(s) em datas não especificadas			

(*Nota: Várias respostas possíveis – sim=1; não=0; NR/Desconhecido= 99);

V.09. Assistência médica em ambulatório (últimos 6 meses)

Número de consultas

("3" se 8 ou mais consultas e "99" se NR/Desconhecido)



Consultas Médicas	Sim=1	Não=0	NR/Desconhecido=99
Mais do que duas consultas (número não especificado)			
Última consulta durante a semana que precedeu a morte			
Última consulta durante o mês precedente (excepto última semana)			
Última consulta em data recente, não especificada			

(*Nota: Várias respostas possíveis – sim=1; não=0; NR/Desconhecido= 99);

V.10. Internamentos hospitalares por doença somática (últimos 6 meses) (IntMed)

1. Nenhum
2. Um internamento de curta duração (até 15 dias)
3. Um internamento de longa duração (superior a 15 dias)
4. Um internamento de duração não especificada
5. Dois ou mais internamentos de curta duração
6. Dois ou mais internamentos de longa duração
7. Dois ou mais internamentos de diferente duração ou duração não especificada
99. NR/Desconhecido

V.11. Assistência psiquiátrica em ambulatório (durante 6 meses)

Número de consultas

("3" se 8 ou mais consultas e "99" se NR/Desconhecido)



Consultas Psiquiátricas	Sim=1	Não=0	NR/Desconhecido=99
Mais do que duas consultas (número não especificado)			
Última consulta durante a semana que precedeu a morte			
Última consulta durante o mês precedente (excepto última semana)			
Última consulta em data recente, não especificada			

(*Nota: Várias respostas possíveis – sim=1; não=0; NR/Desconhecido= 99);

V.12. Internamentos psiquiátricos (últimos 6 meses)

1. Nenhum
2. Um internamento de curta duração (até 30 dias)
3. Um internamento de longa duração (superior a 30 dias)
4. Um internamento de duração não especificada
5. Dois ou mais internamentos de curta duração
6. Dois ou mais internamentos de longa duração
7. Dois ou mas internamentos de diferente duração não especificada
8. 99. NR/Desconhecido

VI. Variáveis de caracterização da família de sangue

VI.01. Estado civil dos pais (ou substitutos parentais) (à idade de 18 anos do sujeito)

1. Casados
2. União livre
3. Divorciados/separados
4. Viúvo(a)
5. Mãe solteira
6. 99. NR/Desconhecido

VI.02. Dimensão da fratria

("3" se 8 ou mais consultas e "99" se NR/Desconhecido)

VI.03. Profissão do pai

Qual (descrever) _____

1. Trabalhador indiferenciado (da agricultura, indústria, pesca, serviços domésticos ou actividades ocasionais)
2. Operador qualificado
3. Empregado qualificado
4. Agricultor ou pequeno empresário rural
5. Quadro médio de empresa particular ou do Estado
6. Artesão, pequeno industrial ou comerciante de retalho
7. Quadro superior de empresa particular ou do Estado, grande empresário, profissão liberal ou similar
8. 99. NR/Desconhecida

VI.04. Profissão da mãe

Qual (descrever) _____

1. Doméstica
2. Trabalhadora indiferenciada ou familiar (da agricultura, indústria, pesca, serviços domésticos ou actividades ocasionais)
3. Operária qualificada
4. Empregada qualificada
5. Agricultura ou pequena empresária rural
6. Quadro médio de empresa particular ou do Estado
7. Artesã, pequena industrial ou comerciante de retalho
8. Quadro superior de empresa particular do Estado, grande empresário, profissão liberal ou similar
9. 99. NR/Desconhecida

VI.08. Doenças somáticas graves, crónicas ou incapacitantes de familiares de 1º grau *

Doença somática grave	Sim=1	Não=0	NR/Desconhecido=99
Neoplasias			
Glândulas endócrinas, nutrição e metabolismo, e deficiências imunitárias			
Sistema nervoso e órgãos dos sentidos			
Aparelho cardiovascular			
Aparelho digestivo			
Outras especificadas			

(*Nota: Várias respostas possíveis – sim=1; não=0; NR/desconhecido=99.

VI.09. Descrever familiar e doença grave (Quem teve o quê?)

VI.10. Perturbações mentais dos familiares do 1º e 2º grau

Perturbação mental	Sim=1	Não=0	NR/Desconhecido=99
Deficiência mental			
Perturbações mentais orgânicas			
Distúrbios pela utilização de álcool			
Distúrbios pela utilização de outros tóxicos (sedativos, hipnóticos, alucinogénios, opiáceos, cocaína, etc,)			
Distúrbios esquizofrénicos			
Distúrbios afectivos maiores			
Distúrbios psicóticos não especificados			
Distúrbios neuróticos			
Distúrbios não especificados			

(*Nota: Várias respostas possíveis – sim=1; não=0; NR/Desconhecido=99.

VI.11. Descrever familiar e perturbação mental (Quem teve o quê?)

VI.12. Abuso/Dependência do álcool de familiares de 1º e 2º graus*

Abuso/Dependência álcool	Sim=1	Não=0	NR/Desconhecido=99
Pai			
Mãe			
Irmão(s)			
Avós			
Outros membros do agregado			
Filhos			
Netos			

(*Nota: Várias respostas possíveis – sim=1; não=0; NR/Desconhecido=99)

VI.13. Abuso/Dependência de tóxicos de familiares de 1º e 2º graus*

Abuso/Dependência tóxicos	Sim=1	Não=0	NR/Desconhecido=99
Pai			
Mãe			
Irmão(s)			
Avós			
Outros membros do agregado			
Filhos			
Netos			

(*Nota: Várias respostas possíveis – sim=1; não=0; NR/Desconhecido=99)

VI.14. Tentativas de Suicídio de familiares do 1º grau e 2º graus *

Tentativa suicídio	Sim=1	Não=0	NR/Desconhecido=99
Pai			
Mãe			
Irmão(s)			
Outros membros do agregado			
Filhos			
Netos			

(*Nota: Várias respostas possíveis – sim=1; não=0; NR/Desconhecido=99)

VI.15. Suicídio consumado de familiares do 1º e 2º graus *

Suicídio	Sim=1	Não=0	NR/Desconhecido=99
Pai			
Mãe			
Irmão			
Dois ou mais irmãos			
Avós			
Parentes colaterais			
Filhos			
Netos			

(*Nota: Várias respostas possíveis – sim=1; não=0; NR/Desconhecido=99)

VII. Variáveis indicadoras de acontecimentos de vida recente destacáveis (ocorridos sobretudo durante os últimos 6 meses)

VII. 01. Esfera da saúde

Saúde	Sim=1	Não=0	NR/Desconhecido=99
Doença somática ou incapacitante do próprio			
Doença grave de uma pessoa-chave ou familiar próximo			
Problemas sexuais			
Gravidez			
Aborto			
Nascimento de um filho			
Outro Especificado			
Qual			

(*Nota: Várias respostas possíveis – sim=1; não=0; NR/Desconhecido=99)

VII.02. Esfera do casal *

Conjugalidade	Sim=1	Não=0	NR/Desconhecido=99
Casamento			
Relação extra-marital			
Deterioração da relação (conflitos e discussões graves e frequentes sem violência física)			
Violência conjugal (sevícias, maus-tratos)			
Disfunção sexual			
Ruptura afectiva ou separação devida a conflitos			
Divórcio			
Morte do noivo, cônjuge ou companheiro marital			
Outro especificado			
Qual			

(*Nota: Várias respostas possíveis – sim=1; não=0; NR/Desconhecido=99)

VII.03. Esfera familiar*

Família	Sim=1	Não=0	NR/Desconhecido=99
Namoro ou noivado de um filho(s) ou neto(a)			
Casamento de um filho(a) ou neto(a)			
Conflito grave ou ruptura com um membro da família			
Saída de casa de um membro da família			
Morte de um membro da família			
Outro especificado			
Qual _____			

(*Nota: Várias respostas possíveis – sim=1; não=0; NR=99)

VII.04. Esfera escolar*

Instituição Escolar	Sim=1	Não=0	NR/Desconhecido=99
Mau aproveitamento (várias notas negativas)			
Problemas de comportamento na escola (castigos, suspensão, etc.)			
Reprovação de ano			
Mudança de estabelecimento de ensino			
Interrupção dos estudos			
Conclusão dos estudos a tempo inteiro			
Outro especificado			
Qual _____			
Não aplicável			

(*Nota: Várias respostas possíveis – sim=1; não=0; NR/Desconhecido=99)

VII.05. Esfera laboral*

Laboral	Sim=1	Não=0	NR/Desconhecido=99
Início de um novo tipo de trabalho			
Alterações importantes no trabalho (mudança de emprego, de funções, de local, ou horário de trabalho, conflitos profissionais, etc)			
Promoção			
Despromoção			
Despedimento			
Desempregado(a) há mais de um mês			
Incapacitado(a) para o trabalho habitual há mais de um mês			
Reforma ou aposentação			
Desaire económico (negócios desastrosos, falência perda de bens valiosos)			
Outro especificado			
Qual _____			
Não aplicável			

(*Nota: Várias respostas possíveis – sim=1; não=0; NR/Desconhecido=99)

VII.06. Esfera social *

Social	Sim=1	Não=0	NR/Desconhecido=99
Perda de estatuto social (por desemprego, despromoção, desastre económico, etc)			
Dividas			
Transplantação sociocultural (migração intra ou extra-fronteiras)			
Mudança do local de residência			
Mudança das condições de vida e/ou hábitos arraigados			
Outro especificado			
Qual _____			

(*Nota: Várias respostas possíveis – sim=1; não=0; NR/Desconhecido=99)

VII.07. Esfera legal *

Legal	Sim=1	Não=0	NR/Desconhecido=99
Alvo de inquérito das autoridades policiais ou judiciárias			
Acção ou processo judicial			
Comparência em tribunal			
Detenção preventiva			
A cumprir pena de prisão			
Outro especificado			
Qual _____			

(*Nota: Várias respostas possíveis – sim=1; não=0; NR/Desconhecido=99)

VIII. Variáveis indicadoras das alterações recentes do comportamento (sobretudo durante o último mês)

VIII.01. Alterações emocionais

Emoções	Sim=1	Não=0	NR/Desconhecido=99
Nervoso, ansioso, tenso, inadequado			
Triste, abatido, aborrecido, deprimido			
Irritado, zangado			
Violento			

(*Nota: Várias respostas possíveis – sim=1; não=0; NR/Desconhecido=99)

VIII.02. Alterações do pensamento

Pensamento	Sim=1	Não=0	NR/Desconhecido=99
Dificuldades de ordem cognitiva (concentração, memória, atenção)			
Dificuldades de ordem volitiva (diminuição da capacidade de decisão, perda de interesse)			
Verbalização de ideias delirantes de culpabilidade, de ruína, etc.			
Verbalização de ideias hipocondríacas			
Verbalização de ideias de morte, ou de suicídio			

(*Nota: Várias respostas possíveis – sim=1; não=0; NR/Desconhecido=99)

VIII.03. Alterações somáticas

Soma	Sim=1	Não=0	NR/Desconhecido=99
Alterações do sono (insónias com despertar precoce ou dificuldades em adormecer)			
Anorexia, perda de peso			
Obstipação, alterações menstruais, diminuição da libido			
Fatigabilidade fácil			

(*Nota: Várias respostas possíveis – sim=1; não=0; NR/Desconhecido=99)

VIII.04. Alterações do comportamento propriamente ditas

Comportamento	Sim=1	Não=0	NR/Desconhecido=99
Crises de choro sem motivo aparente			
Tendência para o isolamento			
Inibição, apatia, lentificação dos movimentos			
Agitação, inquietação			
Aumento do consumo do álcool ou de outros tóxicos			
Tentativa(s) de suicídio			
Alterações inesperadas no contexto de funcionamento habitual do sujeito (reatamento de relações há muito interrompidas, regularização de assuntos pendentes, liquidação de dívidas, oferta de objectos pessoais de estimação, etc.)			

(*Nota: Várias respostas possíveis – sim=1; não=0; NR/Desconhecido=99)

IX. Variáveis de caracterização das circunstâncias da morte

(Conferir dados técnicos autópsia e preencher instrumento COLHEITA CLÍNICA)

IX.01. Circunstâncias que precederam ou envolveram a ocorrência da morte

Estruturação da informação da ocorrência de morte descrita	Sim=1	Não=0	NR/Desconhecido=99
Aquisição de instrumentos ou produtos potencialmente letais sem justificação aparente (arma de fogo, pesticidas, etc)			
Discussão violenta durante as 24 horas precedentes			
Gesto de despedida (telefonema para familiares ou pessoas-chave, exprimindo o seu afecto, pedindo desculpas por alegadas faltas, etc.)			
Comunicação prévia da intenção de pôr termo à vida (directamente, por via telefónica ou postal)			
Pedido de auxílio (directo ou por telefone) após desencadeado o facto que conduziria à morte			
Aceitação de auxílio sem oposição de resistência, se descoberto consciente			
Facto que conduziu à morte registado em situação de isolamento (ausência de testemunhas)			
Indícios sugestivos de precauções especiais para evitar a intervenção de terceiros (hora em que era suposto os familiares encontrarem-se ausentes, porta fechada à chave, etc.)			
Objectos sugestivos de suicídio no próprio cadáver ou nas suas imediações (corda, arma de fogo, embalagens vazias de medicamentos ou de outros produtos tóxicos, bebidas alcoólicas, calafetação e portas e janelas, etc.)			
Outros indícios sugestivos de suicídio nas imediações do cadáver (diário pessoal, livros ou escritos relacionados com doenças, morte, ciências ocultas, álbum ou fotografias de família, bíblia, etc, denotando o seu recente manuseamento)			
Parafernália habitual do consumidor de substâncias injetáveis (seringa, agulha, pó, colher, limão, papel prateado, etc.)			
Carta, nota ou mensagem de despedida (escrita ou gravada)			

(*Nota: Várias respostas possíveis – sim=1; não=0; NR/Desconhecido=99)

IX.02. Estação do ano em que se registou o facto de que resultou a morte

1. Inverno
2. Primavera
3. Verão
4. Outono
9. NR/Desconhecida

IX.03. Mês em que se registou o facto de que resultou a morte
("99" se NR/Desconhecida)

IX.04. Dia da semana em que se registou o facto de que resultou a morte
("99" se NR/Desconhecida)

IX.05. Hora em que se registou o facto de que resultou a morte
("99" se NR/Desconhecida)

IX.06. Associação de métodos *(caso se trate de suicídio)

1. Não (um único método)
 2. Dois métodos diferentes
 3. Três ou mais métodos diferentes
 9. NR/Desconhecido
- (*Nota: Caso não se trate de suicídio, marcar "0")

IX.07. Instrumento, método ou meio que provoca a morte * (caso tenha sido mais do que um, assinalar todos – conferir com dados da autópsia adicionando nova fonte informação):

1. Instrumento de natureza contundente ou actuando como tal
2. Instrumento cortante e/ou perfurante (armas brancas e outros)
3. Armas de fogo
4. Enforcamento
5. Afogamento
6. Outra asfixia mecânica (esganamento , estrangulamento, etc)
7. Precipitação
8. Trucidação
9. Electrocussão
10. Queimaduras por chamas ou líquidos ebulientes
11. Intoxicação por gás (CO ou outro potencialmente letal)

12. Intoxicação por psicofármacos prescritos pelo médico assistente
13. Intoxicação por outros medicamentos sem outra indicação
14. Intoxicação por pesticidas
15. Intoxicação por outros tóxicos (incluindo overdose de opiáceos, identificados ou não)
16. Acção de substâncias cáusticas ou corrosivas, ácidas ou alcalinas
17. Acidente de viação
18. Outros especificados
99. NR/Desconhecido

(*Nota: Caso a morte tenha resultado de causa natural, marcar "00")

Descreva _____

IX.09. Local onde ocorreu o facto que conduziu à morte

1. Quarto de dormir da residência
2. Sala da residência
3. Casa de banho ou cozinha da residência
4. Anexos da residência (garagem, quintal, arrecadação, etc.)
5. Residência do próprio, sem outra indicação
6. Residência de terceiros (pais, amigos, ex-cônjuge, etc.)
7. Local de trabalho e anexos
8. Hospital ou clínica
9. Estabelecimento prisional
10. Asilo ou lar da 3ª idade
11. Outra instituição (escola, internato, quartel, etc.)
12. Lugar público aberto (via pública, jardim, docas, etc.)
13. Lugar público fechado (quarto de hotel ou pensão, instalações sanitárias, etc.)
14. Lugar ermo, isolado (praia, falésias, pinhal, etc.)
15. Outros especificados
99. NR/Desconhecido

IX.10. Período de tempo decorrido entre o facto que conduziu à morte e a ocorrência desta (conferir com dados da autópsia no formulário para o efeito)

1. Encontrado morto, sem outra indicação
2. Entre alguns minutos e uma hora
3. Entre 1 e 6 horas
4. Entre 7 e 24 horas
5. Entre 25 e 48 horas
6. Entre 2 e 7 dias
7. Entre 1 e 4 semanas
8. Mais de 4 semanas
99. NR/Desconhecido

IX.11. Intervenção médica e/ou hospitalar no período que decorreu entre o facto que conduziu à morte e a ocorrência desta

1. Nenhuma
2. Apenas verificação do óbito, sem qualquer informação destinada ao IMLLL.

3. Verificação do óbito, sem qualquer informação destinada ao IMLL.
4. Apenas cuidados terapêuticos de urgência (manutenção das funções vitais, reanimação, etc.) e posterior verificação do óbito, sem que a informação correspondente tivesse acompanhado o cadáver quando da sua remoção pra o IMLL.
5. Cuidados terapêuticos de urgência, realização de exames complementares de diagnóstico e posterior verificação do óbito, sem que a informação correspondente tivesse acompanhado o cadáver.
6. Cuidados terapêuticos de urgência, sem ou com a realização de exames complementares de diagnóstico e posterior verificação do óbito, tendo a informação correspondente acompanhado o cadáver ou sendo enviada ulteriormente.
7. Cuidados terapêuticos de urgência e internamento por período superior a 24 horas, sem que a informação correspondente tivesse acompanhado do cadáver.
8. Cuidados terapêuticos de urgência e internamento por período superior a 24 horas, tendo a informação correspondente acompanhado o cadáver ou sido enviada ulteriormente.
99. NR/Desconhecida.

FIM DA ENTREVISTA
CONFERIR PROCESSO CLÍNICO

AUTÓPSIA PSICOLÓGICA*

Colheita de informação clínica e médico-legal do indivíduo índex

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* Autópsia psicológica: Colheita de informação clínica e médico-legal do indivíduo índex. Adaptado com permissão de: Costa Santos, J. M. M. d. (1998). Suicídio e autópsia psicológica : estudo compreensivo e redefinição das estratégias de categorização das mortes auto-infligidas. Faculdade de Medicina. Lisboa, Universidade Clássica de Lisboa. Dissertação de Doutoramento em Medicina: 859.

I. Variáveis de informação genérica

Identificação do falecido _____

I.01. Ano da morte

I.02. Mês da morte

I.03. Dia da morte

I.04. Houve autópsia? Sim Não

I.05. Dados acessíveis? Sim Não

I.06. Há dados clínicos objetivos acessíveis? Sim Não

I.07. Circunstâncias da morte: foi uma morte violenta? Sim Não

I.08. De que tipo?

1. Morte sem assistência (cadáver encontrado na residência, via pública, abandonado, etc)
2. Morte súbita
3. Suicídio
4. Homicídio
5. Overdose de estupefacientes e/ou outras substâncias tóxicas ilícitas
6. Morte violenta especificada (queimaduras, afogamento, trucidação, intoxicação, queda, tiro de arma de fogo, etc.)
7. Outra especificada. Qual _____
8. Acidente. Qual _____
9. Morte de causa natural
99. NR/Desconhecida

II. Variáveis de informação sobre os entrevistados

II.01. Número de familiares entrevistadas para o presente caso

II.02. Familiar nº – Identificação (nome completo)

II.03. Idade

II.04. Área de residência (freguesia e concelho)

II.05. Naturalidade (freguesia e concelho)

II.06. Relação entre a pessoa entrevistada e o falecido

1. Pai
2. Mãe
3. Irmão
4. Cônjuge/companheiro marital
5. Filho
6. Outro parente. Qual _____
7. Namorado, amigo
8. Colega, chefe, patrão
9. Vizinho, conhecido, outro

II.07. Coabitava com o falecido? Sim Não

II.08. Alguma vez coabitou? Sim Não

II.09. Se sim, em que período? _____

II.10. Desenhar Genograma (em folha inteira neste caderno) e identificar relação de sangue.

II.11. Leu e assinou o consentimento informado (no início deste caderno) Sim Não

II.12. Apreciação do modo como o entrevistado reagiu à entrevista

1. Compreendeu a finalidade e aceitou sem reserva aparente
2. Compreendeu a finalidade, mas aceitou com alguma reserva
3. Compreendeu a finalidade, mas recusou justificando-se
4. Compreendeu a finalidade, mas recusou sem apresentar justificação
5. Não compreendeu a finalidade, mas aceitou sem reserva aparente
6. Não compreendeu a finalidade, mas aceitou com alguma reserva
7. Não compreendeu a finalidade e recusou justificando-se
8. Não compreendeu a finalidade e recusou sem apresentar justificação
9. Não integrável em nenhuma das alíneas anteriores

II.13. Apreciação global do grau de colaboração do entrevistado durante a entrevista

1. Boa (procura informar com pormenor, excedendo mesmo o âmbito das questões colocadas)
2. Suficiente (limita-se a responder às questões sem tergiversar, mas evitando entrar em pormenor)
3. Insuficiente (tenta iludir algumas questões, recorre a subterfúgios, responde ao lado, contradiz-se ou alega com alguma frequência não saber responder a questões compatíveis com o seu grau de conhecimento do falecido)
4. Má (adopta uma atitude de manifesta oposição, não respondendo ou declarando não saber responder à maioria das questões. incluindo as mais elementares)
5. Não classificável, dado o estado de manifesta perturbação emocional em que se encontrava
6. Não integrável em nenhuma das alíneas anteriores

V. Variáveis de caracterização do estado de saúde

V.01. Doença somática com diagnóstico médico * (estabelecido ou confirmado pelo menos nos últimos 6 meses) [CONFERIR PROCESSO CLÍNICO]

Doença somática	Sim=1	Não=0	NR/Desconhecido=99
Infeciosas e parasitárias			
Neoplasias			
Glândulas endócrinas, nutrição e metabolismo, e deficiências imunitárias			
Sistema nervoso e órgãos dos sentidos			
Aparelho cardiovascular			
Aparelho digestivo			
Aparelho genito-urinário			
Sistema osteomuscular e tecido conjuntivo			
Outras especificadas			

(*Nota: Várias respostas possíveis – sim=1; não=0; NR/Desconhecido= 99)

V.02. Distúrbio mental com diagnóstico psiquiátrico codificável no Eixo I do DSM-III (estabelecido ou confirmado pelo menos nos últimos 6 meses) [CONFERIR PROCESSO CLÍNICO]

1. Nenhum
2. Distúrbios que aparecem habitualmente na infância ou na adolescência (se menor que 18 anos), incluindo deficiência mental
3. Distúrbios mentais orgânicos
4. Distúrbios de utilização de álcool
5. Distúrbios pela utilização de outros tóxicos (alucinogénios, opiáceos, cocaína, etc.)
6. Distúrbios esquizofrénicos
7. Outros distúrbios psicóticos
8. Distúrbios afectivos maiores
9. Outros distúrbios afectivos
10. Distúrbios de ansiedade, somatoformes ou dissociativos
11. Distúrbios psicosexuais
12. Outros distúrbios especificados
99. NR/Desconhecido

V.03. Distúrbio mental em diagnóstico psiquiátrico codificável no Eixo II do DSM-III (estabelecido ou confirmado pelo menos nos últimos 6 meses) [CONFERIR PROCESSO CLÍNICO]

1. Nenhum
2. Distúrbios da infância ou da adolescência
3. Distúrbio da personalidade especificado
4. Distúrbio da personalidade não especificado
99. NR/Desconhecido

V.04. Hábitos alcoólicos (assinalar apenas a situação que melhor traduza o padrão habitual de consumo nos últimos 6 meses) [CONFERIR PROCESSO CLÍNICO]

1. Não consumia bebidas alcoólicas ou só o fazia excecionalmente
2. Consumia regularmente, mas em quantidades inferiores a 1 litro de vinho corrente/dia
3. Consumo superior a 1 litro de vinho corrente/dia ou 1 dl de aguardente, com raros episódios de intoxicação, mas sem que se verifiquem as condições resumidas nas restantes alíneas
4. Abuso de álcool (consumo patológico durante pelo menos um mês, implicando perturbações do funcionamento social ou profissional)
5. Dependência do álcool (critérios anteriores acrescidos do aumento da tolerância e de sintomas de abstinência), sem tratamento anterior
6. Dependência do álcool, com tratamento anterior
7. Alcoolismo, sem outra indicação
99. NR/Desconhecido

V.05. Outros hábitos tóxicos (assinalar apenas a situação que melhor traduza o padrão habitual de consumo nos últimos 6 meses) [CONFERIR PROCESSO CLÍNICO]

1. Não consumia substâncias tóxicas
2. Consumo ocasional de sedativos ou hipnóticos sem prescrição médica
3. Consumo ocasional de substâncias alucinogénias ou psicomiméticas (anfetaminas ou *cannabis*)
4. Consumo ocasional de psicofármacos ou outros medicamentos não especificados
5. Abuso ou dependência de barbitúricos, sedativos ou hipnóticos de acção similar (consumo patológico durante pelo menos um mês, implicando perturbações do funcionamento social ou profissional, sem ou com aumento da tolerância e de sintomas de abstinência)
6. Abuso ou dependência de substâncias alucinogénias ou psicomiméticas (anfetaminas ou *cannabis*)
7. Abuso ou dependência de cocaína
8. Abuso ou dependência de opiáceos (heroína, morfina ou similares sintéticos)
9. Abuso ou dependência de substâncias mistas, incluindo opiáceos
10. Abuso ou dependência de fármacos e/ou drogas não especificados
99. NR/Desconhecida

V.06. Verbalização de ideias de morte e/ou suicídio * (assinalar apenas as situações testemunhadas pelo informante ou que este seja capaz de descrever com algum pormenor)

Verbalização	Sim=1	Não=0	NR/Desconhecido=99
Verbalização ocasional de ideias de morte e/ou suicídio			
Verbalização frequente de ideias de morte e/ou suicídio			
Verbalização ocasional de avisos/ameaças de suicídio			
Verbalização frequente de avisos/ameaças de suicídio			
Comunicação nos 6 meses precedentes (excepto último mês)			
Comunicação(ões) em data(s) não especificadas			

(*Nota: Várias respostas possíveis – sim=1; não=0; NR/Desconhecido= 99);

V.07. Número de tentativas de suicídio anteriores (assinalar apenas as situações testemunhadas pelo informante ou que este seja capaz de descrever com algum pormenor)
("3" se 8 ou mais tentativas e "99" se NR/Desconhecido)

V.08. Grau de gravidade das tentativas de suicídio anteriores e sua cronologia* (assinalar apenas as situações testemunhadas pelo informante ou que este seja capaz de descrever com algum pormenor)

Tentativa Suicídio	Sim=1	Não=0	NR/Desconhecido=99
Tentativa(s) de gravidade ligeira (sem que tivesse havido assistência médica)			
Tentativa(s) de gravidade média (com assistência médica de urgência, cuja duração não excedeu as 24 horas)			
Tentativa(s) de gravidade importante (com internamento hospitalar superior a 24 horas)			
Tentativa(s) de gravidade não determinada por insuficiência de informação			
Tentativa(s) em data(s) anterior(es) aos 6 meses que precederam a morte			
Tentativa(s) durante os 6 meses precedentes (excepto último mês)			
Tentativa(s) em datas não especificadas			

(*Nota: Várias respostas possíveis – sim=1; não=0; NR/Desconhecido= 99);

V.09. Assistência médica em ambulatório (últimos 6 meses)

Número de consultas

("3" se 8 ou mais consultas e "99" se NR/Desconhecido)



Consultas Médicas	Sim=1	Não=0	NR/Desconhecido=99
Mais do que duas consultas (número não especificado)			
Última consulta durante a semana que precedeu a morte			
Última consulta durante o mês precedente (excepto última semana)			
Última consulta em data recente, não especificada			

(*Nota: Várias respostas possíveis – sim=1; não=0; NR/Desconhecido= 99);

V.10. Internamentos hospitalares por doença somática (últimos 6 meses) (IntMed)

1. Nenhum
2. Um internamento de curta duração (até 15 dias)
3. Um internamento de longa duração (superior a 15 dias)
4. Um internamento de duração não especificada
5. Dois ou mais internamentos de curta duração
6. Dois ou mais internamentos de longa duração
7. Dois ou mais internamentos de diferente duração ou duração não especificada
99. NR/Desconhecido

V.11. Assistência psiquiátrica em ambulatório (durante 6 meses)

Número de consultas

("3" se 8 ou mais consultas e "99" se NR/Desconhecido)



Consultas Psiquiátricas	Sim=1	Não=0	NR/Desconhecido=99
Mais do que duas consultas (número não especificado)			
Última consulta durante a semana que precedeu a morte			
Última consulta durante o mês precedente (excepto última semana)			
Última consulta em data recente, não especificada			

(*Nota: Várias respostas possíveis – sim=1; não=0; NR/Desconhecido= 99);

V.12. Internamentos psiquiátricos (últimos 6 meses)

1. Nenhum
2. Um internamento de curta duração (até 30 dias)
3. Um internamento de longa duração (superior a 30 dias)
4. Um internamento de duração não especificada
5. Dois ou mais internamentos de curta duração
6. Dois ou mais internamentos de longa duração
7. Dois ou mas internamentos de diferente duração não especificada
8. 99. NR/Desconhecido

VI. Variáveis de caracterização da família de sangue

VI.01. Estado civil dos pais (ou substitutos parentais) (à idade de 18 anos do sujeito)

1. Casados
2. União livre
3. Divorciados/separados
4. Viúvo(a)
5. Mãe solteira
6. 99. NR/Desconhecido

VI.02. Dimensão da fratria

("3" se 8 ou mais consultas e "99" se NR/Desconhecido)

VI.03. Profissão do pai

Qual (descrever) _____

1. Trabalhador indiferenciado (da agricultura, indústria, pesca, serviços domésticos ou actividades ocasionais)
2. Operador qualificado
3. Empregado qualificado
4. Agricultor ou pequeno empresário rural
5. Quadro médio de empresa particular ou do Estado
6. Artesão, pequeno industrial ou comerciante de retalho
7. Quadro superior de empresa particular ou do Estado, grande empresário, profissão liberal ou similar
8. 99. NR/Desconhecida

VI.04. Profissão da mãe

Qual (descrever) _____

1. Doméstica
2. Trabalhadora indiferenciada ou familiar (da agricultura, indústria, pesca, serviços domésticos ou actividades ocasionais)
3. Operária qualificada
4. Empregada qualificada
5. Agricultura ou pequena empresária rural
6. Quadro médio de empresa particular ou do Estado
7. Artesã, pequena industrial ou comerciante de retalho
8. Quadro superior de empresa particular do Estado, grande empresário, profissão liberal ou similar
9. 99. NR/Desconhecida

VI.08. Doenças somáticas graves, crónicas ou incapacitantes de familiares de 1º grau *

Doença somática grave	Sim=1	Não=0	NR/Desconhecido=99
Neoplasias			
Glândulas endócrinas, nutrição e metabolismo, e deficiências imunitárias			
Sistema nervoso e órgãos dos sentidos			
Aparelho cardiovascular			
Aparelho digestivo			
Outras especificadas			

(*Nota: Várias respostas possíveis – sim=1; não=0; NR/desconhecido=99.

VI.09. Descrever familiar e doença grave (Quem teve o quê?)

VI.10. Perturbações mentais dos familiares do 1º e 2º grau

Perturbação mental	Sim=1	Não=0	NR/Desconhecido=99
Deficiência mental			
Perturbações mentais orgânicas			
Distúrbios pela utilização de álcool			
Distúrbios pela utilização de outros tóxicos (sedativos, hipnóticos, alucinogénios, opiáceos, cocaína, etc,)			
Distúrbios esquizofrénicos			
Distúrbios afectivos maiores			
Distúrbios psicóticos não especificados			
Distúrbios neuróticos			
Distúrbios não especificados			

(*Nota: Várias respostas possíveis – sim=1; não=0; NR/Desconhecido=99.

VI.11. Descrever familiar e perturbação mental (Quem teve o quê?)

VI.12. Abuso/Dependência do álcool de familiares de 1º e 2º graus*

Abuso/Dependência álcool	Sim=1	Não=0	NR/Desconhecido=99
Pai			
Mãe			
Irmão(s)			
Avós			
Outros membros do agregado			
Filhos			
Netos			

(*Nota: Várias respostas possíveis – sim=1; não=0; NR/Desconhecido=99)

VI.13. Abuso/Dependência de tóxicos de familiares de 1º e 2º graus*

Abuso/Dependência tóxicos	Sim=1	Não=0	NR/Desconhecido=99
Pai			
Mãe			
Irmão(s)			
Avós			
Outros membros do agregado			
Filhos			
Netos			

(*Nota: Várias respostas possíveis – sim=1; não=0; NR/Desconhecido=99)

VI.14. Tentativas de Suicídio de familiares do 1º grau e 2º graus *

Tentativa suicídio	Sim=1	Não=0	NR/Desconhecido=99
Pai			
Mãe			
Irmão(s)			
Outros membros do agregado			
Filhos			
Netos			

(*Nota: Várias respostas possíveis – sim=1; não=0; NR/Desconhecido=99)

VI.15. Suicídio consumado de familiares do 1º e 2º graus *

Suicídio	Sim=1	Não=0	NR/Desconhecido=99
Pai			
Mãe			
Irmão			
Dois ou mais irmãos			
Avós			
Parentes colaterais			
Filhos			
Netos			

(*Nota: Várias respostas possíveis – sim=1; não=0; NR/Desconhecido=99)

IX. Variáveis de caracterização das circunstâncias da morte

(Conferir dados técnicos autópsia e preencher instrumento COLHEITA CLÍNICA)

IX.01. Circunstâncias que precederam ou envolveram a ocorrência da morte

Estruturação da informação da ocorrência de morte descrita	Sim=1	Não=0	NR/Desconhecido=99
Aquisição de instrumentos ou produtos potencialmente letais sem justificação aparente (arma de fogo, pesticidas, etc)			
Discussão violenta durante as 24 horas precedentes			
Gesto de despedida (telefonema para familiares ou pessoas-chave, exprimindo o seu afecto, pedindo desculpas por alegadas faltas, etc.)			
Comunicação prévia da intenção de pôr termo à vida (directamente, por via telefónica ou postal)			
Pedido de auxílio (directo ou por telefone) após desencadeado o facto que conduziria à morte			
Aceitação de auxílio sem oposição de resistência, se descoberto consciente			
Facto que conduziu à morte registado em situação de isolamento (ausência de testemunhas)			
Indícios sugestivos de precauções especiais para evitar a intervenção de terceiros (hora em que era suposto os familiares encontrarem-se ausentes, porta fechada à chave, etc.)			
Objectos sugestivos de suicídio no próprio cadáver ou nas suas imediações (corda, arma de fogo, embalagens vazias de medicamentos ou de outros produtos tóxicos, bebidas alcoólicas, calafetação e portas e janelas, etc.)			
Outros indícios sugestivos de suicídio nas imediações do cadáver (diário pessoal, livros ou escritos relacionados com doenças, morte, ciências ocultas, álbum ou fotografias de família, bíblia, etc, denotando o seu recente manuseamento)			
Parafernália habitual do consumidor de substâncias injetáveis (seringa, agulha, pó, colher, limão, papel prateado, etc.)			
Carta, nota ou mensagem de despedida (escrita ou gravada)			

(*Nota: Várias respostas possíveis – sim=1; não=0; NR/Desconhecido=99)

IX.02. Estação do ano em que se registou o facto de que resultou a morte

1. Inverno
2. Primavera
3. Verão
4. Outono
9. NR/Desconhecida

IX.03. Mês em que se registou o facto de que resultou a morte
("99" se NR/Desconhecida)

IX.04. Dia da semana em que se registou o facto de que resultou a morte
("99" se NR/Desconhecida)

IX.05. Hora em que se registou o facto de que resultou a morte
("99" se NR/Desconhecida)

IX.06. Associação de métodos *(caso se trate de suicídio)

1. Não (um único método)
 2. Dois métodos diferentes
 3. Três ou mais métodos diferentes
 9. NR/Desconhecido
- (*Nota: Caso não se trate de suicídio, marcar "0")

IX.07. Instrumento, método ou meio que provoca a morte * (caso tenha sido mais do que um, assinalar todos – conferir com dados da autópsia adicionando nova fonte informação):

1. Instrumento de natureza contundente ou actuando como tal
2. Instrumento cortante e/ou perfurante (armas brancas e outros)
3. Armas de fogo
4. Enforcamento
5. Afogamento
6. Outra asfixia mecânica (esganamento , estrangulamento, etc)
7. Precipitação
8. Trucidação
9. Electrocussão
10. Queimaduras por chamas ou líquidos ebulientes
11. Intoxicação por gás (CO ou outro potencialmente letal)

IX.10. Período de tempo decorrido entre o facto que conduziu à morte e a ocorrência desta (conferir com dados da autópsia no formulário para o efeito)

1. Encontrado morto, sem outra indicação
2. Entre alguns minutos e uma hora
3. Entre 1 e 6 horas
4. Entre 7 e 24 horas
5. Entre 25 e 48 horas
6. Entre 2 e 7 dias
7. Entre 1 e 4 semanas
8. Mais de 4 semanas
99. NR/Desconhecido

IX.11. Intervenção médica e/ou hospitalar no período que decorreu entre o facto que conduziu à morte e a ocorrência desta

1. Nenhuma
2. Apenas verificação do óbito, sem qualquer informação destinada ao IMLLL.
3. Verificação do óbito, sem qualquer informação destinada ao IMLLL.
4. Apenas cuidados terapêuticos de urgência (manutenção das funções vitais, reanimação, etc.) e posterior verificação do óbito, sem que a informação correspondente tivesse acompanhado o cadáver quando da sua remoção pra o IMLLL.
5. Cuidados terapêuticos de urgência, realização de exames complementares de diagnóstico e posterior verificação do óbito, sem que a informação correspondente tivesse acompanhado o cadáver.
6. Cuidados terapêuticos de urgência, sem ou com a realização de exames complementares de diagnóstico e posterior verificação do óbito, tendo a informação correspondente acompanhado o cadáver ou sendo enviada ulteriormente.
7. Cuidados terapêuticos de urgência e internamento por período superior a 24 horas, sem que a informação correspondente tivesse acompanhado do cadáver.
8. Cuidados terapêuticos de urgência e internamento por período superior a 24 horas, tendo a informação correspondente acompanhado o cadáver ou sido enviada ulteriormente.
99. NR/Desconhecida.

IX.12. Grupos tóxicos identificados por meio de análises clínicas efectuadas no serviço de urgência *

	Sim=1	Não=0	NR/Desconhecido=99
Análises não efectuadas (por ter entrado já cadáver ou porque a morte sobreveio num curto num curto espaço de tempo, ou se efectuadas, não foi possível obter informação			
Benzodiazepinas			
Barbitúricos			
Antidepressivos tricíclicos			
Outros fármacos			
Opiáceos e similares sintéticos			
Pesticidas			
Álcool			
Outros tóxicos			

(* Nota: Várias respostas possíveis: sim=1; não=0; NR/D=9)

IX.13. Variáveis de informação sobre o relatório da autópsia médico-legal e exames complementares

IX.13.1. Pedido de análises toxicológicas *post mortem*

1. Não
2. Pesquisa de substâncias tóxicas especificadas, com resultado negativo
3. Pesquisa de substâncias tóxicas não especificadas, com resultado negativo
4. Pesquisa de substâncias tóxicas não especificadas, com resultado positivo
99. NR/Desconhecido

IX.13.2. Grupos tóxicos identificados por meio de análises toxicológicas forenses *

	Sim=1	Não=0	NR/Desconhecido=99
Tranquilizantes menores			
Tranquilizantes maiores			
Anti-depressivos tricíclicos			
Outros anti-depressivos			
Anti-epiléticos, anti-parkinsonicos e similares			
Barbitúricos			
Digitálicos			
Analgésicos e/ou anti-piréticos de uso corrente			
Outros fármacos, sólidos ou líquidos			
Opiáceos e similares sintéticos			
Cocaína			
Monóxido de Carbono			
Pesticidas organofosforados			
Paraquat			
Outros tóxicos			

(* Nota: Várias respostas possíveis: sim=1; não=0; NR/D=9)

IX.13.3. Alcoolemia no cadáver

1. Negativa
2. Até 0,50 g/l (não influenciado pelo álcool)
3. Entre 0,51 e 1,00 g/l (possivelmente influenciado pelo álcool)
4. Entre 1,01 e 1,50 g/l (provavelmente influenciado pelo álcool)
5. Entre 1,51 e 2,00 g/l (mais de 1,50 g/l, seguramente influenciado pelo álcool)
6. Entre 2,01 e 4,00 g/l (embriaguez *completa* até estupor alcoólico)
7. Mais de 4,00 g/l (coma alcoólico até morte por paralisia dos centros respiratórios)
8. Positiva, mas não quantificada
99. NR/Desconhecida

(*Nota: Qualificação correspondente à adoptada para o indivíduo vivo, segundo os critérios da National Safety Council dos EUA, habitualmente utilizados no IMLL)

IX.13.4. Dados particulares da autópsia (DadPAut)

	Sim=1	Não=0	NR/Desconhecido=99
Ausência de rasgões ou perfurações do vestuário			
Lesão(ões) sugestivas de suicídio (zonas de eleição, direcção, tipicidade, etc)			
Outros achados sugestivos de suicídio (identificação no conteúdo gástrico de elevado número de comprimidos, de líquido exalando o odor típico dos pesticidas organofosforados, etc.)			
Lesão(ões) compatíveis ou que não permitem excluir o suicídio			
Golpes de ensaio			
Sinais múltiplos de venopunctura (pregas os cotovelos, virilhas, etc.)			
Trajectos venosos esclerosados (cordões venosos)			

(* Nota: Várias respostas possíveis: sim=1; não=0; NR/D=9)

IX.14. Causa directa de morte

1. Doença orgânica ou funcional
2. Lesões traumáticas mecânicas (feridas, fracturas ósseas ou e vísceras maciças, tonturas de vísceras ocas, hemorragias, etc.)
3. Asfixia por enforcamento
4. Asfixia por submersão
5. Outra asfixia mecânica
6. Queimaduras
7. Electrocussão
8. Intoxicação
9. Pneumopatia pós-traumática
10. Outras complicações pós-traumáticas (sepsia/sépsis, embolia pulmonar, enfarte do miocárdio, etc.)
11. Outra causa
12. Indeterminada

IX.15. Etiologia médico-legal da morte

1. Causa natural
2. Acidente
3. Suicídio
4. Homicídio
5. *Overdose* de opiáceos e/ou cocaína
6. Indeterminada ou omissa (não identificada nas conclusões do relatório médico-legal)

IX.16. Variáveis de informação sobre a categorização da morte

IX.16.1. Critérios de avaliação da autodestruição e da intenção (abreviatura)

	Sim=1	Não=0	NR/Desconhecido=99
Resultados da autópsia médico-legal compatíveis com morte auto-infligida			
Resultados das análises toxicológicas compatíveis com morte auto-infligida			
Resultados do inquérito policial compatíveis com morte auto-infligida (e.g. relatórios, fotografias ou diagramas do <i>cenário da morte</i>)			
Depoimentos de testemunhas indicativos de morte auto-infligida			
Declarações do suspeito indicativas de morte auto-infligida (e.g. confissão subsequente ao acto, nota de despedida, mensagem gravada)			
Elementos psicológicos sugestivos de morte auto-infligida (e.g. comportamento observado, estilo de vida, personalidade)			
Indícios de que o suspeito conhecia a letalidade potencial do agente ou meio implicado na morte (e.g. intoxicação por sobredosagem medicamentosa)			
O sujeito tinha evidenciado uma alteração recente ou súbita dos afectos (emoções)			
O sujeito sofria de depressão ou de outro distúrbio mental			
O sujeito tinha feito um gesto de despedida sugestivo do desejo ou propósito de morrer			
O sujeito tinha exprimido ideias ou ameaças de suicídio			
O sujeito tinha feito um gesto de desespero (e.g. tentativa de suicídio recente)			
O sujeito tinha sido confrontado com acontecimentos de vida recentes indesejáveis, designadamente rupturas ou perdas afectivas			
O sujeito tinha evidenciado sinais de instabilidade nas relações familiares próximas			
O sujeito tinha tido um conflito interpessoal recente			
O sujeito possuía uma história indicativa de saúde física debilitada			
Preenchidos 6 ou mais dos critérios anteriores, incluindo obrigatoriamente o 14º, e 15º ou o 16º (suicídio)			

(* Nota: Várias respostas possíveis: sim=1; não=0; NR/D=9)

IX.16.2. Categorização final da morte

1. Causa natural
2. Acidente
3. Suicídio
4. Homicídio
5. *Overdose* de opiáceos e/ou cocaína
6. Etiologia indeterminada
99. NR/Desconhecida (por ausência de elementos suficientes de informação)

IX.16.3. Grau de concordância entre a causa/etiologia médico-legal registada quando da entrada do cadáver no IMLL e a categorização final da morte

1. Não concordante
2. Parcialmente concordante
3. Inteiramente concordante
99. NR/Desconhecido (por ausência de informação inicial)

IX.16.4. Grau de concordância entre a etiologia médico-legal constante do relatório de autópsia e a categorização final da morte

1. Não concordante
2. Concordante
99. NR/Desconhecido (por emissão da etiologia ao relatório de autópsia)

IX.16.5. Observações (Obs.)