

UNIVERSITY OF PAVIA
DEPARTMENT OF BRAIN AND BEHAVIOURAL SCIENCES
PHD IN PSYCHOLOGY, NEUROSCIENCE AND DATA SCIENCE
CYCLE XXXII

***Suicide prevention:
from dogmas to national prevention strategies***

DOCTORAL COURSE COORDINATOR:
PROF. GABRIELLA BOTTINI

Doctoral Thesis by
Cristian Romaniello
Serial no. 451480

Academic Year 2023/2024

Summary

INTRODUCTION.....	1
SUICIDE	6
GENERAL DATA ON THE EPIDEMIOLOGICAL DIMENSION	7
THE STUDY OF SUICIDE IN HISTORY.....	9
HISTORICAL BACKGROUND.....	9
DURKHEIM, FREUD AND BECK	16
EDWIN SHNEIDMAN AND THE FOUNDATION OF SUICIDOLOGY	20
THEORIES OF SUICIDE.....	25
RISK FACTORS	26
THEORETICAL PERSPECTIVES	29
ELEMENTS OF A BIOLOGICAL NATURE	29
ELEMENTS OF A PSYCHODYNAMIC NATURE	31
<i>Internal conflicts and inward aggression</i>	<i>31</i>
<i>Feelings of loss and identification with the lost object</i>	<i>31</i>
<i>Vulnerability and psychological defences</i>	<i>31</i>
<i>Early relational experiences</i>	<i>32</i>
COGNITIVE-BEHAVIOURAL ELEMENTS	32
<i>Hopelessness Theory.....</i>	<i>32</i>
<i>Deficient problem-solving theory</i>	<i>33</i>
<i>Cognitive model of suicide</i>	<i>34</i>
<i>Entrapment Theory.....</i>	<i>36</i>
<i>CBT therapeutic approaches to suicide.....</i>	<i>37</i>
<i>Stress-diathesis theory.....</i>	<i>39</i>
INTERPERSONAL THEORY OF SUICIDE	40
THE THREE-STEP THEORY (3ST)	42
DIFFERENCES BETWEEN IPTS AND 3ST.....	45
GLOBAL EPIDEMIOLOGY OF SUICIDE AND SUICIDE ATTEMPTS.....	47
SUICIDE MORTALITY	47
GLOBAL AND REGIONAL SUICIDE RATES	47
SUICIDE RATES BY GENDER	49
SUICIDE RATES BY AGE	50
THE IMPORTANCE OF SUICIDE AS A LEADING CAUSE OF DEATH	50
CHANGES IN SUICIDE RATES FROM 2000 TO 2012	51
METHODS OF SUICIDE.....	52
SURVEILLANCE SYSTEM IN THE USA	54

SUICIDE ATTEMPTS	54
SELF-REPORTS OF SUICIDAL BEHAVIOUR	55
HOSPITAL DATA ON SUICIDE ATTEMPTS TREATED WITH DRUGS	57
EPIDEMIOLOGY OF SUICIDE AND SUICIDE ATTEMPTS IN ITALY	59
TERRITORIAL DISTRIBUTION (2018-2020)	59
DISTRIBUTION BY GENDER AND AGE GROUP (2020)	63
DISTRIBUTION BY RELATED DISEASES (2020)	64
ANALYSIS OF SUICIDE PATTERNS BY GENDER IN ITALY (2020)	65
SUICIDE MODES AND ASSOCIATED DISEASES	66
LEVELS OF EDUCATION	70
MARITAL STATUS	71
MONTHS OF DEATH	72
CITIZENSHIP	75
GLOBAL SUICIDE PREVENTION INITIATIVES	77
WORLD SUICIDE PREVENTION DAY	77
NATIONAL SUICIDE PREVENTION STRATEGIES	79
EFFECTIVENESS OF NATIONAL SUICIDE PREVENTION STRATEGIES	85
THE STUDY BY MANN ET AL. 2005	85
<i>Training of doctors, screening and public education programmes</i>	<i>87</i>
<i>Restricting access to lethal means and media considerations</i>	<i>87</i>
<i>Conclusion of Results</i>	<i>87</i>
THE STUDY BY MATSUBAYASHI AND UEDA, 2011	88
<i>Country Selection and Data Analysis</i>	<i>88</i>
<i>Results</i>	<i>89</i>
THE STUDY BY ZALSMAN ET AL. 2016	90
<i>Restricting access to the means to commit suicide</i>	<i>92</i>
<i>Awareness programmes in schools</i>	<i>92</i>
<i>Pharmacological and psychological treatments</i>	<i>92</i>
<i>Media strategies and online support</i>	<i>92</i>
THE BREMBERG STUDY, 2017	94
<i>Country Selection and Methods</i>	<i>95</i>
<i>Initial and final suicide rates</i>	<i>96</i>
<i>Influencing factors</i>	<i>96</i>
<i>Considerations and interpretation of results</i>	<i>96</i>
NATIONAL STRATEGIES FOR SUICIDE PREVENTION IN THE WORLD	98
NATIONAL SUICIDE PREVENTION STRATEGIES IN AFRICA	100

NATIONAL SUICIDE PREVENTION STRATEGIES IN AMERICA	101
NATIONAL SUICIDE PREVENTION STRATEGIES IN ASIA	102
NATIONAL SUICIDE PREVENTION STRATEGIES IN EUROPE	105
NATIONAL SUICIDE PREVENTION STRATEGIES IN OCEANIA	108
THE NATIONAL STRATEGY FOR SUICIDE PREVENTION IN ITALY	111
THE STATE OF THE ART IN ITALY	111
PARLIAMENTARY ELEMENTS OF SUICIDE INTERVENTION	114
THE FUNDAMENTAL IMPORTANCE OF MASS COMMUNICATION	125
GUIDELINES FOR CORRECT INFORMATION ON SUICIDE AND THE WERTHER EFFECT	126
SCIENTIFIC EVIDENCE ON THE INFLUENCE OF THE MEDIA ON SUICIDAL BEHAVIOUR	128
<i>Proper Dissemination of Suicide News</i>	132
DIGITAL MEDIA	137
BELIEFS AND FACTS ABOUT SUICIDE	137
CONCLUSIONS	140
BIBLIOGRAPHY	144

INTRODUCTION

Contextualisation of the Suicide Phenomenon

Suicide, defined as the act of voluntarily taking one's own life, is a personal tragedy that impacts entire families, communities and societies. With more than 800,000 people dying by suicide each year worldwide, it has established itself as a major cause of death, representing a serious public health problem that transcends geographical, cultural and economic boundaries. Despite global efforts at prevention, the figures remain alarming, underlining the need for in-depth analysis and targeted action.

Historically, suicide has been subject to profoundly different moral, legal and social evaluations, varying from one cultural context to another. In ancient Greek and Roman civilisations, for example, suicide could be considered an act of honour or a rational choice in the face of defeat or incurable illness. In contrast, Judeo-Christian traditions stigmatised it as a grave sin against the divine will. This diversity of interpretations reflects the complexity of the phenomenon and its roots deeply intertwined with the cultural, ethical and religious norms of a society.

Over the centuries, the perception of suicide has evolved, and with it strategies for prevention and treatment. The emergence of social and medical sciences has led to new understandings of suicide as a multifactorial phenomenon, in which psychological, biological, social and economic aspects interact. This holistic approach has paved the way for more effective prevention strategies, aimed not only at treating the psychopathological aspects of the individual, but also at modifying environmental and social risk factors.

Aims and Objectives of the Thesis

This doctoral work stems from the awareness that, despite the fact that suicide represents a major global challenge, the Italian literature still lacks a survey that explores its multiple dimensions in a comprehensive and interdisciplinary manner. Faced with this void, the thesis sets itself ambitious goals, aimed at integrating knowledge from different fields of study to provide a richer and more multifaceted understanding of the suicide phenomenon.

At the heart of this work is the desire to trace a complex and articulated panorama of suicide, starting from its theoretical roots and ending with institutional measures to reduce the phenomenon,

such as the most contemporary prevention strategies. By examining the main currents of thought, from sociological and psychological theories to the most recent approaches in suicidology, the research aims to outline how each discipline contributes to a more complete understanding of suicide, both in its individual and collective manifestation.

Other important objectives are to analyse global suicide prevention initiatives, with a special focus on the Italian context, in order to assess the effectiveness of the strategies adopted and suggest possible improvements, to explore the role of the media and mass communication in suicide prevention, investigating how these can be used effectively to reduce the phenomenon, and to offer a critical reflection on public policies and awareness-raising actions implemented at national and international level, assessing their impact on suicide trends.

Through these objectives, the thesis aims not only to enrich the Italian academic debate on suicide but also to provide mental health professionals, policy makers and social activists with concrete tools for the formulation of more effective prevention strategies that are sensitive to the Italian cultural and social context.

Overview of Suicide Theories

The understanding of suicide has spanned numerous paradigms, reflecting the evolution of human thought through the ages. This thesis dives into this vast sea of theories, drawing from both sociological and psychological foundations, to build a bridge to the most innovative approaches in modern suicidology.

Émile Durkheim, with his pioneering work 'Suicide' published in 1897, laid the foundation for the sociological study of the phenomenon, introducing the idea that suicide is partly determined by factors external to the individual, such as social integration and regulation. This thesis discusses the Durkheimian analysis, exploring how contemporary social dynamics influence suicidal tendencies.

Freud and subsequent dynamic psychology introduced the understanding of suicide as a manifestation of internal conflicts and psychological despair. Integrating these approaches with Aaron Beck's cognitive theories, which identify distorted thinking as a root of suicidal distress, the research traces an evolutionary line leading to the current understanding of suicide as the result of a complex interaction between mental state, life experiences and cognitive factors.

In the modern era, figures such as Edwin Shneidman and his emphasis on 'psychological pain' as a driver of suicidal behaviour have further enriched the debate by shifting the focus to individual

suffering and how to counter it. This paper aims to reflect on the contribution of Shneidman and other contemporary suicidologists, examining prevention strategies based on reducing psychological pain and increasing individual resilience.

Through the exploration of these theories, the thesis aims to offer a comprehensive framework that sheds light on the multiple facets of suicide, from social and economic determinants to psychological and individual aspects. The aim is to provide a solid basis on which to build effective intervention and prevention strategies that take into account the complexity and variety of human experiences related to suicide.

Description of the Main Parts of the Work

This paper is divided into two main sections, each of which addresses the phenomenon of suicide from different but complementary perspectives, providing a holistic and multidisciplinary understanding.

The first part of the thesis is dedicated to exploring the theoretical foundations of suicide. Through an examination of the main sociological, psychological and philosophical theories, this segment aims to build a solid foundation for understanding suicide as a complex phenomenon that intersects individual, social and cultural dimensions. Chapters in this section include:

- An exploration of classical theories, from Durkheim to Freud, and how these laid the foundations for later studies on suicide.
- An analysis of cognitive theories and contemporary research in the field of suicidology, highlighting the contributions of scholars such as Aaron Beck and Edwin Shneidman.
- An examination of the most recent interdisciplinary approaches that integrate neuroscience and genetics in understanding suicidal behaviour.

The second part focuses on suicide prevention strategies and initiatives implemented at global and national level, with a particular focus on actions undertaken in Italy. This section is structured to provide an overview of the different modes of intervention, assessing their effectiveness and identifying areas for improvement. Among the topics covered are:

- The presentation and analysis of public awareness campaigns and training programmes for mental health professionals.

- Examination of suicide prevention policies, including discussion of the Italian motion and its context within international strategies.
- Critical evaluation of the use of media and digital technologies in suicide prevention, with particular reference to the balance between awareness and risk of suicide contagion.

This bipartite structure makes it possible to deal with the topic of suicide in a comprehensive manner, starting from its theoretical roots and arriving at practical applications in the field of prevention. The aim is to offer not only an academic reflection on suicide but also to propose concrete ideas for action and intervention, with the hope of contributing, even if only in part, to the reduction of this painful phenomenon.

Meaning and Contribution of Work

This doctoral work aims to offer for the first time a comprehensive analysis that combines theoretical and practical insights into a single comprehensive framework. The multidisciplinary approach adopted reflects the inherent complexity of the suicide phenomenon, requiring an interpretation that goes beyond traditional disciplinary categorisations to embrace a holistic view.

From an academic perspective, this thesis is a contribution to the understanding of suicide, integrating sociological, psychological and suicidal theories with the latest research in the field. The examination of the various theories not only provides a comprehensive overview of the existing literature but also lays the groundwork for future investigations, suggesting how different approaches can illuminate complementary aspects of suicidal behaviour. Furthermore, the critical analysis of international and national suicide prevention strategies offers valuable insights into the development of more effective and culturally and socially sensitive policies.

On a practical level, the thesis stands out for its commitment to providing concrete recommendations for suicide prevention. By examining existing initiatives and evaluating their effectiveness, the work suggests avenues for improvement and innovation, emphasising the importance of an integrated approach that considers both individual-level interventions and public awareness strategies. In particular, the reflection on the use of media and digital technologies in suicide prevention opens up new possibilities for intervention, exploiting the opportunities offered by online platforms while warning of the associated risks.

In conclusion, this doctoral work aims to offer a reference point for those working in the field of mental health, social policy and education, providing theoretical and practical tools to address one

of the most pressing challenges of our time. The hope is that, through greater understanding and collective commitment, we can move towards a future in which suicide is no longer seen as an inevitability, but as a preventable phenomenon, against which society can and must mobilise.

SUICIDE

Suicide is a global tragedy that afflicts communities worldwide, with profound implications that extend far beyond the individual. Each year, suicide is the cause of more than 800,000 deaths, ranking as one of the leading causes of death worldwide (WHO, 2021). Its prevention has become a critical public health challenge, requiring collective efforts and effective strategies involving different disciplines and sectors of society.

According to the World Health Organisation (WHO), suicide is described as:

[...] an act of self-elimination, deliberately initiated and performed by the persons concerned in full knowledge or expectation of its fatal outcome (WHO, 1998).

The phenomenon of suicide has a strong psychosocial nature and is influenced by a wide range of individual, cultural, demographic, economic and legislative factors (WHO, 2014a). These aspects have given rise to a lively debate among experts on the need to establish a common definition (Silverman & De Leo, 2016; De Leo et al., 2021).

What is common to the various definitions proposed by the main authors who have dealt with this subject, such as Durkeim (1897), Shneidman (1985), Rosemberg (1988), Davis (1988), Mayo (1992) and De Leo (2006), is the idea that suicide is an intentional, voluntary act, characterised by a certain degree of awareness and with clear attribution to the individual, who procures death for himself.

Intentionality is the distinguishing feature that separates suicide from other forms of death, but identifying it can be complex. How can the genuine intention of a deceased person be determined? How can we understand the often contradictory motivations that drive a suicidal act? (Andriessen, 2006; De Leo et al., 2004). These questions take on a greater degree of complexity when one takes into account the fact that the explication of the self, which is linked to the concept of intentionality, varies greatly according to cultural context. For instance, Western and non-Western conceptions of the individual emphasise the dichotomy between a unified, atomised self and a more extended self beyond the individual.

In other words, the concept of intentionality implies that the suicidal gesture is both intrinsic and extrinsic to the subject, creating a complex, alternating interaction between free will -where the dimension of freedom and its opposite, constraint become preponderant- and social and individual influences.

This perspective requires a non-reductionist approach to understanding the complexity of suicide, balancing the interpretation of suicide as an individual pathology with its understanding as the result of social factors -even if not in their entirety- that can be measured through quantitative indicators that can explain large-scale changes in society.

General data on the epidemiological dimension

Every year, more than 800,000 people lose their lives to suicide. In cruder terms, one person takes their own life every 40 seconds (WHO, 2014a). Mortality due to suicide exceeds the number of deaths from diseases such as malaria, breast cancer or dementia, accounting for about 1.49% of global deaths in a year (Global Burden of Disease, 2019). Furthermore, it is estimated that for every suicide there are approximately 20 suicide attempts (WHO, 2014b), and it is estimated that, on average, one hundred people (so-called survivors or survivors) are affected in various ways as a result of a suicide-related loss (Berman, 2011).

In 2016, suicide became the leading cause of death in high-income countries in Asia Pacific and ranked among the top 10 causes of death in Europe, Central Asia, Australasia, Southern Latin America and high-income countries in North America (GBD, 2019). Importantly, suicide accounts for 56% of all violent deaths, surpassing the number of deaths in war and homicide. Specifically, it accounts for 81% of violent deaths in high-income countries and 44% and 70% in low- and middle-income countries, respectively (WHO, 2014a).

Suicide rates also vary according to gender and age. Suicide rates are lowest among young people under 15 and rise sharply among people over 70. In high-income countries, men have three times higher suicide rates than women, while this difference narrows in low- and middle-income countries, where the male suicide rate is 'only' 57% higher (GBD, 2019). In general, men have higher suicide mortality rates at all ages, with the exception of the 15-29 age group, where suicide is the leading cause of death among young women worldwide (8.5%). Gender variability appears to be related to issues related to gender equality, gender stereotypes, differences in methods of coping with stress and conflict, accessibility to potentially lethal means, exposure to violence and alcohol and drug use, as well as different conceptions and treatments of mental health (WHO, 2014c).

It is important to note that although data show slightly higher rates of suicide in high-income countries, a large part of the world's population resides in Low and/or Middle Income Countries (LMICs), where statistics are not as reliable. The scarcity of means to collect data accurately and

systematically, together with the complexities involved in recording deaths by suicide, make it difficult to obtain complete information. Criminal records and court offices, and even hospital services, often provide documentation that is not always reliable in terms of counting deaths and documenting medical treatment administered following suicide attempts (Douglas, 1967). Suicide, in addition to having a complex and multilevel registration procedure, is stigmatised or illegal in many countries (Mishara & Weisstub, 2016), and this aspect leads to underestimation of the extent of data or misclassifications of deaths. Legal consequences, together with stigma and shame, may lead community members and authorities to conceal suicide deaths, categorising them as 'deaths due to undetermined intent', 'accidents', 'homicides' or 'unknown causes' (WHO, 2014b). Furthermore, factors such as economic development and migration movements can significantly influence suicide rates. For example, the increase in suicide rates in some Eastern European countries has been attributed to post-communist privatisation and the Russian economic crisis of 1998 (Mäkinen, 2006; Stuckler et al., 2009). Similarly, but in the opposite direction, experts attribute the significant reduction in suicide rates in China and India to recent economic development, steadily increasing urbanisation, improved living conditions and increased accessibility to medical care (Wang et al., 2014).

In summary, the epidemiology of suicidal behaviour is influenced not only by methodological challenges in the collection and production of statistical data, but also by a wide range of social, cultural, economic and religious factors, factors that draw attention to difficult questions. For example, Gibbs & Thompson (2012) address the question of how it can be explained that, during the war in Afghanistan, more American soldiers died by suicide than in combat, or Dowsett (2012), on how the rise in suicide rates in Europe as a result of the financial crisis, which led, for example, to the temporary suspension of evictions by Spanish banks, could be verified. The analysis of this situation, with alienation, fear and violence as structural consequences of the social and economic orders, refers back to the Dürkhemian conception of suicide as a phenomenon linked to social integration and regulation, highlighting at the same time its intentional and individual nature, as each individual decides to end his or her own life.

THE STUDY OF SUICIDE IN HISTORY

The study of suicide, a complex phenomenon that intersects various fields such as sociology, psychology and medicine, has a long and varied history and reflects the diversity of human perceptions and social responses. The understanding of suicide has evolved considerably over the centuries, moving from interpretations based on religious and moral beliefs to a more scientific and humanistic approach.

The history of the study of suicide is fundamental to understanding how societies have interpreted and managed this behaviour over time. From ancient civilisations, where suicide could be seen as an act of courage or dishonour, to the modern era, where it is generally seen as an issue closely linked to mental health, the various interpretations reflect changes in cultural, religious and ethical values. The progressive medicalisation and psychologisation of suicide, in particular, has marked a turning point in the management and prevention of this phenomenon (Colt, 1991).

This section aims to trace the evolution of the study of suicide by examining how different historical periods have interpreted and responded to suicide. Through an analysis of major theories and research, changes in conceptions of suicide and its impact on society will be explored.

Historical background

Ancient civilisations offer an important insight into early interpretations of and reactions to suicide. Ancient Egypt, for instance, showed rare documentation of suicide, mainly limited to texts concerning nobility or royalty. This suggests a possible perception of suicide as an act related to dignity or despair in exceptional circumstances, rather than a widespread phenomenon among the general population (Erman, 1894). The rarity of reporting cases of suicide, as well as the concentration of reports on noble figures, suggests the difficulty and cost of extending the possibility of writing in ancient times. However, it is in what ancient Egypt has left us that we find the earliest evidence of suicide in history, engraved on an ancient Egyptian manuscript known as 'Dispute between a man and his Ba', which dates back to the Middle Kingdom of Egypt, some 4,000 years ago. In this writing, which is considered one of the oldest examples of literary reflection on the theme of suicide and existential pain, a man expresses his deep distress and suffering in a dialogue with his 'Ba', which can be interpreted as his spirit or soul. The following is a part of the text (taken from the works of Allen, 2011, and Lichtheim, 1973 and Pritchard, 1950) that reflects the man's sense of loneliness, despair and desire for death, as an escape from suffering:

"Who should I talk to today?
Brothers are evil
And today's friends are not loving.

Who should I talk to today?
Hearts are rapacious
Every man kidnaps the possession of his mate.

Who should I talk to today?
Kindness is pursued
And every man thinks only of his own interest.

Who should I talk to today?
The heart has become rapacious
No one is happy with the present moment.

Who should I talk to today?
There is no one with a compassionate heart
And no one I care about.

Who should I talk to today?
I am weighed down with grief
And I lack affection.

One is rejected by people to whom one belongs
And one turns to strangers for affection.
Death presents itself to me today
As the refuge of those who see their home after years in captivity".

It should be noted that, despite the fact that millennia have passed, what one thinks and writes about society, as well as what one thinks and writes about one's emotions, one's frailties and one's pain, is not dissimilar to what an account of ancient Egypt testifies.

As Professor Maurizio Pompili (2013) reports:

"It is that intimate inner dialogue of which Shneidman [1996] speaks: the mind goes through all the options to solve the problem that causes extreme suffering until at a certain point the subject of suicide emerges; the mind rejects it and continues the checking of options; it finds suicide again and rejects it again; but finally, having discarded all other options, the mind accepts suicide as the solution, identifies it as the only answer available and plans it".

Interesting material to discuss about suicide has come down to us from ancient Greece. The Greeks approached the subject from numerous perspectives, from the religious-mythological to the philosophical to the legal and social.

In the view of society, the perception of suicide varied widely from polis to polis, reflecting the cultural and legal diversity between city-states. There were no universal laws on suicide, but social

and legal reactions depended on local norms and values. In Athens, for example, the property of those who committed suicide without a cause deemed justifiable could be confiscated by the state (Dodds, 1951), while in Sparta, the context of constant military preparedness and the valuing of sacrifice for the community could make suicide acceptable in specific contexts, as an act of honour in the face of defeat or misfortune.

The philosophical understanding of suicide varied significantly between the different schools, reflecting the complexity and diversity of Greek thought. Of these, the Stoic and Pythagorean schools offered two of the most delineated and contrasting perspectives.

The Stoic school, founded by Zeno of Cizio in the 3rd century BC, promoted a life in harmony with reason and nature, valuing control of the passions and inner freedom. According to the Stoics, suicide could be considered a rational and morally acceptable act in circumstances where a person was no longer able to live in accordance with his rational nature. Seneca, one of the best known Stoic philosophers, argued that suicide was a dignified way out in the face of unbearable suffering or incurable illness (Long & Sedley, 1987). This view was based on the idea that life should be lived virtuously and that if circumstances prevented this, withdrawing from life was a rational choice and not an act of despair.

In stark contrast to the Stoics, the Pythagoreans, followers of Pythagoras in the 6th century BC, saw suicide in a negative light. Their philosophy emphasised the harmony of the soul and the importance of the cycle of reincarnations. The Pythagoreans believed that the soul was immortal and that suicide unfairly interfered with the life cycle and fate of the soul, predetermined by the gods. Therefore, suicide was considered an immoral act that broke the natural and cosmic order, depriving the soul of the opportunity to purify itself through life experiences (Burkert, 1985).

The case of Socrates (Dodds, 1951), sentenced to death in 5th century BC Athens and who chose to voluntarily drink hemlock, remains one of the most emblematic and discussed examples of suicide in the history of philosophy. His decision seems to have stemmed not from despair, but from an ethical commitment to the principles of truth and justice, and the conviction that death was not an evil in itself, but a passage to a possible better life. Socrates' death is shown as an exception in the perception of suicide: the act of choosing death to remain true to one's principles was viewed with admiration and respect.

The texts of tradition have also made interesting contributions and, certainly, the best known and most important one concerns the suicide of Ajax Telamonius. During the Trojan War, after

Achilles' death at the hands of Paris, the Greek heroes were faced with the question of who should inherit Achilles' divine weapons, forged by the gods. Ajax and Odysseus both claimed this honour, but the weapons were eventually awarded to Odysseus. Ajax, deeply wounded and unable to bear the shame of loss and the humiliation of not being chosen, falls into a blind rage.

In Sophocles' tragedy (2007, Griffith, 1999), this fury led the hero to carry out a massacre among the cattle and pack animals of the Achaeans, believing in his madness to take revenge on his fellow warriors. When he came to his senses and realised the irrationality of his acts, Ajax found himself unable to live with the shame and decided to take his own life, impaling himself on his sword. His death is a final act of autonomy, an attempt to restore his perceived lost honour. Again, shame, humiliation, the perception of being in a situation from which one cannot escape, are psychological elements common between the ancient and contemporary worlds.

In Rome, the perception of suicide was even more stratified. Roman society, starting with its traditions and its strong sense of honour, offered a complex perspective on suicide, influenced by legal, ethical and philosophical elements. Under certain circumstances and, we might say, differences between social classes, suicide was considered an act of honour and dignity. This perception was particularly evident among the aristocracy and senatorial class, where suicide could be chosen as a means to avoid the shame of public condemnation, loss of social status or confiscation of property by the state (for more on this, see Griffin, 1986). A number of suicides that have come down to us recount the Roman approach to this issue. These include Cato the Younger who, known for his unyielding stoicism and his commitment to the Roman Republic, after the defeat of Pompey at Pharsalus in 48 BC and the inexorable rise of Julius Caesar as dictator, chose to commit suicide in Utica (in present-day Tunisia) in 46 BC in order not to live under a regime he perceived as tyrannical. His death has been interpreted as a symbol of resistance and moral integrity, a final act of defiance against the loss of republican freedom (see Plutarch, 'Life of Cato the Younger'). Mark Antony, an important Roman general and politician, is another example of how suicide was linked to political issues. After the defeat at the Battle of Actium in 31 BC and the subsequent conquest of Alexandria by Octavian (the future Augustus), Mark Antony chose to take his own life in 30 BC. His decision was motivated by the loss of power and the impossibility of maintaining his position and dignity in a world that had changed radically (see Suetonius, 'Lives of the Caesars'). A further example that deserves attention is that of Lucretia. According to tradition, Lucretia committed suicide after being raped by Sextus Tarquinius, son of the king of Rome Lucius Tarquinius the Proud. Her death became the trigger for the revolt against the Tarquins and the end of the Roman monarchy, leading to the establishment of the Roman Republic. The story of Lucretia,

told by historians such as Titus Livius, shows how her suicide could be interpreted as an act of extreme virtue and honour, capable of inspiring significant political change (see Titus Livius, 'Ab Urbe Condita').

Although there were no specific laws regulating suicide in ancient Rome, Roman law did contain provisions concerning the consequences of suicide, especially in relation to the distribution of inheritance and confiscation of property. Voluntary death made it possible to preserve the honour of the family and to avoid the confiscation of property, thus allowing the inheritance to be left to one's descendants. Moreover, the authorities could consider suicide as an acceptable option for those accused of serious crimes, offering them a way out that avoided public humiliation and confiscation of property (Cantarella, 1991).

The Middle Ages marked a drastic change in the perception of suicide. With the rise of Christianity -and similarly in Islam and Judaism- suicide became a grave sin against the divine will. This religious understanding of suicide had profound social and legal implications, leading to punitive practices towards people who committed suicide and their families. This religious and legal stigmatisation of suicide reflected and reinforced the view of suicide as a morally and socially unacceptable act (Murray, 1998).

The medieval European context, characterised by the predominance of the Catholic Church, saw suicide become the object of strong moral and religious condemnation, with repercussions ranging from dishonour to *damnatio memoriae*, the condemnation of the suicide's memory. The medieval Catholic Church interpreted suicide as a grave sin, an act of despair that denied God's sovereignty over life and death. Augustine of Hippo (354-430 A.D.), in his work 'De civitate Dei' (The City of God), was among the first to formulate an explicit condemnation of suicide, profoundly influencing later Christian thought. Augustine argued that suicide violated the Sixth Commandment, 'Thou shalt not kill', applying it also to self-harm and the voluntary destruction of one's own life, and that no circumstances justified suicide, not even to avoid major sins such as sexual violence, since such an act implied a lack of faith in God's redemptive and protective abilities (Augustine, 'De civitate Dei', Book I, Chapter 20). Augustine's position was further developed and integrated into ecclesiastical thought and practice. Through the growing elaboration of canon law and the succession of Lateran Councils, the Church codified the practice of denying Christian funeral rites to suicides, coming to reflect the seriousness with which this act was interpreted. This exclusion from funeral rites served not only as a posthumous punishment but also as a warning to the community about the seriousness of the sin of suicide. The Church's negative view was reflected in medieval laws and social practices. Suicides were often buried in unconsecrated ground, outside Christian cemeteries, and

could be subject to posthumous humiliation, such as hanging the body or burying it at a crossroads with a stake driven through the heart. These practices reflected a desire to emphasise the seriousness of sin and act as a deterrent for other potential suicides (Murray, 1998). Despite general condemnation, there were significant variations in the perception and treatment of suicide depending on region, time and circumstance. In some cases, the motivations behind suicide could influence the community's response. For example, suicide to avoid shame for a crime or for mental illness could sometimes elicit sympathy rather than condemnation (Dinzelbacher, 1996).

Medieval literature reflects the complexity of views on suicide. Dante Alighieri's 'Divine Comedy' places suicides in the thicket of Hell, turning them into trees tortured by harpies, an image that emphasises self-inflicted violence and loss of humanity. However, the same work recognises the complexity of human motivations and the possibility of redemption, although suicide remains a sin (Dante, 'Inferno', Canto XIII).

During the Renaissance, between the 14th and 17th centuries, a renewed interest in humanism and the rights and dignity of the individual began, albeit timidly, to challenge medieval orthodoxy. Despite the fact that the period exhibited a profound cultural, artistic, political and scientific transformation in Europe, it failed to offer truly innovative perspectives on suicide, which oscillated between moral condemnation and increasing reflection on human pain and despair.

Renaissance humanists, while rediscovering and enhancing classical Greek and Latin texts, approached the subject of suicide with an attitude that often reflected the tension between admiration for antiquity and prevailing Christian values. Philosophers such as Marsilio Ficino and Pico della Mirandola explored the dignity and worth of the individual, but without deviating significantly from the Christian condemnation of suicide. However, the emphasis on humanity and human potential introduced a more nuanced dialogue on suffering and the search for meaning (Kristeller, 1945).

At a legal level, the Renaissance saw the continuation of medieval practices of posthumous penalisation of suicides, with penalties that could include confiscation of property and infamous burials. However, in some areas of Europe, there began to be signs of a more measured attitude, often influenced by the circumstances of the suicide, such as mental illness or extreme despair. This change reflected a very slow but progressive recognition of the psychological complexities behind the act of suicide (Murray, 2000).

The intellectual and cultural movement that brought about a renewal in the way reason, the individual and society are viewed is the Enlightenment, from the 18th century. This period, characterised by the promotion of science, criticism of tradition and rational enquiry, also influenced the perception of suicide, shifting the focus from the predominantly moral and religious element to one more related to individual rights and an understanding of human nature. During the Enlightenment, philosophers and thinkers began to question suicide no longer just in terms of a sin or crime, but as a matter related to the individual's sovereignty over his or her own life. The view of suicide became part of a broader debate on personal freedom, suffering and the right to end one's life in circumstances of extreme distress or incurable illness.

David Hume, an 18th century Scottish philosopher, is considered a central figure of the Enlightenment and one of the first to openly and rationally discuss the topic of suicide in ethical and philosophical terms. His essay 'Of Suicide' remains one of the most influential and provocative contributions on the subject, reflecting Hume's characteristic approach based on reason and empirical enquiry. Published posthumously in 1777, in it Hume expounded against the traditional condemnation of suicide, arguing that, if life becomes an unbearable burden, ending one's existence might not only be rational but also guiltless towards God and society. In particular, Hume challenged traditional and religious conceptions of suicide, arguing against the notion that it is universally immoral or against natural law. He argued that God has given human beings the faculty of reason, which can be used to evaluate one's condition in life. If life becomes an unbearable burden, full of suffering with no hope of improvement, Hume asserts that the individual has the right to end his own existence (Hume, 1777). The philosopher challenged the idea that suicide could be an affront to God, arguing that if God created human beings with the capacity to reason about their condition and act to end their suffering, then the use of that faculty cannot be inherently wrong. He compared the act of suicide to decisions such as changing one's residence or country to improve one's living conditions, emphasising that if these actions are not considered an affront to divine providence, neither should suicide be. Hume also addressed the extent to which suicide harms society, arguing that any social harm resulting from an individual's suicide is minimal compared to the personal suffering the individual seeks to escape. Furthermore, he argued that society has no right to require an individual to endure unbearable suffering for the collective good when this well-being is not significantly compromised by the loss of an individual member. Compared to the past, Hume's analysis opened up new perspectives on individual freedom, the right to an end to suffering, and the role of reason in navigating the deeper ethical questions of human life.

Durkheim, Freud and Beck

Émile Durkheim, a French sociologist of the late 19th and early 20th century, is considered the scholar who revolutionised the study of suicide through his sociological approach, breaking away from the predominantly moral, psychological or philosophical interpretations of the time. In his seminal work, 'Suicide' (1897), Durkheim explored the phenomenon of suicide not as an isolated act of individual despair, but as a social phenomenon that can be analysed statistically and understood within the context of society (Durkheim, 1897). Using an empirical approach and relying on statistical data, Durkheim highlighted how external factors and social structure influence the propensity to commit suicide, challenging the idea that it is primarily the result of individual internal factors.

Durkheim identified four (at first three) types of suicide based on the individual's ties to society and the regulatory and integrative forces acting on it: social integration (the degree to which individuals feel part of a community) and social regulation (the degree to which society's expectations guide individual behaviour). The four types of suicide, according to Durkheim, are:

- **Selfish Suicide:** this type of suicide occurs when social integration is weak. People feel isolated, lonely and insufficiently integrated into society or its institutions (such as family, religion or work). Without a strong social bond, the individual may feel without purpose or belonging, leading to a sense of hopelessness that may culminate in suicide.
- **Altruistic Suicide:** this type occurs in contexts of high social integration, where the individual is so strongly integrated into the group that he is willing to sacrifice himself for the common good. In this case, individual identity and needs are overwhelmed by group membership. Examples include the suicide of soldiers in battle to save their comrades or ritual suicide in some cultures.
- **Anomalous Suicide:** this type occurs in situations of low social regulation, where societal norms and values are confused, weak or rapidly changing, leaving the individual without clear guidance on how to behave. It can occur after major social or personal changes (such as an economic crisis or the death of a loved one), where the individual feels disoriented and without a sense of stability or order.

- **Fatalistic Suicide:** this type, less discussed in Durkheim's writings, occurs in conditions of excessive social regulation, where the expectations and pressures placed on the individual are so oppressive that personal freedom is extremely limited. This can occur in extremely oppressive societies or in situations where the individual's fate is perceived as unbearably painful and hopeless.

Durkheim's theory has significantly influenced both sociological and psychological research. This work shifted the focus from the study of individual causes, such as mental illness, to social and environmental influences. This paradigm shift paved the way for a more complex analysis of the causes of suicide, considering both personal and social factors (Besnard, 1988).

The history of the psychology of suicide initially developed through the contribution of psychoanalysis by Sigmund Freud, the father of psychoanalysis, whose work paved the way for understanding suicide in psychological terms and - in contrast to Durkheim's approach which, as we have seen, integrated individual aspects with social aspects - inwardly. Freud, through his exploration of the depths of the unconscious, internal conflicts and defence mechanisms, saw suicide primarily as an act directed against an introjected object, often resulting from feelings of anger and hatred turned inward.

Although Freud did not devote a work entirely to suicide, he treated the topic in several contexts within his vast production, often linking it to the notion of the death drive ('Thanatos') introduced in works such as *Beyond the Pleasure Principle* (1920).

In 'Mourning and Melancholia' (1917), Freud elaborated on the distinction between normal mourning and melancholia (which today we might compare to clinical depression), indicating how in the latter there is a loss of self-esteem and intense self-criticism. Freud suggests that, in melancholia, anger and hostility towards others are internalised, turning into hostility against oneself, which can culminate in suicide (Freud, 1917). Specifically, Freud observed that while mourning is characterised by the deep pain caused by loss, melancholia goes further, manifesting itself in a loss of self-esteem and a feeling of extreme worthlessness and self-reproach. Mourning, although painful, is described as a process through which the individual eventually accepts the loss and is able to regain an interest in life. Melancholia, on the other hand, is characterised by a pathological attachment to the lost object, in which the individual not only grieves over the loss but also identifies with the lost object and blames himself for its absence. One of the key aspects of the essay is the idea that in melancholia, the individual 'internalises' the lost object, incorporating it into his or her self. This process leads to a fusion of anger and hostility towards the lost object and self-

accusation, where the individual criticises himself as harshly as he would have criticised the lost object. This dynamic can result in a destructive attack against the self, which Freud links to the risk of suicide in melancholic individuals. Freud suggests that suicide in the context of melancholia can be seen as the final act of an internal conflict, in which aggression and hostility originally directed towards others (or the lost object) is turned against the self. The severity of self-criticism in melancholia may lead the individual to consider suicide as the only way out of unbearable pain and overwhelming guilt.

Subsequently, the field of clinical psychology began to develop more specific, cognitivist models for understanding and treating suicidal behaviour. One of the most significant contributions was that of Aaron Beck, one of the fathers of cognitive therapy, known for his work on depression and mood disorders.

Beck, focusing on how an individual's thoughts, beliefs and perceptions influence their behaviour and emotions, identified negative thought patterns, such as a distorted view of self, the world and the future, as key factors in suicidal behaviour.

In his work, Beck sought to identify distorted or dysfunctional thoughts as key factors in the genesis of suicide. According to his theory, people contemplating suicide tend to interpret their experiences through a negative lens, characterised by cognitive distortions such as catastrophisation, overgeneralisation and personalisation, which we can explain in brief:

- catastrophising is the tendency to predict the worst possible outcome of a situation, even when there is little evidence to support such a conclusion. Individuals who catastrophise often expect disasters in response to any minor problem, increasing their state of anxiety and depression. This type of thinking can lead to the belief that suicide is the only way out of situations perceived as unbearable, even when more rational and less extreme alternatives exist.
- overgeneralisation, on the other hand, occurs when an individual extracts a general rule or definition from a single event or a small number of events. This pattern of thinking leads to seeing patterns of failure or negativity based on an isolated experience and applying them inappropriately to other areas of life. For example, a single rejection or failure may lead the individual to conclude that they are totally incapable or undesirable, ignoring positive experiences or facets of their success.

- Personalisation implies blaming oneself for external events or the well-being of others, without a logical basis to justify such a conclusion. Individuals who engage in personalisation may feel guilty for situations beyond their control, or interpret neutral events as direct reflections of their own value or actions. This can lead to a distorted view of self as a source of problems or unhappiness for others, fuelling feelings of worthlessness and despair.

These thought patterns lead to a distorted view of reality, where problems seem insurmountable and the only solution appears to be suicide (Beck, 1967).

In a well-known later work, 'Cognitive Theory of Depression' (1979), Beck provided a basis for understanding how these cognitive distortions can lead to feelings of hopelessness and suicidal thoughts (Beck, A.T, 1979). In it, the author formulated the concept of the 'cognitive triad', which describes three types of negative thoughts that depressed people tend to experience: negative views of self, the world and the future. These distorted thought patterns contribute significantly to the genesis and maintenance of depression and can increase the risk of suicide, and we can summarise them as follows:

- Negative self-view: the individual perceives him/herself as inadequate, inferior or a failure. This negative self-assessment is often based on overgeneralisations and distorted interpretations of one's own experiences, abilities and value. The negative self-view can lead to feelings of hopelessness, low self-esteem and self-hatred.
- Negative worldview: the individual sees the outside world as a hostile, unfair or opportunity-free place. This perception may stem from difficult life experiences, but it is accentuated and distorted by negative cognitive filters. Events are interpreted pessimistically, and obstacles are assumed to be insurmountable, leading to a sense of helplessness.
- negative view of the future: the individual expects that things will get worse or that there is no hope for improvement. This gloomy future outlook prevents one from seeing solutions or possible paths to well-being, fuelling the belief that pain or suffering is interminable. The perception of a hopeless future can significantly increase the risk of suicidal behaviour, as the individual may feel trapped in his or her own suffering.

Edwin Shneidman and the foundation of suicidology

Despite the extensive innovations made by the previously mentioned authors, suicidology, as a distinct discipline, emerged primarily through the work of Edwin Shneidman in the 1950s and 1960s. Shneidman, considered the father of modern suicidology, introduced a holistic approach to the study of suicide, emphasising the complexity and multidimensionality of the phenomenon. Born in 1918, Shneidman began his academic career in the field of psychology but soon focused his attention on the phenomenon of suicide, a subject that was little explored and understood at the time. His interest in suicide began while working in the pathology services of the Los Angeles County General Hospital, where he examined numerous cases of self-inflicted death. This experience led him to found the first crisis centre for suicide prevention in the United States, to develop the field of suicidology, and to the founding of the American Association of Suicidology in 1968, establishing the basis for the modern approach to suicide prevention (Shneidman E.S., 1996).

Shneidman introduced a number of revolutionary concepts into the field of suicidology. His central idea was that suicide is not so much a desire to die as it is a desire to end unbearable pain, which he called "mental pain." According to Shneidman, who defined suicide as the result of intense and unbearable psychological suffering, this mental pain is the result of frustrated needs, such as the need for love, belonging, autonomy or personal fulfilment. Shneidman wrote: "Suicide occurs when the pain exceeds the resources the individual has to cope with it" and believed that understanding suicide requires a deep exploration of the individual's emotions, thoughts and subjective experiences.

One of his most influential theories takes the name 'psychache,' a term he coined to describe the suffering mind. A person's psychache is the place where pain, frustration and despair meet. Shneidman argued that the key to preventing suicide lies in empathic listening, understanding a person's inner pain, and providing support to mitigate this pain (Shneidman E.S., 1985).

Shneidman pioneered the application of qualitative research methods in the study of suicide. One of his best-known techniques was the analysis of 'suicide notes,' the farewell messages left by people who died by suicide. Through the examination of these messages, Shneidman sought to understand the motives and feelings of suicidal people, offering a personal insight into their mental and emotional state.

In the therapeutic field, Shneidman emphasised the importance of empathic listening and human connection. He firmly believed that understanding and accepting an individual's pain could provide

the support needed to overcome moments of crisis. His approach focused on creating a therapeutic relationship based on trust and understanding, aiming to reduce psychic pain and provide alternatives to suicide.

Throughout his career, Edwin Shneidman has examined countless cases of suicide, providing in-depth analyses that have sought to shed light on the complex dynamics behind this act. As anticipated, his studies often included the detailed examination of 'suicide notes', letters or messages left by individuals who decided to end their lives. These analyses were not limited to a superficial reading of the contents, but delved into the psychological depths of the individual, trying to understand the emotional and cognitive fabric that led to the final decision.

One of the most significant cases examined by Shneidman concerned a young man whose suicide note revealed a deep sense of isolation and despair. Through meticulous analysis of the language and themes expressed in the note, Shneidman was able to delineate the individual's specific frustrations and disappointments, which were rooted in unmet needs and an inability to see alternative solutions to his suffering. This case highlighted the importance of understanding suicide not just as an isolated act, but as the culmination of a complex interweaving of psychological, social and personal factors.

In another study, Shneidman explored the case of an elderly woman who committed suicide after a long struggle with a debilitating illness. Her suicide note offered interesting details about her psychic pain, revealing a deep sense of loss of dignity and autonomy, and the perception of being a burden to loved ones. Shneidman's analysis highlighted how suicide can sometimes be seen as an attempt to regain control in situations perceived as unbearably painful and hopeless.

Shneidman also examined cases in which the social context and interpersonal relationships had played a central role in the process leading to suicide. One example involved an adolescent whose suicide appeared to have been influenced by a combination of school pressures, family problems and complex social dynamics. By analysing the adolescent's interactions with his peers and his self-perception, Shneidman highlighted how youth suicide can often be the result of a perfect storm of external and internal factors, emphasising the importance of attentive and proactive social and psychological support.

Shneidman's theories on suicide provided a different perspective to sociological theories, such as those of Émile Durkheim. While Durkheim focused on the social and collective factors that influence suicide, Shneidman emphasised an understanding of subjective pain and individual

motivations. Despite apparent differences, Durkheim and Shneidman's perspectives are not necessarily at odds, but can be seen as complementary. Durkheim highlighted how social and collective factors can influence the suicide rate in a society, while Shneidman emphasised the importance of understanding individual experiences and subjective pain. The social factors identified by Durkheim can be interpreted as external influences that can intensify or mitigate the psychic pain Shneidman speaks of. For example, low social integration (selfish suicide according to Durkheim) may contribute to a sense of isolation and despair, intensifying individual psychic pain.

Important further contributions to the field of suicidology were made by scholars and collaborators of Shneidman, such as Norman Farberow and Robert Litman. Their work emphasised the importance of targeted interventions, emotional support and an understanding of crisis dynamics in suicidal individuals (Farberow N.L. & Litman R.E., 1980).

Farberow and Litman, together with Shneidman, founded the Los Angeles Suicide Prevention Center (LASPC) in 1958, the first of its kind in the United States, marking the beginning of a systematic approach to suicide prevention and assistance for people in crisis. The work of these authors is noteworthy on several elements, but it is important here to note how much they focused on demystifying suicide and the importance of addressing it openly, counteracting the stigma and lack of understanding that often surround this topic. Further elements the authors focused on concerned the identification of suicide risk factors, including depression, hopelessness and other mental health problems, but also the role of life stressors, such as relationship or financial crises, in enhancing suicide risk.

Our country, which, despite some noteworthy efforts and results, to date has no effective national plan to reduce the number of suicides, is the birthplace of two of today's leading experts in the field of suicidology: Diego De Leo and Maurizio Pompili.

Diego De Leo has the distinction of founding the Australian Institute for Suicide Research and Prevention (AISRAP), and has extended his work well beyond Italian borders, influencing suicide prevention policy and practice globally. His research has focused on assessing the epidemiological aspects of suicide, including risk factors specific to different demographic and cultural cohorts. A key aspect of his work concerns the development of culturally adapted prevention strategies, emphasising the importance of cultural sensitivity in suicide intervention practices. De Leo has held leadership roles in IASP, promoting international collaboration in suicide research and helping to establish World Suicide Prevention Day as a global awareness-raising moment.

Pompili's career has been distinguished by his approach to suicide prevention, which spans research, education and clinical intervention. As a professor at the University of Rome 'La Sapienza' and director of the Suicide Prevention Centre at the Policlinico Sant'Andrea, he led numerous studies focusing on mood disorders and suicidal behaviour, helping to identify new risk factors and underlying mechanisms. Pompili has particularly emphasised the importance of early intervention and training of healthcare professionals, developing programmes that improve the ability to recognise and manage suicide risk. He also worked to improve the support networks available for people at risk, promoting the use of suicide prevention hotlines and counselling services.

Both De Leo and Pompili introduced significant innovations in the field of suicidology. De Leo, through his work with IASP and his research, helped shape the global suicide prevention agenda, emphasising the importance of an integrated approach that considers cultural and social particularities. Pompili advanced the understanding of the links between psychiatric disorders and suicide, pushing for the adoption of evidence-based screening and intervention practices in clinical practice. Through their pioneering efforts and their commitment to research and clinical practice, Diego De Leo and Maurizio Pompili have left an indelible mark on the field of suicide prevention, continuing to influence health policies, practitioner training and intervention strategies, and contributing to saving lives in Italy and around the world.

Today, suicidology is going through an important period of development, involving the highest clinical, cultural, scientific and institutional levels. Governments of the most advanced countries have helped to promote national suicide prevention programmes and strategies, and the attention of supranational institutions is constantly increasing.

As we have seen, since the 1950s, suicidology has seen significant expansion, with research ranging from the study of risk and protective factors, to the analysis of family, social and cultural dynamics, to prevention and intervention strategies. In addition to the above, this expansion has included the exploration of biological factors, such as genetics and neurobiology, as well as psychological and environmental factors (Joiner, T.E., 2005).

Over the past decades, suicide research has been enriched by multidisciplinary approaches, integrating biological, psychological, social and cultural perspectives. The holistic nature of this approach has been essential for understanding the complex interactions of factors that contribute to suicidal behaviour. Neuroscientific studies, for example, have explored the role of neurotransmitters and brain circuits, while psychological research has continued to investigate risk factors such as depression, hopelessness and history of trauma (Mann, J.J., 2003).

THEORIES OF SUICIDE

In the context of the academic investigation concerning the psychology of suicidal behaviour, there has always been a need to find a comprehensive and universally accepted definition of suicidal behaviour. This need stems from the desire to ensure clear and unambiguous communication within the scientific community, facilitating a direct and productive comparison of the results of different research (Silverman et al., 2007a; 2007b). Terminological precision is thus indispensable in order to clearly delineate the field of investigation, allowing scholars to delve into the complexities and nuances that characterise the suicide phenomenon.

The recent revision of the nomenclature, proposed by Silverman et al. (2007b), emphasises the critical distinction between suicidal ideation, communication and behaviour, introducing a classification that emphasises the intentional nature of such behaviour. This approach makes it possible to effectively distinguish between self-harm, which lacks an explicit suicidal intent, and suicidal behaviour, which implies a certain degree of intentionality in ending one's own life. This distinction proves to be crucial, not only for diagnostic purposes but also for the design of targeted therapeutic interventions and for the conduct of epidemiological and clinical studies (Silverman et al., 2007a; 2007b).

In this conceptual framework, 'suicide attempt' is defined as an intentional, potentially harmful behaviour with an intention to die that does not, however, end in death. In contrast, 'suicide' represents the tragic culmination of a suicide attempt, resulting in the death of the individual. These definitions lay the foundations for a sharper and more structured understanding of suicidal behaviour, delineating the boundaries within which psychological and clinical research moves (Silverman et al., 2007b).

The concept of 'serious suicidal behaviour' is introduced to categorise lethal and near-lethal suicide attempts, thus emphasising the seriousness and urgency of such actions. This category emphasises the need for priority clinical attention and early and appropriately calibrated intervention strategies (Silverman et al., 2007a).

Although such definitions give impetus to a better articulated formal clarity, the editor believes that it is better to use new terminologies that do not reveal any potential belittling action regarding 'non-serious' suicidal acts. Based on these reflections, terms such as 'purposeful suicidal behaviour' and 'not necessarily purposeful suicidal behaviour' are proposed.

The refinement of definitions and the standardisation of terminology used to describe suicidal behaviour represent essential steps towards the advancement of research and clinical practice in the field. These efforts aim to overcome terminological ambiguities and promote constructive dialogue within the academic community, thereby increasing the effectiveness of interventions for the prevention and treatment of suicidal behaviour.

Conceptual and terminological clarity thus assumes a crucial role in demarcating the territory of investigation, enabling scholars to address with precision and depth the psychosocial dynamics underlying suicidal behaviour. This commitment to accurately define terms and delineate the boundaries of the phenomenon under investigation is essential in order to build a solid and coherent body of knowledge, capable of effectively guiding both theoretical research and clinical application in the delicate field of suicidal behaviour.

Risk factors

Risk factors for suicidal behaviour are variables associated with an increased likelihood that a certain outcome, in this case suicide or attempts at it, will occur. The scientific literature determines the main risk factors and distinguishes between long-term and short-term risk factors; their identification is based on longitudinal and cross-sectional studies that have attempted to delineate correlations and, when possible, causal relationships with suicidal behaviour (Moscicki, E.K., 2001; Nock, M.K., et al., 2008; Hawton K. & van Heeringen K., 2009).

The main risk factors are:

- **Mental disorders:** A wide range of research shows that the presence of mental disorders is one of the most significant risk factors for suicide. Approximately 95 per cent of people who die by suicide suffer from at least one mental disorder at the time of death, such as major depression, bipolar disorder, borderline personality disorder, schizophrenia, eating disorders and substance use disorders (Cavanagh et al., 2003; Ernst et al., 2004).
- **Previous Suicide Attempts:** The history of previous suicide attempts is one of the strongest and most consistent predictors of future suicidal behaviour. Individuals who have already attempted suicide have a significantly higher risk of subsequent suicide attempts or death by suicide (Haw et al., 2007; Kotila & Lönnqvist, 1987).

- **Social isolation:** Social isolation is recognised as a powerful and reliable predictor of suicidal ideation, attempts and lethal behaviour. Lack of meaningful social relationships, loneliness and absence of social support are all factors that may contribute to increased suicide risk (Conwell, 1997; Dervic et al., 2008).
- **Physical Diseases:** Certain medical conditions are associated with a high risk of suicide, particularly those involving chronic pain, disability or terminal illness. Among these, cancer, HIV/AIDS and neurodegenerative diseases show a significant association with suicide risk (Conwell, 1994; Harris & Barraclough, 1997).
- **Stressful Life Events:** Acutely stressful life events, such as the loss of a job, the end of a significant relationship or traumatic experiences, may act as catalysts for suicidal behaviour, especially in the presence of other risk factors (American Association of Suicidology, 2009).

As anticipated, understanding suicidal behaviour requires an in-depth analysis of risk factors, which can be classified according to their temporal incidence: some exert their influence in the short term, while others act over a longer time span. This distinction is crucial for the development of targeted preventive and therapeutic interventions.

Short-term risk factors are often related to immediate crises or recent stressful events that may precipitate a suicide attempt. These include:

- **Recent stressful life events:** these may include job loss, break-up of significant relationships, bereavement, marginalisation, discrimination, or any other form of personal or professional loss.
- **Acute medical diagnosis:** receiving news of a serious or terminal medical diagnosis may trigger a suicidal crisis, especially if the condition is associated with pain, disability or deterioration of quality of life.
- **Intense interpersonal conflicts:** serious quarrels with partners, family members, friends or colleagues, especially if they lead to social isolation or loss of support.
- **Exposure to suicidal behaviour:** being exposed to the suicide of a known person, especially in close environments such as family, school or workplace, may increase the risk of suicidal behaviour.

- **Acute substance abuse:** sudden or increased use of alcohol or drugs can increase impulsivity and reduce inhibitions, raising the risk of self-harm or suicidal behaviour.
- **Psychiatric crises:** the sudden worsening of an existing psychiatric condition, such as a major depressive episode, acute panic attacks or exacerbations of psychotic disorders, may lead to an increased suicide risk.
- **Anniversaries of traumatic events:** anniversaries of death, loss or other traumatic events may evoke grief and despair, potentially precipitating suicidal thoughts.
- **Immediate legal or financial problems:** facing serious legal problems or sudden financial crises can generate despair and feelings of entrapment, increasing the risk of suicide.
- **Recent social isolation or rejection:** experiences of bullying, cyberbullying, revenge porn or other phenomena of a discriminatory nature or any form of recent social exclusion or rejection can intensify feelings of loneliness and despair.
- **Access to lethal means:** recent purchase of or sudden access to lethal means, such as firearms or large quantities of drugs, may increase the risk of suicidal thoughts resulting in action.

Long-term risk factors, on the other hand, include conditions or experiences that increase lifetime vulnerability to suicide. These include:

- **Psychiatric disorders:** already discussed above.
- **Family history:** the presence of suicidal behaviour in the family history may indicate, according to some scholars, a greater genetic or environmental predisposition to suicide.
- **Trauma and abuse in childhood:** early traumatic experiences, such as physical, sexual or emotional abuse, can significantly increase the risk of suicide in adulthood.
- **Chronic illness and pain:** serious medical conditions, especially when associated with chronic pain or significant impairment of quality of life, may increase suicide risk in the long term.
- **Prolonged social isolation and loneliness:** lack of stable social support networks and social isolation are significant risk factors for suicide, indicating the importance of interpersonal connections for mental health.

- **Long-term stressful life experiences:** prolonged or chronic stressful life situations, such as persistent poverty, long-term unemployment, or discrimination, may contribute to the risk of developing suicidal behaviour.
- **Impulsivity and aggressiveness as personality traits:** these traits may predispose individuals to risky behaviour, including suicidal behaviour, especially when combined with other stressors or psychiatric disorders.
- **Exposure to violence, conflict or war:** exposure to extreme situations, such as domestic violence, armed conflicts or war experiences, can have a lasting impact on suicide risk, reflecting the effect of intense traumatic experiences.
- **Long-term alcohol and substance abuse:** Prolonged alcohol and substance abuse may not only worsen or contribute to the development of psychiatric disorders but also directly increase the risk of suicidal behaviour.

Theoretical perspectives

Theoretical perspectives on suicide represent the different conceptual models through which scholars attempt to understand the causes, processes and factors that contribute to suicidal behaviour. These theories provide a framework for interpreting the complexity of suicide, offering explanations that go beyond the mere enumeration of risk factors to explore the underlying dynamics that lead an individual to consider or perform a suicidal act.

Elements of a biological nature

Biological theories of suicidal behaviour explore the biological and genetic bases that may predispose an individual to suicide risk. These theories suggest that there are specific biological mechanisms and genetic factors that, together with environmental and psychosocial influences, may increase vulnerability to suicide. While biological theories emphasise the importance of biological factors in understanding suicidal behaviour, it is crucial to recognise that suicide is the result of the interaction of biological, environmental, psychological and social factors. Research in this area continues to evolve, offering hope for the development of more targeted preventive and therapeutic strategies based on specific biological mechanisms.

Below, the main research areas and key concepts of biological theories of suicide are mentioned.

Genetic and hereditary factors

Research has indicated that suicide may have a hereditary component. Family, twin and adoptive studies have shown that biological relatives of individuals who have committed suicide have an increased risk of suicidal behaviour, suggesting the existence of a genetic predisposition to suicide. However, identifying specific genes associated with suicide has proven complex, given the multifactorial nature of suicidal behaviour (Brent and Mann, 2005).

Neurochemical dysregulation

A significant area of research into the biological basis of suicide focuses on the dysregulation of neurochemical systems, in particular the serotonergic system. Serotonin is a neurotransmitter that plays a key role in the regulation of mood, impulsivity and aggressive behaviour. Post-mortem studies on individuals who have committed suicide have shown abnormalities in serotonin levels and serotonergic receptors in the brain. These findings support the hypothesis that serotonergic dysregulation may contribute to suicide risk (Mann, 2003).

Stress response and the endocrine system

The role of the endocrine system, in particular the hypothalamic-pituitary-adrenal (HPA) axis, has been examined in relation to suicidal behaviour. The HPA axis regulates the body's stress response and studies have found that individuals with a history of suicide attempts may have a dysregulation of the HPA axis, resulting in an altered stress response. Abnormalities in the function of the HPA axis could therefore increase vulnerability to stress and negatively influence the ability to cope with difficult situations, raising the risk of suicidal behaviour (Pariante & Lightman, 2008).

Inflammation and the immune system

Recent research has begun to explore the link between inflammation, the immune system and suicide risk. Elevated levels of inflammatory markers have been found in some individuals at risk of suicide, suggesting that inflammatory processes might play a role in modulating suicidal behaviour (Brundin et al., 2017).

Neuroanatomical and neurophysiological factors

Neuroimaging studies in individuals with suicidal behaviour have identified structural and functional alterations in specific brain areas associated with mood regulation and impulsive

decision-making, such as the prefrontal cortex and amygdala. These findings suggest that certain neuroanatomical and neurophysiological abnormalities may contribute to vulnerability to suicide (Jollant et al., 2008).

Elements of a psychodynamic nature

Psychodynamic theories of suicide are based on the principles of psychoanalysis and the psychodynamic approach, emphasising the importance of unconscious processes, internal conflicts and early relational experiences in understanding suicidal behaviour. These theories focus on the motivations underlying suicidal behaviour and the psychological meanings that can lead an individual towards suicide (Freud, S. 1917, Maltzberger, J. T., & Goldblatt, M. J., 1996, Shneidman, E. S., 1996, Paris, J., 2002).

Internal conflicts and inward aggression

One of the central concepts of psychodynamic theories is the idea that suicide represents an act of aggression turned inward. Originally proposed by Sigmund Freud, this view suggests that aggressive energy, when not expressed externally or blocked by internal or external factors, can be turned against oneself. Suicide, in this framework, is seen as a final act of self-destruction in which the individual 'kills' a part of himself, often in response to unresolved internal conflict or feelings of anger and hatred towards himself or significant others.

Feelings of loss and identification with the lost object

Psychodynamic theories also emphasise the role of feelings of loss and the grieving process in suicidal behaviour. According to this perspective, suicide can be interpreted as an extreme response to a significant loss, such as the death of a loved one, the end of an important relationship or the loss of identity or social role. The suicidal individual may attempt to 'reunite' with the lost object through the act of suicide, in an unconscious process of identification with the lost object.

Vulnerability and psychological defences

Psychodynamic theories of suicide also explore the individual's personality structure and the psychological defences used to manage emotional stress and internal conflicts. Individuals with specific personality configurations or fragile psychological defences may be more vulnerable to

suicide in response to stress or trauma. For example, people with a strong sense of shame, guilt or self-criticism may be particularly at risk.

Early relational experiences

Finally, psychodynamic theories attach great importance to early relational experiences and their impact on personality development and the ability to manage conflicts and emotions. Insecure, traumatic or conflictual childhood relationships can lead to dysfunctional internal relationship patterns, influencing the perception of self and others and increasing vulnerability to suicidal behaviour.

In summary, psychodynamic theories offer a multifaceted understanding of suicide, emphasising internal processes, psychic conflicts and the influence of past relationships and experiences. This approach emphasises the need for an in-depth examination of individual psychological dynamics in the treatment and prevention of suicide.

Cognitive-behavioural elements

Cognitive-behavioural theories (CBT) of suicide focus on how distorted thought patterns, dysfunctional beliefs and learned behaviours influence an individual's vulnerability to suicidal behaviour. These theories emphasise the importance of the relationship between thoughts, emotions and behaviour, proposing that by changing negative thought patterns and maladaptive behaviour, one can reduce the risk of suicide. In the following, this theoretical perspective is explored in more detail, highlighting the main concepts and approaches.

Hopelessness Theory

Aaron Beck is one of the leading exponents of the cognitive theory of suicide, placing particular emphasis on the role of despair. According to Beck, hopelessness is a key predictor of suicidal behaviour and derives from pessimistic thought patterns about the future. People who commit suicide often believe that their condition is hopeless and that suicide is the only way out of their pain (Beck et al., 1985; Beck et al., 1990 O'Connor and Nock, 2014, King, 2002).

The key concepts of this theory are:

- **Despair as Mediator:** Beck identifies despair as the critical mediator between depression and suicide. Despair is characterised by pervasive negative expectations about the future, where the individual believes that one's circumstances, pain or suffering will never change or improve.
- **Negative Cognitive Schemes:** Desperate individuals often exhibit negative cognitive schemas that influence their interpretation of events, leading them to view the future through a lens of pessimism and fatalism. These schemas may be rooted in past life experiences and are activated by current circumstances perceived as stressful or overwhelming.
- **Negative Cognitive Triad:** Despair is closely linked to Beck's negative cognitive triad, which includes a negative view of self, the world and the future. These negative beliefs reinforce each other and contribute to the feeling of hopelessness.
- **Prediction of Suicidal Behaviour:** Beck argues that hopelessness is a stronger predictor of suicidal behaviour than depression alone. Individuals who exhibit high levels of hopelessness are at significantly higher risk for suicidal thoughts and behaviour.

Deficient problem-solving theory

Problem-solving theory describes a framework for understanding suicidal behaviour, emphasising how difficulties in problem-solving may contribute to vulnerability to suicide (Pollock and Williams, 2004; Reinecke et al., 2001; Sadowski & Kelley, 1993). This perspective suggests that individuals who approach suicide often perceive their problems as insurmountable and feel unable to find effective solutions, leading them to consider suicide as the only way out.

Key components of problem-solving theory:

- **Problem-solving deficits:** at the core of this theory is the belief that individuals at risk of suicide often display significant deficits in problem solving, including difficulty in generating alternative solutions, assessing the possible consequences of their actions and implementing practical solutions.
- **Rigid Cognitive Style:** Suicide tempters tend to adopt a rigid cognitive style, characterised by dichotomous thinking (all or nothing) and an excessive focus on negative aspects of situations, making it difficult to see potential solutions to problems.

- **Impulsivity:** Impulsivity can exacerbate deficits in problem-solving, as impulsive individuals may act hastily without fully considering the alternatives or consequences of their actions.
- **Perception of Insurmountability:** Individuals with problem-solving deficits often perceive their problems as insurmountable and feel trapped in their circumstances, contributing to a sense of hopelessness and suicidal thoughts.

The theory of problem-solving deficits has important implications for the treatment and prevention of suicide (Nezu et al., 2013 D'Zurilla & Nezu, 2006). Therapeutic approaches that aim to improve problem-solving skills, promote a more flexible cognitive style and help individuals generate and evaluate alternative solutions are considered effective. These include problem-solving training (specific training programmes that teach problem-solving strategies and help develop a more effective approach to problem management, thereby reducing perceived insuperability and vulnerability to suicide), cognitive-behavioural therapy (used to address and modify negative and rigid thought patterns that contribute to problem-solving deficits, while at the same time promoting the learning of more effective coping strategies), impulsivity-focused interventions (strategies that aim to manage and reduce impulsivity and are intended to provide individuals with tools to reflect and evaluate the consequences of their actions before acting).

Cognitive model of suicide

The Cognitive Model of Suicide, developed primarily by Aaron Beck and his colleagues, is one of the most influential approaches in understanding and treating suicidal behaviour. This model emphasises the role of cognitive processes, in particular how distorted thoughts, irrational beliefs and negative interpretations of self, others and the future (the negative cognitive triad) contribute to the development of suicidal behaviour (Beck et al., 1979; Beck et al., 1990).

The main components of the cognitive model of suicide include some elements already described in the section on despair theory, such as the negative cognitive triad, dysfunctional cognitive schemata and despair as a predictor of suicidal behaviour. In addition, we find:

- **Cognitive Distortions:** Suicide-prone individuals often exhibit cognitive distortions, such as catastrophising (imagining the worst possible scenario), selective abstraction (focusing only on negative aspects), and global labelling (self-defining by a single negative event). These distortions contribute to a cycle of negative thoughts that can increase the risk of suicide.

- **Negative Cognitive Filter:** A further key concept is the negative cognitive filter, through which individuals view themselves and their experiences in an exclusively negative way, ignoring positive or neutral information. This filter reinforces the belief that suicide is the only solution to alleviate emotional pain.

The Cognitive Model of Suicide provides an in-depth understanding of the cognitive processes underlying suicidal behaviour, highlighting the importance of therapeutic interventions aimed at changing negative thought patterns and promoting more effective coping strategies (Wenzel et al., 2009; Brown et al., 2005).

Modal theory (Rudd, 2000) represents an extension and specific elaboration of Aaron Beck's theory of psychopathology. According to this theory, particular configurations or 'modes' of psychological functioning are central to the understanding and treatment of suicidology. A 'mode' refers to a subpersonal organisation that integrates cognitive, affective, behavioural and physiological components in response to particular stimuli or situations.

Modal theory proposes that modes represent dynamic structures within the personality that can be activated by specific triggers, leading to characteristic patterns of thought, emotion and behaviour. Specifically, the 'suicidal mode' is a construct that groups together dysfunctional beliefs about oneself, others and the future (the cognitive triad), accompanied by an emotional state of despair and behaviours that can lead to suicide. This also includes thought patterns that emphasise helplessness, worthlessness and intolerance of psychological suffering.

The theory emphasises the importance of identifying and modifying dysfunctional modes through cognitive-behavioural interventions to prevent suicidal behaviour. This approach suggests that intervening on the modes activated in moments of crisis can help reduce the risk of suicide by modifying the structure and content of the modes themselves and constructing more adaptive ways to manage psychological pain.

The clinical implication of this theory is that understanding and treating suicide requires an approach that considers the integration of different psychological systems (cognitive, affective, behavioural and physiological) and how they interact in generating and maintaining suicidal behaviour. Interventions based on modal theory aim to deactivate the suicidal mode, modify its structure and content, and construct more adaptive alternative modes that can reduce psychological pain and increase stress tolerance.

Entrapment theory

Entrapment Theory is an important approach to understanding suicidal behaviour, and focuses on an individual's perception of being trapped in a painful or intolerable situation with no possibility of escape (Gilbert and Allan, 1998; Williams, 2001; Taylor et al., 2001). This theory is closely related to the concepts of hopelessness and helplessness, but adds a critical element related to the subjective perception of having no way out.

The key components of entrapment theory are:

- **Perception of entrapment:** central to the theory is the idea that people become vulnerable to suicide when they perceive that they are trapped in a painful or unbearable life situation from which they believe there is no possible escape.
- **Stress and adverse situations:** stressful life situations, adversity and trauma can contribute to the perception of entrapment. These experiences can be internal, such as mental illness or emotional pain, or external, such as relationship or financial problems.
- **Problem-solving deficits:** similarly to other cognitive theories of suicide already mentioned, such as the problem-solving deficit theory, entrapment theory also considers the inability to find effective solutions to problems as a factor that can intensify the feeling of being trapped.
- **Frustration of psychological needs:** the perception of not being able to satisfy basic psychological needs, such as belonging, self-esteem and control, can increase the feeling of entrapment.
- **Despair and hopelessness:** the feeling of entrapment is often accompanied by despair and a lack of hope that things will get better, leading to suicide being considered as the only escape route.

This theory also has implications for treatment and prevention, which can be outlined as follows:

- **Acknowledgement and validation:** Recognising and validating the feelings of entrapment experienced by the individual, providing support and understanding are considered fundamental elements in the care of individuals who Present suicidal aspirations,

- **Development of problem-solving skills:** interventions can focus on improving the individual's problem-solving skills, helping him/her to see alternatives and escape possibilities that he/she did not previously consider.
- **cognitive restructuring:** therapy can help challenge and change distorted thoughts that contribute to the perception of entrapment.
- **Stress reduction and mindfulness techniques:** these techniques can help manage stress and reduce the feeling of being overwhelmed by circumstances.
- **promotion of hope:** therapeutic strategies that aim to instil hope and strengthen motivation for change can be particularly effective.

Entrapment Theory emphasises the importance of psychological interventions aimed at recognising and addressing feelings of entrapment to prevent suicidal behaviour. Identifying sources of stress and actively working to develop alternative coping strategies and solutions to problems can significantly reduce the risk of suicide.

CBT therapeutic approaches to suicide

Cognitive-behavioural therapies for suicide focus on understanding and modifying patterns of thought and behaviour that contribute to suicidal vulnerability and specific techniques to modify suicidal thoughts and behaviour. These approaches aim to identify and address cognitive distortions, irrational beliefs and maladaptive behaviours that may lead an individual to consider suicide as a solution to their problems, and include cognitive restructuring, to identify and challenge automatic suicidal thoughts; problem-solving training, to develop more effective coping strategies; and hopelessness intervention, to address and reduce feelings of hopelessness (Tarrier, Taylor, Gooding, 2008).

Research has provided significant empirical support for the effectiveness of CBT therapies in reducing suicidal behaviour and improving associated risk factors such as depression and hopelessness (Beck et al., 1974). Randomised controlled trials have shown that CBT can significantly reduce both suicide attempts and suicidal thoughts in high-risk patients (Brown et al., 2005).

The key components of CBT approaches to suicide are:

- **Cognitive-behavioural assessment of suicide risk:** CBT begins with a detailed assessment of suicide risk by examining the history of suicidal behaviour, current suicidal thoughts, stress factors, coping resources and available support networks;
- **Identification and modification of cognitive distortions:** work with the patient focuses on identifying negative thought patterns, cognitive distortions (e.g. catastrophising, over-generalisation) and irrational beliefs that contribute to hopelessness and suicidal vulnerability;
- **development of problem-solving skills:** CBT interventions, as we have seen, focus on improving problem-solving skills, helping the individual to generate alternative solutions to problems, evaluate options more realistically and implement effective action plans;
- **managing impulsivity and emotional regulation:** strategies for managing impulsivity and improving emotional regulation are taught, including distraction techniques, distress tolerance and mindfulness;
- **Strengthening adaptive coping strategies:** therapy aims to strengthen and expand the patient's coping repertoire by encouraging behaviours that promote well-being and reduce vulnerability to acute emotional pain;
- **relapse prevention and crisis intervention:** a relapse prevention plan is developed that includes strategies to recognise and manage the warning signs of suicidal behaviour, thus improving long-term safety.

CBT has been shown to be effective in reducing suicidal thoughts and behaviour in several studies and meta-analyses. Specific approaches such as Cognitive Behavioural Therapy for Suicide Prevention (CBT-SP) and Dialectical Behavior Therapy (DBT) have shown particular effectiveness in treating individuals at high risk of suicide (Linehan, 1993, Wenzel et al., 2009).

In summary, CBT theories of suicide offer a structured framework for understanding and intervening in suicidal behaviour, emphasising the central role of cognitive and behavioural processes. By intervening on maladaptive thoughts, emotions and behaviour, CBT aims to reduce suicide risk and provide individuals with more effective coping strategies.

Stress-diathesis theory

The stress-diathesis theory is a conceptual model that seeks to explain suicidal behaviour through the interaction between individual vulnerability factors (diathesis) and stressful environmental factors. This model suggests that while some individuals have an inherent predisposition or vulnerability to suicide (e.g. due to genetic, biological or personality factors), stressful life events can trigger suicidal behaviour in vulnerable individuals (Mann et al., 1999; van Heeringen, 2003).

The key components of the stress-diathesis model are as follows:

- **Suicidal Diathesis:** refers to an individual's innate vulnerability to suicide, which may result from a variety of factors, including genetic, neurobiological, psychological and personality factors. This vulnerability does not by itself determine suicidal behaviour, but increases the risk in the presence of stress;
- **Stressors:** life events or circumstances perceived as overwhelming or insurmountable by an individual. These may include significant losses, interpersonal conflicts, financial problems, serious medical diagnoses, or experiences of trauma;
- **Interaction between Stress and Diathesis:** The theory emphasises the importance of the interaction between individual vulnerability and external stressors. An individual with a high suicidal diathesis might require only a relatively low level of stress to become suicidal, whereas someone with a low diathesis might face high levels of stress without developing suicidal behaviour;
- **Role of Protective Factors:** the theory also recognises the importance of protective factors, such as effective coping skills, social support and access to care, in moderating the impact of stressors on the vulnerable person.

Treatment and prevention of suicide, with this approach, focus on the identified components:

- early interventions on diathesis factors, which include preventive strategies and early interventions that may focus on diathesis factors, such as treating underlying psychiatric conditions or strengthening coping skills;
- stress management, since, as we have discussed before, education and intervention on stress management techniques can help individuals navigate through life's challenges by reducing the impact of external stressors;

- development and maintenance of protective factors, i.e. programmes that promote social support, resilience and access to care resources can act as buffers against the development of suicidal behaviour.

Interpersonal Theory of Suicide

The Interpersonal Theory of Suicide, formulated by Thomas Joiner (Joiner 2005; van Orden et al., 2010; Ribeiro and Joiner, 2009; Ma et al., 2016), represents a significant contribution in understanding the psychological dynamics underlying suicidal behaviour. This theory articulates in detail how the interplay between specific psychological states can lead an individual not only to desire death but also to overcome the natural fear of death necessary to carry out a suicide attempt. The Interpersonal Theory of Suicide is considered one of the most important theories in the field of suicide psychology because it offers a detailed understanding of the psychological and social mechanisms that contribute to suicidal behaviour.

The theory is based on several key elements that, when present simultaneously, significantly increase the risk of suicidal behaviour:

- thwarted belongingness;
- perceived burdensomeness (perception of being a burden);
- acquired capability for suicide;
- dynamic interaction
- overcoming the natural fear of dying

The theory identifies two primary psychological states that, when experienced simultaneously, intensify the desire to commit suicide. The first, 'thwarted belongingness', occurs when an individual feels deeply disconnected from others, lacking meaningful relationships or a sense of belonging to a community. The second, 'perceived burdensomeness', emerges from the individual's belief that he or she is a burden to others, believing that his or her own death will somehow lighten the load on friends and family. This interaction between the sense of isolation and the perception of being a burden creates the conditions that lead to the desire to commit suicide.

The concept of 'thwarted belongingness' in Interpersonal Suicide Theory emphasises the fundamental human need to feel connected, accepted and valued within one's social relationships. When these interpersonal connections are perceived as insufficient, weakened or totally absent, a state of frustrated belongingness occurs, which can have a profound impact on an individual's psychological well-being. The authors describe the elements that shape the sense of non-belonging, such as loneliness and isolation, the lack of reciprocal relationships within which there are satisfactory levels of support, care and understanding, marginalisation and isolation from basic contexts, such as family, workplace or school, and the failure to satisfy basic social needs, such as affection, belonging and acceptance. Frustrated belonging not only affects emotional and psychological well-being but can also feed a vicious cycle of further isolation. Individuals may begin to withdraw from social interactions to protect themselves from the pain of exclusion or disappointment, exacerbating their feelings of isolation.

Perceived burdensomeness expresses how the profound impact of self-perception, represented in terms of a burden on others, has on suicide risk. This perception does not simply stem from low self-esteem, but from the intrinsic belief that one's existence represents an unbearable burden on others, causing them pain, suffering or discomfort.

It is characterised by a profound feeling of inadequacy, which manifests itself in the belief that one is not able to contribute positively to the lives of others, but instead aggravates them with one's presence. This belief is rooted in the distorted conviction that one is making the lives of those around one worse, leading the individual to feel an unbearable burden, the absence of which would be a relief to others. These elements intertwine, creating a cycle of self-depreciation and isolation that can intensify the risk of suicidal behaviour. Within this framework, two emotions persistently present in the experience of suicide tempters, guilt and shame, settle in.

The simultaneous presence of these two psychological states, however, is not sufficient to push an individual beyond an innate fear of death. Joiner introduces the concept of 'acquired capability for suicide', a process by which an individual becomes progressively insensitive to the pain and fear associated with suicide. This aspect of the theory suggests that it is not sufficient to desire to die in order to perform a suicidal act; a specific capability is also required, acquired through painful or provocative experiences, which reduce the innate fear of death and increase tolerance to pain. Repeated exposure to situations of physical or psychological pain leads, over time, to a decrease in fear and an increased capacity to cope with pain, thus enabling the individual to overcome the natural barrier to performing serious or fatal self-harming acts. This habituation process, together with the progressive loss of the fear of dying, is a key element in understanding why only some

people, despite their desire to commit suicide, actually succeed in making extreme gestures towards themselves.

The theory emphasises the importance of the dynamic interaction between these states. It is not the isolated presence of a psychological state that determines suicidal risk, but their combination and the crucial addition of the acquired capacity for suicide. This interaction creates a psychological pathway that can lead from suicidal ideation to the implementation of suicidal behaviour. In other words, it is the conjunction of suicidal desire and acquired capacity for suicide that are decisive for actual suicidal behaviour. Thus, it is only when an individual desires to die (due to frustrated belonging and the perception of being a burden) and has simultaneously acquired the capacity to inflict harm upon oneself (through habituation to pain and fear of death) that a lethal or near-lethal suicide attempt is likely to occur. This final stage emphasises that both components, desire and ability, must be present to push a person over the risk threshold and towards suicidal action. The theory seeks to explain that many individuals may experience suicidal thoughts, but most do not proceed to the suicidal act due to a lack of acquired capacity, which is only developed through specific experiences that reduce the natural fear of dying and increase tolerance to physical pain. Therefore, this component of the theory emphasises the importance of considering not only the suicidal desire itself but also the psychological and physical disposition of the individual to act on such thoughts, painting a more complete picture of the risk factors for suicide.

The final point of articulation from the Interpersonal Theory of Suicide is the process by which an individual overcomes the natural fear of death. This process is not sudden but develops over time, and represents the final bridge that transforms the desire to die into a potential suicidal action, making it a perceived tolerable or even fearless option.

The Three-Step Theory (3ST)

After exploring the importance of interpersonal needs in Joiner's Interpersonal Theory of Suicide, another significant perspective is provided by David Klonsky's Three-Step Theory (3ST) (Klonsky and May, 2015; Klonsky et al., 2018; Klonsky et al., 2021). Proposed in 2015, the 3ST examines suicidal behaviour through the prism of psychological pain, contemplation of suicide as a response to pain, and the acquisition of the ability to act on such suicidal thoughts. Klonsky's 3ST emphasises psychological and physical pain as the initial catalyst, the progression to contemplation of suicide as an escape route from unbearable suffering, and finally, the acquisition of suicidal

capacity through exposure to painful experiences, outlining a complex pathway from despair to suicidal action (Klonsky and May, 2015). In other words, the pathway leading to suicidal behaviour would go through a sequential structure, beginning with the perception of unbearable pain, followed by the evaluation of suicide as a possible solution to that pain, and culminating in the acquisition of an emotional and physical tolerance necessary to perform the suicidal act.

The theory emphasises in particular:

- The increased intensity of suicidal thoughts in response to perceived unbearable suffering.
- The decision that suicide is the response to such suffering, influenced by the ability to overcome the natural instinct to survive.
- The physical and emotional disposition to the suicidal act, developed through previous experiences of physical or emotional pain or through habituation to the concept of death.

Suffering, be it psychological, emotional or physical, is seen as the primary catalyst that initiates the process towards the consideration of suicide. However, it is not only the existence of suffering that is relevant, but the individual's subjective perception that such suffering is unbearable and insurmountable.

This perception can be influenced by various factors, including:

- Psychological state: mental disorders such as depression, anxiety and personality disorders can alter an individual's perception of their suffering, making it seem more intense and insurmountable.
- Life experiences: stressful or traumatic life events, such as the loss of a loved one, significant personal failures or physical and emotional abuse, may contribute to feelings of hopelessness.
- Social isolation: the lack of perceived or real social support can intensify feelings of loneliness and despair, increasing the perception of suffering.
- Resilience and coping: the individual's ability to cope with stress and suffering, influenced by personal resilience and available coping strategies, may determine how unbearable a painful experience is perceived to be.

According to 3ST, not everyone who experiences intense suffering develops suicidal thoughts. The key is the perception of the unbearability and insurmountability of suffering. This perception may lead individuals to consider suicide as an option to end their pain, especially if they feel they have no other way out or method to alleviate their suffering.

The transition from intense suffering perceived as unbearable to the actual contemplation of suicide as an option to end such suffering is crucial for the decision to be made. At this stage, the individual not only experiences profound suffering, but also comes to believe that suicide may offer a way out. This belief emerges from a thought process in which suicide is perceived as a 'logical' or 'rational' solution to the insurmountable problems the person faces (Klonsky and May, 2015; Klonsky et al., 2018; Klonsky et al., 2021).

Some factors that may contribute to this belief include:

- sense of helplessness: the belief that there are no realistic alternatives or viable solutions to alleviate one's suffering.
- tunnel vision: a narrow focus that limits the individual's ability to see alternative solutions to suicide, making this option seemingly the only way out.
- despair: a profound loss of hope for the future, where the individual cannot imagine a positive change or a reduction of their suffering.
- identity and self-esteem: the perception of oneself as unworthy to live or as a burden to others, which can reinforce the belief that suicide is beneficial not only for oneself but also for one's loved ones.

It is important, at this point, to dwell briefly on the distinction between the considered decision that suicide is the response to suffering experienced and impulsive acts. In 3ST, the focus is on the decision as a deliberate process, influenced by prolonged suffering and the perception of having no alternative. This differs from suicidal acts performed impulsively (called 'raptus' in jargon), without a long period of contemplation, which may be triggered by acute life events or momentary impulses.

The final stage of the Three-Step Theory, as we have discussed, concerns the physical and emotional disposition to the suicidal act, that is, the acquisition of the capacity to perform the suicidal act itself. This critical stage implies that an individual has not only considered suicide as a possible solution to his or her suffering, but has also overcome the natural barriers against self-

harm, thus becoming psychologically and physically capable of acting on his or her suicidal thoughts (May and Klonsky, 2016).

The disposition to commit suicide includes several key components:

- Tolerance to pain: an increase in tolerance to physical and emotional pain is essential for an individual to actually perform a suicidal act. Previous experiences of pain, whether self-inflicted (as in the case of self-harm) or suffered (as in the case of trauma or abuse), may contribute to this tolerance.
- habituation to the fear of death: fear of death is a powerful natural barrier against suicide. The disposition to the suicidal act requires a process of habituation to this fear, through which the individual becomes less sensitive to the prospect of dying.
- Practical preparation: at this stage, practical preparation activities may also occur, such as accumulating the means for suicide or planning when and where the act might be performed.

Some factors that may accelerate or facilitate the acquisition of this capacity include:

- Repeated exposure to pain: whether through self-harming behaviour, painful life experiences, or training that involves overcoming physical pain, these experiences may reduce the threshold for implementing suicidal impulses.
- pattern of suicidal behaviour: knowledge of other individuals who have committed suicidal acts, either directly or through the media, can influence the perception of the suicidal act as a concrete possibility and overcome the associated fear.
- Social isolation and lack of support: the lack of an emotional and social support network may make it more difficult for the individual to find alternatives to suicide and may increase the feeling that suicide is an acceptable solution.

Differences between IPTS and 3ST

David Klonsky's Three-Step Theory and Thomas Joiner's Interpersonal Theory of Suicide both make significant contributions to the understanding of suicidal behaviour, but focus on different aspects and mechanisms.

The main points of difference between the two theories are the process (integration of factors vs. sequential process), the role of suffering and the ability to perform the suicidal act:

- Joiner emphasises interpersonal factors as key determinants of suicidal behaviour. The theory suggests that two main interpersonal conditions, perceived as untenable by the individual, lead to suicidal desire: 'perceived burdensomeness' and 'thwarted belongingness'. The IPTS also identifies 'acquired capacity for suicide' as the factor that enables people to act on suicidal desires. Klonsky, on the other hand, focuses on a sequential psychological process that drives the individual towards suicide. The theory proposes that suicide is the result of three steps: the presence of intense pain and suffering, the decision that suicide is the solution to this suffering and, finally, the development of the capacity to undertake the suicidal act. The 3ST highlights how pain (not limited to interpersonal factors) can push a person towards suicide.
- Although suffering plays a role in IPTS, it is more related to the interpersonal dimensions of the individual's life. The perception of being a burden and lack of belonging are seen as key sources of suffering. Klonsky gives a central and broader role to suffering, seeing it as a universal motor that can drive an individual to suicide. 3ST emphasises suffering in more general terms, including but not limited to interpersonal factors.
- IPTS discusses 'acquired capacity' as a process by which an individual becomes insensitive to fear of death and pain, often as a result of previous experiences of violence, abuse, self-harm or exposure to death. This concept implies a psychological adaptation that reduces natural barriers to self-harm. Similarly, 3ST includes the stage where the individual acquires the capacity to act upon suicide, but places it as the last step in a sequential process that begins with suffering. The capacity to act upon suicide is seen as the outcome of a process of habituation to pain and fear of death.

Although both theories offer valuable perspectives on suicidal behaviour, they differ in their emphasis on the factors that lead to suicide. Joiner's IPTS focuses on interpersonal factors as key elements, whereas Klonsky's 3ST describes a sequential process driven by suffering, consideration of suicide as a solution, and the acquisition of the ability to act.

GLOBAL EPIDEMIOLOGY OF SUICIDE AND SUICIDE ATTEMPTS

The prevalence, characteristics and patterns of suicidal behaviour vary widely among different communities, demographic groups and over time. Consequently, up-to-date surveillance of suicides and suicide attempts is an essential component of national and local suicide prevention efforts. Suicide is stigmatised (or illegal) in many countries. Consequently, obtaining usable data of high reliability on suicide behaviour is difficult, particularly in countries that do not have good registry systems (which record deaths by suicide) or good data collection systems on the provision of hospital services. Developing and implementing suicide prevention programmes appropriate for a community or country requires both an understanding of the limitations of the available data and a commitment to improving the quality of the data to more accurately reflect the effectiveness of specific interventions.

Suicide mortality

The main source of data in this chapter are WHO global health estimates. The estimates are largely based on the WHO mortality database, a global register of causes of death and vital data created from data provided to WHO by member states (WHO, 2014d). Various statistical modelling techniques are used to arrive at the estimates. The methods for generating these estimates are described in the technical documents of the WHO Department of Health Statistics and Information Systems (WHO, 2014e). This chapter presents global and regional results. In most cases, the reported rates are age-standardised with respect to the age distribution of the WHO world standard population, thus allowing easier comparison between areas and over time.

Global and regional suicide rates

As shown in Table 1, there were approximately 804,000 deaths by suicide worldwide in 2012. This indicates an annual global age-standardised suicide rate of 11.4 per 100,000 population (15.0 for males and 8.0 for females).

The age-standardised suicide rate is slightly higher in high-income countries than in low- and middle-income countries (12.7 versus 11.2 per 100,000 population). However, given the much higher proportion of the world's population residing in low- and middle-income countries, 75.5% of all global suicides occur in these countries.

Among low- and middle-income countries in the six WHO areas, there is a range of almost three times the age-standardised suicide rate, from a low of 6.1 per 100,000 in the American region to a high of 17.7 per 100,000 in South-East Asia. A consequence of the different suicide rates in the WHO areas is that in 2012 the South-East Asian region accounted for 26% of the world population but 39% of global suicides.

This difference in rates is even more pronounced when comparing data on a national level. In the 172 countries with a population of more than 300,000, age-standardised suicide rates range from 0.4 to 44.2 per 100,000 - a range of 110 times. The magnitude of these differences has remained fairly stable over time: in 2000, the range of age-standardised suicide rates in the 172 countries was 0.5 to 52.7 per 100,000 - a 105-fold difference.

Area	percentuale della popolazione sulla popolazione globale	Numero di suicidi (in migliaia, riferiti al 2012)	percentuali dei suicidi globali	Tassi di suicidio standardizzati per età (per 100000 abitanti) per entrambi i generi	Tassi di suicidio standardizzati per età (per 100000 abitanti) per il genere maschile	Tassi di suicidio standardizzati per età (per 100000 abitanti) per il genere femminile	Rapporto dei tassi di suicidio tra maschi e femmine standardizzati per età
Global**	100.0%	804	100.0%	11.4	8.0	15.0	1.9
All high-income Member States	17.9%	192	23.9%	12.7	5.7	19.9	3.5
All low-and middle-income (LMIC) Member States	81.7%	607	75.5%	11.2	8.7	13.7	1.6
LMICs in Africa	12.6%	61	7.6%	10.0	5.8	14.4	2.5
LMICs in the Americas	8.2%	35	4.3%	6.1	2.7	9.8	3.6
LMICs in Eastern Mediterranean	8.0%	30	3.7%	6.4	5.2	7.5	1.4
LMICs in Europa	3.8%	35	4.3%	12.0	4.9	20.0	4.1
LMICs Sud-Est asiatico	25.9%	314	39.1%	17.7	13.9	21.6	1.6
LMICs del Pacifico occidentale	23.1%	131	16.3%	7.5	7.9	7.2	0.9
Reddito alto	18.3%	197	24.5%	12.7	5.7	19.9	3.5
Reddito medio-alto	34.3%	192	23.8%	7.5	6.5	8.7	1.3
Reddito medio-basso	35.4%	333	41.4%	14.1	10.4	18.0	1.7
Reddito basso	12.0%	82	10.2%	13.4	10.0	17.0	1.7

Table 1

There are several important caveats that must be considered when estimating these suicide mortality data. Of the 172 WHO Member States for which estimates were made, only 60 have good quality

registration data that can be used directly to estimate suicide rates. The estimated suicide rates in the other 112 Member States (representing about 71% of global suicides) are necessarily based on modelling methods. As one might expect, good quality registry systems are much more likely to be available in high-income countries. The 39 high-income countries have the capacity to report suicide data more or less well, and it is estimated that they may account for 95% of all suicides in these countries. Among the low- and middle-income countries, on the other hand, only 21 possess fairly good reporting capacity, accounting for only 8% of all estimated suicides in these countries.

The problem of poor quality mortality data collection is not exclusive to suicide, but given the sensitivity of suicide - and the illegality of suicidal behaviour in some countries - underreporting and misclassification are likely to be more problematic for suicide than for most other causes of death. Suicide registration is a complicated and multi-layered procedure that includes medical and legal concerns and involves several responsible authorities that may vary from country to country. Suicides are commonly misclassified according to the codes of the tenth edition of the International Classification of Diseases and Related Health Conditions (ICD-10) as 'deaths by undetermined intent' (ICD-10 codes Y10-Y34), and also as 'accidents' (codes V01-X59), 'homicides' (codes X85-Y09) and 'cause unknown' (codes R95-R99) (Värnik et al., 2010; Värnik et al., 2012; Höfer et al., 2012). It is possible that the wide range of estimated suicide rates reported for different countries and areas is the result of different reporting and registration practices. In the 60 countries with good age-adjusted registration systems, national age-adjusted suicide rates in 2012 varied 32-fold (from 0.89 to 28.85 per 100,000). Regional differences persist despite decades of work to improve the accuracy of country-specific mortality data. One must also consider the possibility that a considerable part of these observed differences are, in fact, real differences.

Suicide rates by gender

As we have seen, suicide rates vary according to sexual gender. For many years it was believed that globally men died by suicide three times more than women. This high male-to-female ratio, however, is a real phenomenon in high-income countries, where the age-standardised suicide rate in 2012 was 3.5. In low- and middle-income countries, the male-female ratio is much lower, at 1.6, indicating that the suicide rate is 'only' 57% higher in men than in women.

However, there are large differences between areas and between countries. As shown in Table 1, gender ratios in low- and middle-income countries vary from 0.9 in the Western Pacific region to 4.1 in the European continent, a difference of 4.5 times. Among the 172 Member States with a

population over 300,000, the average male to female ratio is 3.2, the median ratio is 2.8 and the ratio varies from 0.5 to 12.5 (i.e. a 24-fold difference).

There are also differences in the relationship between gender and age. There are many potential reasons for different suicide rates between men and women: issues of gender equality, differences in socially acceptable ways of coping with stress and conflict between men and women, availability and preference for different means of suicide, availability and patterns of alcohol consumption, and differences in seeking care for mental disorders between men and women. The very wide range of gender ratios for suicide suggests that the relative importance of these different reasons varies considerably from country to country.

Suicide rates by age

With regard to age, suicide rates are lowest in people under 15 and highest in those aged 70 and over, for both men and women in almost all areas of the world, although the age patterns of suicide rates between the ages of 15 and 70 vary by region. In some regional areas suicide rates rise steadily with age while in others there is a peak in suicide rates among young adults that declines in middle age. In some areas the age of males and females is similar while in other areas it is very different. The main differences between high-income and low- and middle-income countries are that young adults and older women in low- and middle-income countries have much higher suicide rates than their counterparts in high-income countries, while middle-aged men in high-income countries have much higher suicide rates than middle-aged men in low- and middle-income countries.

The importance of suicide as a leading cause of death

In 2012, suicide accounted for 1.4% of all deaths worldwide, making it the 15th leading cause of death. These deaths place a huge economic, social and psychological burden on individuals, families, communities and countries. Suicide is a serious public health problem in every country and every community around the world.

In high-income countries, the proportion of all deaths due to suicide (1.7%) is higher than the corresponding proportion in low- and middle-income countries (1.4%). This is mainly due to the higher number of deaths from infectious diseases and other causes in low- and middle-income countries than in high-income countries. With the notable exception of low- and middle-income

countries in the Western Pacific, in all other areas of the world the proportion of all deaths due to suicide is higher in males than in females and is a higher cause of death for males than for females.

The proportion of all deaths due to suicide and the degree of suicide as a cause of death vary widely by age. Globally, among young adults aged 15-29 years, suicide accounts for 8.5% of all deaths and is ranked as the second leading cause of death (after traffic accidents). Among adults aged 30-49 it accounts for 4.1% of all deaths and is ranked as the fifth leading cause of death. Surprisingly, in high-income countries and low- and middle-income countries in South-East Asia, suicide accounts for 17.6% and 16.6%, respectively, of all deaths among young adults aged 15-29 years and is the leading cause of death for both sexes.

Another method to assess the importance of suicide as a public health problem is to evaluate its relative contribution to all intentional deaths, which include deaths from interpersonal violence, armed conflicts and suicide (so-called violent deaths).

Globally, suicides account for 56% of all violent deaths (50% in men and 71% in women). In high-income countries, suicide accounts for 81% of violent deaths in both men and women, while in low- and middle-income countries 44% of violent deaths in men and 70% of violent deaths in women are due to suicide.

Changes in suicide rates from 2000 to 2012

Despite the increase in world population between 2000 and 2012, the absolute number of suicides decreased by about 9%, from 883,000 to 804,000. However, very different patterns are observed from region to region: the percentage change in the total number of suicides varies from a 38% increase in low- and middle-income countries in Africa to a 47% decrease in low- and middle-income countries in the Western Pacific.

The global age-standardised suicide rate (which takes into account differences in the size and age structure of populations over time) decreased by 26% (23% in men and 32% in women) during the 12-year period from 2000 to 2012. Age-standardised rates decreased in all areas of the world, except in low- and middle-income countries on the African continent and among men in low- and middle-income countries in the Eastern Mediterranean region.

This global and regional analysis masks country-specific changes in suicide rates. Among the 172 Member States with a population over 300,000, the change in age-standardised suicide rates over the period 2000-2012 ranges from a decrease of 69% to an increase of 270%.

Among these 172 countries, 85 (49.4%) experienced a decrease in age-standardised suicide rates of more than 10%, 29 (16.9%) experienced an increase of more than 10% and 58 (33.7%) experienced relatively small changes in age-standardised suicide rates over 12 years.

The reasons for such rapid changes in suicide rates are still being understood. One possible partial explanation is the remarkable improvement in global health in recent decades. From 2000 to 2012, global age-standardised mortality from all causes fell by 18%. The decline in suicide rates was faster than the decline in overall mortality (26% versus 18%), but only by 8%.

Suicide methods

Most people who engage in suicidal behaviour are ambivalent about their desire to die at the time of the act, and some suicidal acts represent impulsive responses to acute psychosocial stressors. The restriction of means (limiting access to the means to commit suicide) is a key component of suicide prevention efforts because it provides these individuals with the opportunity to buy time with respect to what they are about to do and, hopefully, to make the acute crisis go away. However, the development of policies to appropriately restrict the means used for suicide (e.g., limiting access to pesticides and firearms, installing barriers on subways, bridges and iconic buildings, changing drug packaging regulations) requires a detailed understanding of the methods of suicide used in the community and the method preferences of different demographic groups within the community.

Unfortunately, national data on the methods used for suicide are rather limited. The ICD-10 includes a coding that records external causes of death, including the method of suicide, but many countries do not collect this information. Between 2005 and 2011, only 76 of the 194 WHO member states reported data on suicide methods in the WHO mortality database. These countries account for about 28% of all global suicides, so the methods used in 72% of global suicides are not well understood. As expected, coverage is much better for high-income countries than for low- and middle-income countries. In high-income countries, hanging accounts for 50% of suicides and the use of firearms is the second most common method, accounting for 18% of suicides. The relatively high proportion of gun suicides in high-income countries is mainly attributable to high-income countries in the Americas, where voluntary deaths by gunshot account for 46% of all suicides; in other high-income countries, voluntary deaths by gunshot account for about 4.5% of all suicides.

Due to the lack of country-level data on suicide methods in low- and middle-income countries in the WHO mortality database, researchers must rely on data published in the scientific literature to evaluate patterns of suicide methods used in these areas (Wu et al., 2012). One of the main suicide

methods in low- and middle-income countries, particularly in countries with a high proportion of rural residents engaged in agriculture, is pesticide self-poisoning. A systematic review (Gunnell et al., 2007) of global data for the period 1990-2007 estimated that about 30% (confidence interval 27-37%) of global suicides are due to self-poisoning by pesticides, most of which occur in low- and middle-income countries. Based on this estimate, pesticide ingestion is among the most common methods of suicide globally. If true, this would have important implications for prevention because restriction of pesticides, although difficult, is often more feasible to implement than restricting the means of suspension.

Other research shows that the most common method of suicide in a community can be determined by the environment, can change rapidly over time, and can be spread from one community to another. In highly urbanised areas such as China, Hong Kong and Singapore, where the majority of the population lives in multi-storey apartment complexes, jumping from tall buildings is a common method of suicide. An epidemic related to the use of barbecue charcoal to produce a highly toxic gas, carbon monoxide, as a means of suicide began in China and the Hong Kong region in 1998 and quickly spread to Taiwan, where it became the most common method of suicide within eight years (Chang et al., 2014). Other methods that have become popular in some locations include mixing chemicals to produce hydrogen sulphide gas (e.g. in Japan) and the use of helium gas. These findings highlight the importance of ongoing monitoring of methods used in both suicide and suicide attempts to ensure that means restriction efforts and community education efforts respond to evolving suicide prevention patterns. However, many of the newly emerging methods of suicide cannot be specifically identified using current ICD-10 external cause codes, so they will not be evident in mortality registry systems unless a single coding system is agreed upon.

The use of regional or country-specific data on suicide has a limitation on the usefulness of the data in designing targeted suicide prevention programmes because they are insensitive to substantial within-country variability in suicide rates, demographic patterns and methods. There is ample evidence on the important differences in suicide rates and demographic characteristics between different locations within countries - e.g. between urban and rural areas in China (Phillips et al., 2002) and between different states in India (Patel et al., 2012). In this situation, national data do not help determine the geographic areas or demographic groups that should be prioritised in intervention efforts. National estimates of the proportions of all suicides by different methods provide a focus for national efforts to restrict means, but these efforts often need to be adapted to the different regions of each country. For example, pesticide ingestion suicides occur mainly in rural areas, so pesticide restriction measures would probably not be the main focus of suicide

prevention programmes in urban areas of countries that may have a high proportion of pesticide ingestion suicides nationwide.

Surveillance system in the USA

The Centres for Disease Control and Prevention (CDC) in the United States have a National Violent Death Reporting System (NVDRS), a surveillance system that collects detailed information on violent deaths, including suicides (Paulozzi et al., 2004). The NVDRS serves as a data repository that links relevant information on each incident from a variety of sources, including the victim's death certificate, toxicology and autopsy reports, and various investigative reports from law enforcement, coroner, medical examiner or death scene investigators. The NVDRS provides details on the demographic characteristics of the deceased, the mechanisms/weapons involved in the death, other characteristics of the incident (e.g., place and time of death), the health status of the deceased, and the life stress-related circumstances believed to have contributed to the death based on the results of death scene investigations, witness statements, death declarations, and other material evidence (e.g., suicide notes). States in the US that participate in NVDRS manage data collection through state health departments or subcontracted entities such as coroners' offices. Data are collected and coded by trained extractors. The CDC, which plans to expand the NVDRS to all states in the United States, has structured an effective data collection model, while data collection itself continues to be one of the most significant problems in the fight against suicide.

Suicide attempts

Suicide attempts place a significant social and economic burden on communities due to the use of health services to treat injuries, the psychological and social impact of the behaviour on the individual and his or her relatives and, not least, the long-term impact of disability due to the injury. More importantly, a previous suicide attempt is the most important predictor of death by suicide in the general population: individuals who have experienced previous suicide attempts run a much higher risk of dying by suicide than individuals who have no clinical history of suicide attempts. Identifying these high-risk individuals and providing them with follow-up care and support should be a key component of all comprehensive suicide prevention strategies.

Monitoring the prevalence, demographic patterns and methods of suicide attempts in a community provides important information that can help in the development and evaluation of suicide prevention strategies. When combined with information on suicide deaths, data on rates and

methods of suicide attempts can be used to estimate the mortality rate of suicidal behaviour (i.e. the proportion of all suicidal acts that result in death) by gender, age and method. This information helps to identify high-risk groups in the community that should be the target for selective psychosocial interventions, as well as high-risk methods that should be the target for means-restriction interventions.

There are two main methods to obtain information on national or regional rates of suicide attempts: from self-reports of suicidal behaviour in surveys of representative samples of community residents and from medical records on treatment for self-harm in representative samples of health care institutions (usually hospitals) in the community. WHO does not routinely collect data on suicide attempts, but has supported the activities of the WHO World Mental Health Surveys (Kessler et al., 2008) that collect information on suicide attempts. In addition, WHO's STEPwise approach to chronic disease risk factor surveillance (STEPS) includes questions designed to collect data on suicide attempts (WHO, 2014f). In addition, WHO has published a resource booklet, as well as one on suicide case registration (WHO, 2011), on the creation of hospital case registries for drug-treated suicide attempts (WHO, 2014b).

Improved suicide prevention initiatives should include the thorough investigation of suicide attempts and its accurate reporting.

Self-reports of suicidal behaviour

Many community surveys on psychosocial issues include self-reported questions on suicidal behaviour. When the same survey is administered to the same population over time, reasonable conclusions can be drawn about changing trends in self-reported suicidal behaviour. An example of this is the twice-yearly Youth Risk Behaviour Surveillance System (YRBSS) in the United States (CDC, 2013). However, it is much more difficult to interpret the results when different survey instruments are used or when the same survey is administered to different populations (especially when using different languages). Beyond the standard methodological problems associated with community surveys (such as ensuring that the survey sample is truly representative of the target population), there are several potential confounding factors that may influence rates of suicidal ideation and suicide attempts. These factors include the literacy level of the population, the specific wording used in the questionnaire, the length of the questionnaire, the interpretation (i.e. the exact meaning and implications) of the wording in the local language, the time frame considered and - most importantly - the extent to which respondents are willing to disclose this information.

Willingness to report previous suicidal behaviour may vary by age, gender, religion, ethnicity and other factors, so caution is needed when comparing rates of self-reported suicidal behaviour in different demographic or cultural groups. Comparing rates of self-reported suicidal ideation across groups is particularly problematic because suicidal ideation is often a fleeting and fluctuating experience that cannot be observed by others. Furthermore, the comparison of self-reported rates of suicidal ideation and suicide attempts - which may be of limited value in assessing current suicide risk - is also confounded by the different ages of respondents and the reenactment bias of long-distance events. Therefore, the most useful, and probably the most reliable, measure generated by community-based self-report surveys is the occurrence of suicide attempts (involving some level of physical injury) in the previous year.

The WHO World Mental Health Surveys (Kessler et al., 2008) use the WHO Composite International Diagnostic Interview (CIDI) which includes a series of standardised questions on the frequency, timing, methods and medical treatment (if any) of suicide attempts. The available report on the 12-month prevalence of suicide attempts among individuals aged 18 years and older (collected in studies from 2001 to 2007) is based on data from 10 high-income countries (nine used nationally representative samples) with a combined sample analysis of 52,484 individuals, six middle-income countries (four used nationally representative samples) with a combined sample of 25,666 individuals and five low-income countries (one used a nationally representative sample) with a combined sample of 31,227 individuals (Borges et al, 2012). The reported prevalence of suicide attempts in the previous year was 3 per 1,000 individuals (or 0.3%) among both males and females in high-income countries, 3 per 1,000 among males and 6 per 1,000 among females in middle-income countries, and 4 per 1,000 among both males and females in low-income countries. Applying the prevalence in high-, middle- and low-income countries to the adult population (i.e., aged 18 years and older) of all countries in each of these World Bank income strata, the estimated global annual prevalence of self-reported suicide attempts is about 4 per 1000 adults. Given the estimated 2012 global suicide rate of 15.4 per 100,000 adults aged 18 years and older, this would indicate that for every adult who died by suicide, there are likely to be more than 20 who have attempted one or more suicide attempts. However, as in the case of suicide and suicide attempt rates, there is wide variation in the ratio of attempts to death and, in the case, in the death rate of suicidal behaviour by region, sex, age and method.

Hospital data on suicide attempts treated with drugs

Other sources of information on suicide attempt rates are records of medical treatment for self-harm from emergency and outpatient departments of hospitals and other health care facilities. Unlike the registration of deaths, there are no internationally accepted methods for standardising the collection of information on suicide attempts, so a number of methodological issues need to be considered when comparing rates between different jurisdictions. Estimates of rates of drug-treated suicide attempts based on hospital reports may be inaccurate if the hospitals selected are not representative of all hospitals in the community or if a substantial proportion of suicide attempts are only treated by local clinics and therefore do not reach a hospital. Furthermore, the reported rates of suicide attempts treated with drugs are strongly influenced by hospital registration processes. These may not be completely reliable because:

- may not distinguish individuals from treatment episodes (thus individuals with multiple suicide attempts in a year are duplicated);
- cannot exclude those who die in hospital during treatment for the suicidal act or those who are discharged in order to die at home (and thus are not really suicide attempts);
- cannot distinguish between subjects with non-suicidal and suicidal self-injury;
- may not include individuals treated in hospital emergency departments who are subsequently discharged before formal hospitalisation;
- may not include subjects admitted directly to hospital wards without going through the emergency room;
- may not record the suicide attempt method (which makes it impossible to assess mortality rates on a method-specific basis);
- may systematically record suicide attempts as 'accidents' due to stigma, lack of insurance cover for suicidal behaviour or concern about potential legal complications.

Standardising these registration processes within countries, and subsequently between countries, is one of the fundamental tasks required in countries' efforts to understand and eventually reduce suicides.

Only some suicide attempts result in injuries that receive medical treatment, so mortality estimates based on drug-treated suicide attempts will necessarily be higher than those based on self-reported suicide attempt rates from community surveys. Very few countries have developed national or nationally representative registry systems of drug-treated suicide attempts, so it is only rarely possible to integrate hospital-level data with national suicide rates. Mortality measures can be calculated when nationally representative data on drug-treated suicide attempts are available.

Unfortunately, examples from low- and middle-income countries are not available, so examples are limited to four high-income countries: the Flanders region of Belgium (Wittouck et al., 2010), Ireland (Perry et al., 2012), Sweden (Ludvigsson et al. 2011) and the United States (CDC, 2014). A fourfold range was found in the total number of fatal cases of 'medically serious suicidal behaviour' (operationally defined as suicidal behaviour involving medical treatment or death) in the four countries, from 4.2% in Ireland to 17.8% in Flanders. The mortality pattern by gender and age is identical in the four countries: medically severe suicidal behaviour is much more likely to be fatal in men than in women, and there is a clear gradual increase in mortality from medically severe suicidal behaviour by age. This result is consistent with previous subnational reports of fatal cases of medically severe suicidal behaviour (Jansen et al., 2009, Miller et al., 2004).

Another potentially useful measure - also available for specific locations in several low- and middle-income countries - is the number of in-hospital deaths by specific methods (i.e. the number of in-hospital deaths due to a method of attempting suicide divided by the number of persons treated in hospitals who used the same method to attempt suicide). The determination of method-specific in-hospital mortality can identify highly lethal methods that should be the focus of both community-based means-restriction prevention efforts and hospital-based efforts to improve the medical management of self-harming behaviour. For example, the medical management of suicide attempts due to pesticide ingestion is often technically difficult and may require advanced equipment that is not available in hospitals in rural areas of many low- and middle-income countries. In these settings, providing training and equipment to local medical personnel is an essential component of the suicide prevention effort (WHO, 2008). Data on the in-hospital mortality of different pesticides - which can range from 0% to 42% - are essential to determine the type of training and equipment most needed (Dawson et al., 2010).

EPIDEMIOLOGY OF SUICIDE AND SUICIDE ATTEMPTS IN ITALY

Territorial distribution (2018-2020)

Internationally produced statistics on suicides suffer from underestimation problems related to a number of factors. One of them is the difficulty in recognising suicide as a cause of death, for example, suicides of elderly people living alone or in old people's homes may be considered deaths due to 'sudden death' or 'unknown cause'. Others may concern cases in which suicide is not always recognised as such and may occur as deaths apparently due to road accidents, deaths in prisons attributable to self-harming episodes, but without the certainty of the intention to take one's own life, or cases of voluntary overdose of drug addicts.

In some cases, as we have already mentioned, suicide is recognised as such but does not become visible due to the difficulty in talking about it, for various reasons, on the part of family members.

According to the international literature, however, these difficulties do not have a significant quantitative impact on different population groups and, therefore, do not compromise the usability of these statistics, with appropriate caution, for comparisons over time and space.

In Italy, the analysis of the suicide phenomenon is based on official statistics produced by ISTAT through the survey on 'Deaths and Causes of Death'. This is not a simple recording of tragic events, but is a comprehensive survey that aims to gather both health and demo-social information, thus offering -ISTAT reports- a complete overview of all the deaths that have occurred in Italy. The survey is structured to provide specific details on each individual case, allowing an understanding of the circumstances and causes of each death.

The process of collecting this information is methodologically rigorous. It is carried out through the use of specific individual models, known as 'Istat D4' and 'Istat D4bis'. These models, which are also recognised internationally, are designed to try to ensure that each piece of data collected is accurate and detailed. When a treating physician fills out one of these models, he or she would have to provide a precise description of the morbid sequence that led to the patient's death. But not only that, the clinician would also be obliged to report any other morbid states that might have been relevant, thus ensuring that every possible factor is taken into account.

It is important to emphasise that the survey on 'Deaths and Causes of Death' is not just a bureaucratic formality. It must fulfil strict quality standards. These requirements are outlined in both EU and national legislation. By following these standards, apart from the phenomena that

make it difficult to establish a relevant number of suicides, Italy ensures that the statistics produced are useful and relevant, allowing researchers, health professionals and authorities to have a clear and detailed understanding of the suicide phenomenon in the country, as far as possible.

This section focuses on the number of suicides in Italy during the three-year period 2018-2020 as per the latest and most updated ISTAT analysis (ISTAT, 2023). The first section deals with the territorial distribution, broken down both by the five main geographical areas and by the twenty Italian regions. The aim is to provide a comprehensive view of the distribution of suicides in the country over this period and to identify any regional trends or variations.

In total, Italy recorded 3,730 suicides in 2018, 3,680 in 2019 and 3,686 in 2020. These figures show a slight variation in the number of suicides over these three years, with an overall decrease of 44 cases between 2018 and 2020 (just over 1%). It should be noted that these statistics do not cover the Covid-19 period, on which it is not yet possible to make an assessment, which underlines the difficulty of intervening in a timely manner on the needs of persons affected by suicide.

Territorio di residenza	Anno		
	2018	2019	2020
Centro	730	726	711
Isole	377	411	372
Nord-est	933	877	946
Nord-ovest	1094	1075	1119
Sud	596	591	538
Totale	3730	3680	3686

Table 2. Territorial distribution over geographical macro-areas

As shown in Table 2, the North-West area emerged as the one with the highest number of suicides in the whole country. In 2018, 1,094 suicides were recorded, with Lombardy being the most affected region, with 589 cases (not surprising, since Lombardy is by far the most populous region in Italy). In 2019, the number remained stable at 1,075, but increased to 1,119 in 2020, showing an upward trend in the period of the full Covid-19 pandemic. The North-East recorded a total of 933 suicides in 2018, with Veneto in the lead (370 cases). In 2019, the number dropped to 877, but in 2020 it rose again to 946, showing a significant change. The Centre area reported 730 suicides in 2018, with Tuscany showing 260 cases. In 2019, the number remained stable at 726, but in 2020 it dropped to 711, showing a downward trend. In the South, 596 suicides were recorded in 2018, with Campania showing the worst number, 179 cases. In 2019, the situation remained similar with 591

suicides, but in 2020 the total fell to 538, showing a downward trend. The Islands reported 377 suicides in 2018, with Sicily leading the way with 225 cases. In 2019, the number rose to 411, but in 2020 it fell to 372.

Territorio di residenza	Anno		
	2018	2019	2020
Piemonte	399	339	355
Valle d'Aosta / Vallée d'Aoste	23	16	11
Liguria	83	69	82
Lombardia	589	651	671
Trentino Alto Adige / Südtirol	85	98	102
Bolzano / Bozen	39	52	43
Trento	46	46	59
Veneto	370	324	369
Friuli-Venezia Giulia	127	94	108
Emilia-Romagna	351	361	367
Toscana	260	269	292
Umbria	74	61	66
Marche	111	120	99
Lazio	285	276	254
Abruzzo	71	79	79
Molise	23	18	16
Campania	179	173	173
Puglia	202	187	162
Basilicata	41	42	35
Calabria	80	92	73
Sicilia	225	260	227
Sardegna	152	151	145
Estero	68	65	54
Non indicato	22	14	8
Totale	3905	3857	3850

Table 3. Regional distribution

As shown in Table 3, Lombardy reported 589 suicides in 2018, 651 in 2019 and 671 in 2020, with an upward trend. In Veneto, the number of suicides was 370 in 2018, 324 in 2019 and 369 in 2020, showing a significant variation. Tuscany reported 260 suicides in 2018, 269 in 2019 and 292 in 2020, with an upward trend. Campania reported 179 suicides in 2018, with the number remaining constant in 2019 and 2020. Sicily reported 225 suicides in 2018, 260 in 2019 and 227 in 2020, with significant changes over the period.

Of the other regions, Abruzzo recorded 71 suicides in 2018, 79 in 2019 and 79 in 2020, Basilicata 41 suicides in 2018, 42 in 2019 and 35 in 2020, Calabria 80 suicides in 2018, 92 in 2019 and 73 in 2020, Emilia-Romagna 351 suicides in 2018, 361 in 2019 and 367 in 2020, Friuli-Venezia Giulia 127 suicides in 2018, 94 in 2019 and 108 in 2020, Lazio 285 suicides in 2018, 276 in 2019 and 254 in 2020, Liguria 83 suicides in 2018, 69 in 2019 and 82 in 2020, Marche 111 suicides in 2018, 120 in 2019 and 99 in 2020, Molise 23 suicides in 2018, 18 in 2019 and 16 in 2020, Piedmont 399 suicides in 2018, 339 in 2019 and 355 in 2020, Apulia 202 suicides in 2018, 187 in 2019 and 162 in 2020, Sardinia 152 suicides in 2018, 151 in 2019 and 145 in 2020, Umbria 74 suicides in 2018, 61 in 2019 and 66 in 2020, Valle d'Aosta 23 suicides in 2018, 16 in 2019 and 11 in 2020, the Autonomous Province of Trento 46 suicides in 2018, 46 in 2019 and 59 in 2020 and the Autonomous Province of Bolzano 39 suicides in 2018, 52 in 2019 and 43 in 2020.

This analysis reveals considerable variations in the number of suicides between different Italian regions and between geographical areas of the country over the period 2018-2020. Some regions showed upward trends, while others recorded a decrease in cases. These differences may be the result of multiple factors, including socio-economic conditions, access to health services and cultural factors. One factor that is worth mentioning, however, is the advent of the Covid-19 pandemic. What we can observe is that the two macro-areas of the North, but also the islands, show an increase in suicides in 2020 compared to the previous two years, the Centre and the South a decrease. This could be due to two important factors in suicide: the sense of community, more typical of the South than of the North, and isolation, an element that may explain the increase in suicides in peripheral and isolated territories such as the islands.

The North-East is historically the distribution with the highest levels of suicide mortality (8.2 deaths per 100,000 inhabitants in 2020). The South is the one with the lowest values (3.9). Overall, the levels of suicide mortality over the last year have remained constant at national level, but the differences between the North and the rest of the country have increased.

The regions with the lowest values are essentially all those in the South, In the North and Centre only Liguria and Lazio have values below the national average. A wide unevenness can be observed between the two islands. For the two youngest age groups, the fluctuations across the territory could be due to the relatively low numbers rather than to real differences in the phenomenon.

Distribution by gender and age group (2020)

Table 4 analyses data on the number of suicides in Italy in 2020, focusing on the breakdown by gender and age group.

Fascia d'età	Genere		Totale
	maschi	femmine	
15-34 anni	365	83	448
35-64 anni	1414	424	1838
65 anni e più	1110	290	1400
Totale	2889	797	3686

Table 4. Distribution by gender (2020)

Of the 3,686 suicides recorded in 2020, 2,889 involved males, while 797 were females. These data reveal the confirmation of a significant difference between the two sexes, with far more male suicides than female ones. For the sake of completeness, it should be said that the Istat report, in the summed totals of males and females for 2020, observes 3,712 suicides (6.2 per 100,000 inhabitants, with ratios per 100,000 inhabitants of 10.1 for males and 2.6 for females, respectively). Istat explains that 'the total also includes suicides with age not indicated, so it may not coincide with the sum of the age groups'. Considering this, we know that the data we analyse in this text are slightly underestimated, because of what has just been explained.

With regard to age groups, the distribution reveals that a total of 448 suicides occurred in the 15-34 age group. The majority of these (365 cases) concerned males, while 'only' 83 concerned females. The 35-64 age group was the most affected in 2020, with a total of 1,838 suicides. Of these, 1,414 cases concerned male individuals, while 424 concerned the female sex. Among individuals over the age of 65, 1,400 suicides were reported in 2020. Also in this age group, males had a significantly higher number of cases (1,110) than females (290).

The analysis of these data highlights several significant trends. In general, the number of suicides among men was significantly higher than among women in 2020. The age group between 35 and 64 emerged as the most affected, with a significantly higher number of suicides than the other age groups, an element that can be explained by the difficulties faced by people in that age group in being unable to carry out the activities that produce a social identity in them (in fact, making their lives more similar to those of the elderly, who are more affected when the social roles they previously lived in are no longer present).

Compared to twenty years before the time of the survey, the phenomenon is declining: from 7.3 suicides per 100,000 inhabitants in 2000 to 6.2 in 2020. Suicide mortality increases with age: it rises from 1.4 suicides per 100,000 inhabitants under the age of 24 to 10.0 for people over the age of 64, more than seven times higher. The highest rate is among older men with 18.2 suicides per 100,000 inhabitants while the lowest is among younger women (0.6 suicides per 100,000 inhabitants).

Over the 20-year period, the generally decreasing trend shows some fluctuations, such as the increases recorded in 2008-2012, due to an increase among men aged 45-64. Overall, the decrease was greater among women, who were already starting from lower mortality levels than men, for whom the rate in 2020 fell by 28 per cent compared to 2000, almost three times the decrease among men (10 per cent).

Distribution by related diseases (2020)

In this section, on the basis of Table 5, we assess the data on suicides in Italy in 2020, examining the presence or absence of physical and mental illness as variables, and mentioning the correlation between health conditions and suicides in the country.

Malattie mentali	Malattie fisiche			Assenza di malattie fisiche
	Presenza di malattie fisiche	(di cui) tumori	(di cui) altre malattie fisiche	
Presenza di malattie mentali	169	47	132	635
(di cui) depressione	111	35	86	441
(di cui) altre malattie mentali	79	17	64	266
Assenza di malattie mentali	186	76	132	2758

Table 5. Distribution by associated diseases (2020)

In 2020, of the total of 3,686 suicides recorded in Italy, 355 individuals had physical illnesses. Of these, 123 cases involved cancer, while 264 involved other forms of physical illness. However, the majority of suicides (3,393 cases) involved individuals without documented physical illnesses. With regard to mental illnesses, ISTAT records 804 suicides where these were present. Among these 804 victims, 552 cases concerned depression, while 345 concerned other 'mental illnesses'. On the other hand, 2,944 of the suicides involved individuals with no documented mental illness.

The analysis of these data highlights several significant trends. In 2020, most suicides occurred among people without documented physical or mental illness. However, these data underline the

importance of addressing mental and physical health issues in understanding the phenomenon in its entirety.

Analysis of suicide patterns by gender in Italy (2020)

In this section, we look at the data on suicide patterns in Italy in 2020, breaking down the information by sexual gender, as shown in table 6.

Modalità di suicidio	Genere		Totale
	Maschi	Femmine	
Avvelenamento	139	85	224
Impiccagione e soffocamento	1502	274	1776
Annegamento	91	46	137
Arma da fuoco e esplosivi	371	12	383
Fuoco e oggetti molto caldi	27	3	30
Oggetti appuntiti	54	17	71
Precipitazione	476	253	729
Scontro con veicolo	66	22	88
Altro o non specificato	219	91	310
Totale	2945	803	3748

Table 6. Distribution by mode and gender

This analysis provides a detailed perspective on the different suicide modes used, with a focus on the differences between men and women. In the following, the modes of suicide are analysed according to gender:

- Poisoning: in 2020, 224 suicides were committed by poisoning. Of these, 139 involved male individuals (62%) and 85 female individuals (38%).
- Hanging and suffocation: this mode represents the most common method of suicide, with 1,776 cases recorded. The vast majority of these (1,502 cases, 84.6%) involved males, while 274 cases involved females (15.4%).
- Drowning: in 2020, 137 suicides were committed by drowning. Of these, 91 (66.4%) involved male individuals and 46 (33.6%) female individuals.
- Firearms and explosives: this modality was used in 383 cases of suicide. Most of the cases (371, 96.8%) involved males, while only 12 (3.2%) involved females.
- Fire and very hot objects: 30 suicides were committed through the use of fire and very hot objects. Of these, 27 (90%) involved male individuals and 3 (10%) female individuals.

- Pointed objects: this modality was used in 71 cases of suicide. Most of the cases (54, 76%) involved males, while 17 (24%) involved females.
- Precipitation: this is the method chosen by 729 suicides in 2020. Of these, 476 (65.3%) involved male individuals and 253 (34.7%) female individuals.
- Vehicle collision: this modality was used in 88 cases of suicide. Of these, 66 (75%) involved male individuals and 22 (25%) female individuals.
- Other or unspecified: 310 suicides were classified as 'other or unspecified'. Of these, 219 (70.7%) involved male individuals and 91 (29.3%) female individuals.

From these data, we observe a number of characteristics: first of all, the more male than female tendency towards suicide is confirmed. In fact, 78.6% of suicides concern the male gender, while 21.4% concern the female gender. It is not surprising, therefore, that for each method used for suicide, the male gender has more victims than the female gender. However, in methods such as precipitation, drowning and, above all, poisoning, the range narrows significantly. This, except for the case of precipitation, where the search for death is particularly decisive, indicates, once again, that the issue of body preservation remains central for the female gender compared to the male gender, which in fact is hugely more affected by methods such as road crashes, the use of fatal burns, firearms, explosions and hanging.

In general terms, hanging and suffocation emerged as the most common methods, followed by precipitation and the use of firearms and explosives. Almost one in two suicides is by hanging and suffocation (among men this mode rises to 51.3 per cent of cases) and in about one in five cases precipitation is used. Among women, this mode rises to 31.9 per cent of cases, close to the proportion of hanging and suffocation cases (34.6). Among men, the use of firearms and explosives is also high, accounting for 12.7 per cent of cases, while among women suicides due to poisoning are frequent (10.7 per cent).

Suicide modes and associated diseases

This section relates data on suicide patterns and the presence or absence of mental and physical illness in Italy in 2020. Following the ISTAT report, as well as the structure of the presentation of data on the methods analysed in the previous section, we try to understand how these variables interact.

Table 7 provides a detailed analysis of suicide patterns when there is the presence of mental illness and in cases where there is the presence or absence of physical illness.

Modalità di suicidio	Condizioni di salute		Totale
	Malattie mentali presenti e malattie fisiche assenti	Malattie mentali presenti e malattie fisiche presenti	
Avvelenamento	67	81	148
Impiccagione e soffocamento	276	341	617
Annegamento	19	22	41
Arma da fuoco e esplosivi	27	35	62
Fuoco e oggetti molto caldi	4	6	10
Oggetti appuntiti	5	12	17
Precipitazione	160	198	358
Scontro con veicolo	9	9	18
Altro o non specificato	68	100	168
Totale	635	804	1439

Table 7. Suicide modes when mental illness is present

Among those with mental illnesses, net of the presence of physical illnesses, hanging and suffocation are confirmed as the most common mode of suicide, with a total of 617 cases, followed by precipitation with 358 cases. The least frequent suicide modes among those with mental illnesses are fire and very hot objects (10 cases) and sharp objects (17 cases) and collisions with vehicles (18 cases).

Among those with physical illnesses, hanging and suffocation remain the most frequent mode of suicide, with 341 cases, followed by precipitation with 198 cases (representing, for both modes, 55% of those who used this method, leaving 45% for those without physical illnesses). The least frequent modes of suicide using these categories are, on the other hand, those related to the use of fire and very hot objects (6 cases, 60%), collision with other vehicles (9, although we note that this is the same number as for those using the same method, but who do not present organic pathologies) and the use of sharp objects (12 cases out of a total of 17, representing 70% within the same mode). A further element that deserves attention is organic pathologies as risk factors. In fact, net of the presence of conditions of mental suffering, those with physical illnesses account for 56% of those who committed suicide.

Table 8 provides a detailed analysis of suicide patterns when there is an absence of mental illness and when there is the presence or absence of physical illness.

Modalità di suicidio	Condizioni di salute		Totale
	Malattie mentali assenti e malattie fisiche presenti	Malattie mentali assenti e malattie fisiche assenti	
Avvelenamento	24	119	143
Impiccagione e soffocamento	37	1398	1435
Annegamento	8	107	115
Arma da fuoco e esplosivi	23	325	348
Fuoco e oggetti molto caldi	6	18	24
Oggetti appuntiti	9	50	59
Precipitazione	49	482	531
Scontro con veicolo	1	78	79
Altro o non specificato	29	181	210
Totale	186	2758	2944

Table 8. Suicide modes when there is an absence of mental illness

In the absence of mental illness, hanging and suffocation account for an impressive 1,435 cases, followed by precipitation with 531 cases. Suicide by gunshot or use of explosives is also significant, with 348 cases. The least frequent suicide modes in the absence of mental illness are the use of fire and very hot objects (24 cases), the use of sharp objects (59 cases) and collisions with vehicles (79 cases).

This table shows a very interesting fact: when there is no overt psychopathological condition present (since those who commit suicide do so out of a total lack of hope for the future and experiencing the lack of difference between life and death), suicide is carried out in great prevalence by those who do not have organic pathologies, approaching 94% of the total quota.

The large numerical discrepancy between those who have organic pathologies and those who do not, certainly indicates that the latter represent a larger percentage of the population, but also that they have unquestionably greater capacities to use certain methods of suicide (e.g. suicides by reason of driving collisions were 99% committed by tempters who had no organic pathologies, by hanging and suffocation 97.5%, and those following the use of firearms or explosives 93%, the same percentage as for drowning).

Table 9 presents the patterns of suicide disregarding the presence or absence of psychopathologies and factoring in organic health status.

Modalità di suicidio	Condizione di salute		Totale
	Malattie fisiche presenti trascurando il dato della salute mentale	Malattie fisiche assenti trascurando il dato della salute mentale	
Avvelenamento	38	186	224
Impiccagione e soffocamento	102	1674	1776
Annegamento	11	126	137
Arma da fuoco e esplosivi	31	352	383
Fuoco e oggetti molto caldi	8	22	30
Oggetti appuntiti	16	55	71
Precipitazione	87	642	729
Scontro con veicolo	1	87	88
Altro o non specificato	61	249	310
Totale	355	3393	3748

Table 9. Suicide mode when there is absence or presence of organic disease

Again, the number of suicides by hanging and suffocation are in the vast majority, with 1,776 cases, followed by precipitation with 729 cases. In third position, the figure of suicides by gunshot or use of explosives is not surprising, with 383 cases. The least frequent suicide modes, again, are the use of fire and very hot objects (30 cases), the use of sharp objects (71 cases) and collisions with vehicles (88 cases).

The frequency of major morbid states is higher with increasing age and in women (the proportion of suicides with associated morbidity is 27% in women and 16% in men).

The increase in all values (except for the figure for collisions with vehicles, in the case of the presence of organic pathologies) indicates that the presence of mental pathologies is a risk factor to be paid attention to.

Using all the information reported by the physician about the morbid picture of persons who committed suicide makes it possible to provide a quantitative measure of deaths by suicide with the presence of a major illness. For each death certificate, the morbid entities that provide an indication of the presence of a major illness (physical or mental) were identified. ISTAT reports that the results document, in a non-negligible proportion of cases, a poor physical or mental condition that may have influenced the choice to commit suicide; however, the associations found cannot be tout-

court interpreted as a direct measure of the causal relationship between the presence of the illness and the act of suicide.

Levels of education

Table 10 presents a complex and significant picture of the relationship between the level of education and the number of suicides recorded in different areas of Italy.

Territorio	Titolo di studio				Totale
	Licenza elementare o nessun titolo	Licenza di scuola media	Diploma	Laurea o diploma universitario	
Italia	1136	1464	846	240	3686
Nord-ovest	310	453	266	90	1119
Nord-est	272	384	214	76	946
Centro	256	261	162	32	711
Sud	182	213	113	30	538
Isole	116	153	91	12	372
Eestero	21	15	12	6	54
Non indicato	4	2	1	1	8

Table 10. Distribution of suicides in 2020 in Italy, by geographical areas and educational levels

In general, it can be seen that Italy has a total of 3,686 suicides and that, when foreign data and the few cases of missing data are added, this brings the total to 3,748 suicides. The distribution of these suicides varies considerably according to educational level. The group of suicides with 'Primary School Certificate or no qualification' has the highest number of suicides, amounting to 1,136. This might suggest that those with a lower level of education or no formal training may be exposed to greater risk factors. On the other hand, the number decreases as the level of education increases, with university graduates representing the lowest number, with 240 suicides in 2020.

Geographically, as we have seen, the North-West region stands out with 1,119 suicides, followed closely by the North-East region with 946. While these regions have a high number of suicides in absolute terms, it would be interesting to examine these figures in relation to their total population to get a clearer picture of the prevalence. Central and Southern Italy show slightly lower numbers with 711 and 538 suicides respectively. The Islands, which include both Sicily and Sardinia, show a total of 372 suicides, a number that, considering their population, could be the subject of further investigation.

Marital status

Table 11 underlines the importance of marital status as a potentially influential factor in the distribution of suicides in Italy, with data referring to 2020.

Territorio di residenza	Stato civile				Totale
	Nubile/celibe	Coniugata/o o separata/o legalmente	Divorziata/o	Vedova/o	
Italia	1399	1656	211	420	3686
Nord-ovest	414	504	70	131	1119
Nord-est	374	404	63	105	946
Centro	267	308	41	95	711
Sud	180	277	23	58	538
Isole	164	163	14	31	372
italiani all'estero	36	17	1	0	54
Non indicato	5	3	0	0	8

Table 11. Distribution of suicides in 2020 in Italy, by geographical area and marital status

Analysing the different marital status categories, it emerges that the highest number of suicides is associated with married or legally separated persons, which amounts to 1,656 suicides. This figure may suggest the need for further analysis concerning marital dynamics or the consequences of legal separation, which could play a significant role in the suicide phenomenon. On the other hand, the number of suicides among single men and women is slightly lower, but still high, at 1,399 cases.

A further figure provided by ISTAT is the number of widowers who have decided to end their lives, which records a total of 420 deaths by suicide. The loss of a spouse may be a significant stress factor, leading to feelings of loneliness and despair.

Geographically, the trends observed in the previous table are maintained. The North-West area shows a high number of suicides in all marital status categories, with a particular peak among the married or legally separated. The same applies to the North-East area. While the South and the Islands show lower figures overall, it is noteworthy that in the South the number of married or legally separated people committing suicide only slightly exceeds that of single/unmarried people.

Suicide figures among Italians abroad remain low, but this may reflect the overall size of this population. Once again, some cases were not specified by territory of residence, signalling the need for further improvement in data collection.

Months of death

Table 12 shows an overview of the last six years of recorded suicide cases in Italy, broken down by month in which the suicide act was committed.

Mese di decesso	Anno						Totale
	2015	2016	2017	2018	2019	2020	
Gennaio	330	300	322	320	283	310	1865
Febbraio	300	294	317	255	294	291	1751
Marzo	358	332	348	326	343	281	1988
Aprile	331	328	308	353	346	298	1964
Maggio	373	363	386	383	339	399	2243
Giugno	393	369	392	353	359	330	2196
Luglio	385	371	370	339	339	382	2186
Agosto	359	330	340	301	303	338	1971
Settembre	323	328	325	324	301	300	1901
Ottobre	290	321	266	300	284	292	1753
Novembre	301	284	299	294	274	283	1735
Dicembre	328	284	286	272	294	244	1708
Anno	4071	3904	3959	3820	3759	3748	23261

Table 12. Distribution of suicides in the period 2015-2020 in Italy, by month of death

The description of the data shows that the phenomenon of suicide has varied over time on both a monthly and annual basis.

The total number of suicides was highest in 2015, with a total of 4,071 cases. Since then, there has been a general downward trend, with the lowest reached in 2020 with 3,748 cases. However, the intermediate years show fluctuations, such as the small increase in 2017. These assessments can be made net of the difficulties in data collection, which, although stable over time, do not allow us to make a precise judgement. Another element that is worth mentioning concerns crises: in 2020, Italy, to a greater extent than the rest of Europe and much of the world, suffered the powerful first wave of the Covid-19 pandemic. Nevertheless, it is not possible for us to make a detailed analysis, as data for the years after 2020 are missing. We do know, however, that hospital departments and organisations dealing with suicide have raised alarms about the increase in cases during and after the impact of Covid-19.

It is well known that the number of deaths by suicide does not increase in times of crisis; on the contrary, it falls. The moment of increase in suicides generally occurs at the end of crisis periods.

A few examples may help to explain this particular feature, such as the economic crisis that took place in the 19th century, a crisis of such magnitude and extension in time that it earned it the name of the Long Depression. Between 1870 and 1880, Italy was also hit by a deep economic crisis, which led to a significant increase in the suicide rate. It is interesting to note that the crisis had a marked agricultural character at first, and then an industrial one. It led to a lasting phase of deflation that triggered a period of massive redundancies and wage reductions. These characteristics, together with the rise in the price of flour and grain, basic necessities, had an impact on people's mental health, with disastrous consequences (Morselli, 1879). A similar phenomenon was observed during the economic crisis of the last century, starting in 1929 with the Great Depression. It is not the purpose of this text to analyse in detail the crises we are discussing, but we can say that after an expansive economic phase that followed the Great War, a contractionary phase occurred in the United States. In the expansionary period, high productivity allowed wages and prices to be maintained, confidence in the expansionary environment favoured investment but, over time, there was no correspondence between this expansion and purchasing power. The consequence was a recessionary phase that saw a reduction in demand and productivity, with serious effects on incomes and, therefore, on the quality of life of households. Interestingly, there was a reduction in deaths from other causes, but what increased was the suicide rate (Stuckler et al., 2012). Suicide again followed the trend of the unemployment rate. More recently, the economic crisis that erupted in 2007, the Great Recession due to the financial crisis linked to subprime mortgages in the USA, triggered in 2008 what was regarded as the most severe recession to hit Europe since the Second World War, comparable in some respects to the Great Depression of the 1930s. The suicide rate for men aged 25-64 involved in employment began to rise in 2008, after a period of significant decline between 1994 and 2007, and the suicide rate in 2010 was 12% higher than in 2006. At the same time, the suicide rate for women of all ages and for men under 25 and over 65 decreased (Pompili et al., 2014). It is interesting to note that the age group most affected was precisely the one most closely related to the world of work. What we certainly know, as reported by Istat (2016), is that suicide is the cause of death most directly influenced by economic crises (Romaniello, 2021).

Since the dawn of the Covid-19 health crisis, there was acute concern in Italy about the potential increase in suicide rates among the population. This concern stemmed from the realisation that the difficulties caused by the pandemic could increase the vulnerability of many people to mental health problems and suicidal behaviour. Elements such as fear of the virus, prolonged isolation, economic challenges, barriers in accessing health services, and the direct effects of Covid-19 on physical health were considered potential catalysts for this risk. In this regard, a study was conducted that

analysed the suicide phenomenon, highlighting several aspects related to the evolution of the pandemic (Grande et al., 2023).

The survey examined suicide mortality in Italy in 2020, comparing it with data from the pre-pandemic period, between 2015 and 2019. This analysis showed, for the year 2020, a decrease in suicide rates, although this was not statistically significant. Males saw a decrease of 2.8 per cent while females saw a more pronounced decrease of 7.7 per cent. This trend was accentuated in the months when the pandemic was most intense, between March and December, with a decrease of 3.3% for males and 9.3% for females.

When looking at geographical variations, it emerged that the central and southern regions and the islands recorded a decrease in suicide mortality in 2020, while in northern areas a slight increase was noted, particularly among males from May onwards.

A reflection on the trend in 2020 leads one to consider that several factors may have had an impact during the early months of the pandemic. Community support for at-risk individuals, the strengthening of family ties as families were closer together during lockdowns, the alleviation of daily stress during these periods, and a feeling of collective solidarity may have exerted a protective effect on the population. However, it is crucial to emphasise that the analysis is based only on the first ten months after the outbreak of the pandemic and, therefore, reflects the immediate effects on suicide mortality. We cannot yet fully understand the medium- and long-term repercussions of pandemic-related stressors, making continuous monitoring of suicide trends in the months and years to come crucial.

Going back to the data in the table, analysing the monthly data, there is no clear seasonality in the suicide phenomenon, except for the already known indication that suicides tend to increase in the first half of the year and decrease in the second. The month of June often has the highest or among the highest numbers of suicides, especially in 2015, 2016 and 2018. Similarly, May and July show high numbers in some years. In contrast, October and December tend to have slightly lower figures, especially December in 2020 with only 244 cases.

Some months showed significant fluctuations from one year to the next. February 2018 recorded only 255 suicides, in sharp contrast to 317 in 2017 and 294 in 2019. Similarly, April 2018 saw an increase from the previous year, with 353 cases compared to 308 in 2017.

Citizenship

Table 13 shows the evolution of suicides in Italy between 2015 and 2020, highlighting the link with the victims' nationality.

Cittadinanza	Anno						Totale
	2015	2016	2017	2018	2019	2020	
Italia	3827	3685	3701	3554	3515	3510	21792
Europa eccetto Italia	156	129	148	126	128	130	817
Africa	35	20	47	58	35	42	237
Asia	28	32	23	40	34	34	191
America settentrionale	2	5	6	3	3	3	22
America centro-meridionale	10	13	15	11	21	10	80
Oceania	0	0	0	0	2	0	2
Non Indicato	13	20	19	28	21	19	120
Totale	4071	3904	3959	3820	3759	3748	23261

Table 13. Distribution of suicides in the period 2015-2020 in Italy, by citizenship

It is clear that the majority of suicides involve Italian citizens, and the motivation is indeed implicit, that is, the number of people with Italian citizenship living in Italy compared to the other nationalities of Italian residents is significantly higher. In 2020, out of a total of 3,748 suicides, 3,510 were of Italian citizenship. Interestingly, despite small annual fluctuations, the number of suicides among Italian citizens has decreased slightly over the years, from 3,827 in 2015 to 3,510 in 2020.

Outside of Italian citizenship, people from other European countries seem to be the most affected, with numbers remaining relatively stable over time. For example, while 129 suicides were recorded from this category in 2016, the number increased slightly to 148 in 2017, and then stabilised at around 130 in 2020. Again, this figure is not surprising, as 50 per cent of foreigners living in Italy come from other European countries.

Looking at the continents of origin, in fact, we discover that 50% come from other European countries (more than 2.6 million), most of them from the European Union (30%, as opposed to 20% from outside the EU). 22% come from Africa (1,140 million), 20% from Asian countries (1,112 million) - half of which from the Indian subcontinent - and 7% from the American continent (380 thousand).

Looking at the data on suicide by citizenship relative to other continents, we observe for Africa a peak of 58 suicides in 2018, followed by a decrease to 42 in 2020. Asia has shown a similar trend over the years, with an increase to 40 victims in 2018 and then a stabilisation to 34 in 2020. As for

the Americas, the numbers remained rather low and stable, with North and Central and South America showing small variations over the years. Surprisingly, in 2019, there were two suicides among Oceania nationals, but the number returned to zero the following year.

Finally, the 'Not Indicated' category has seen smaller variations over the years, ranging between 13 and 28 suicides per year.

The next section will deal with follow-up work, that is, initiatives to intervene in the suicide phenomenon. In other words, global suicide prevention initiatives, from World Suicide Prevention Day to National Suicide Prevention Strategies, but also the fundamental importance of mass communication.

GLOBAL SUICIDE PREVENTION INITIATIVES

As part of global efforts to combat suicide, World Suicide Prevention Day (WSPD) emerges as a key initiative, established to raise awareness and mobilise preventive action against suicide. The International Association for Suicide Prevention (IASP), in collaboration with the World Health Organisation (WHO), launched this day in 2003, dedicating an annual moment to reflection, awareness-raising and collective commitment in the fight against suicide.

In parallel, national suicide prevention strategies represent another key pillar in the fight against this silent epidemic. Recognising the complexity and multifactorial nature of suicide, these strategies are based on a holistic and multidisciplinary approach, aiming to reduce suicide rates through a mix of interventions including mental health promotion, support for people at risk, training of health professionals and public awareness.

A further element considered to be fundamental in counteracting the suicide phenomenon concerns mass communication, since, as has already been explained above, the lack of attention paid to the dissemination of news concerning suicide, especially of well-known personalities, causes a significant increase in the number of suicides in the days following the dissemination of information concerning such suicide. This phenomenon, which simulates a contagion effect, is known as the 'Werther effect'.

In this second part, we aim to examine the evolution and effectiveness of national suicide prevention strategies and the impact of the WSPD. Through the analysis of global initiatives and country case studies, it aims to paint a picture of best practices, challenges and future opportunities in suicide prevention. The aim is to provide valuable insights for future policies and programmes, with the intention of contributing to a significant reduction in the number of suicides globally. The last substantive section of the paper, on the other hand, will deal with the elements of suicide prevention with reference to mass communication.

World Suicide Prevention Day

World Suicide Prevention Day (WSPD), observed on 10 September each year, is a global initiative to promote awareness and action to prevent suicide, a public health problem that knows no geographical or cultural boundaries. The establishment of WSPD is a joint effort of the International Association for Suicide Prevention (IASP) and the World Health Organisation

(WHO), with the support of other non-governmental organisations and communities committed to the fight against suicide.

The decision to establish the WSPD dates back to 2003, when the IASP, under the leadership of key figures such as the Italian suicidologist Diego De Leo, recognised the urgent need to dedicate a day, internationally, to suicide prevention. This day aims to provide an annual opportunity to focus the world's attention on a problem perceived as repulsive, surrounded by stigma and silence. Since its inception, WSPD has grown in resonance, becoming a catalyst for prevention initiatives in over 60 countries.

The initiatives of the WSPD are manifold and seek to pursue the following objectives:

- raise awareness that suicide is preventable;
- stimulate open discussion on suicide and its complex dynamics, thus reducing stigma;
- promote effective, evidence-based prevention strategies;
- to give a voice to suicide survivors, people who have lost loved ones to suicide, and anyone who has been touched by this tragedy.

Activities promoted during this day vary widely and may include public lectures, educational events, commemorations, social media campaign launches, and the distribution of information materials. These initiatives are often organised with the involvement of governments, health organisations, communities, and individuals, reflecting a collaborative and inclusive approach to suicide prevention.

The impact of the WSPD has been significant, helping not only to raise global awareness of suicide issues but also to encourage the development of national and local prevention policies. WSPD's role in breaking the silence that often surrounds suicide has been important, encouraging people to speak out, share their experiences, and seek help. In addition, the day strengthened support networks for those affected by suicide, providing resources and comfort.

WSPD is considered a crucial component of global suicide prevention efforts, emphasising the importance of collective action, education, and solidarity. Through its message of hope and community, the WSPD continues to inspire a worldwide movement towards greater understanding and prevention of suicide.

National Suicide Prevention Strategies

The phenomenon of suicide represents one of the most complex and painful challenges to contemporary societies, touching the lives of individuals, families and entire communities. In the context of a growing recognition of the importance of mental health and individual well-being as foundations of a healthy community, the need for effective and coordinated suicide prevention strategies is emerging. The National Suicide Prevention Strategies are ambitious responses to this need, proposing a holistic and multi-sectoral approach that aims to reduce suicide rates through the joint efforts of government institutions, the health sector, non-governmental organisations, local communities and individuals. These strategies are key to establishing a framework within which organisations, communities and individuals can work synergistically to prevent suicide. The objective is twofold: to reduce risk factors associated with suicide and to enhance protective factors among vulnerable populations. This includes initiatives to raise awareness about the warning signs of suicide, improve access to care for people in crisis, develop education and training programmes for professionals and volunteers, and promote awareness-raising campaigns to combat mental health-related stigma.

An effective national suicide prevention strategy is based on several key pillars, including:

- mental health promotion and prevention of mental illness: actions aimed at improving general mental health and preventing the occurrence of conditions that can lead to suicide;
- Early detection and intervention: early identification of people at risk of suicide and early intervention to provide them with the necessary support;
- access to care services: ensuring that those who are at risk of or have attempted suicide have easy access to mental health care services;
- Reducing access to means of suicide: implementation of measures to limit access to instruments commonly used in suicide, such as firearms or poisons;
- support to survivors and affected families: providing assistance and support to people affected by the suicide of a family member or friend.

The United States, in its National Strategy for Suicide Prevention includes four key strategic directions:

1. Promoting the wellbeing of individuals, families and communities: emphasises the importance of empowering individuals and communities to become autonomous in recognising and managing issues associated with mental health and suicide risk. This

directorate is committed to disseminating knowledge through educational programmes aimed at the public, encouraging resilience on both an individual and collective scale, and alleviating the stigma associated with seeking psychological help.

2. Integration of preventive services in clinical and community settings: To incorporate suicide prevention actions within primary care services and community activities. The objective includes the provision of appropriate tools and specific training for professionals to facilitate early identification of and timely intervention with at-risk individuals.
3. Provision of treatment and support services: this aspect of the strategy aims to ensure that people affected by suicide, whether as survivors or as family members or friends, are provided with continuous, quality support. Therefore, the provision of lasting counselling and support services is envisaged.
4. Surveillance, research and evaluation activities: the last strategic direction emphasises the need to collect precise and reliable data on the suicide phenomenon and associated behaviour. The intention is to effectively guide and measure the impact of the prevention actions undertaken, through an ongoing commitment to research and evaluation analysis.

National strategies, therefore, are key elements in counteracting and reducing suicide. However, the effectiveness of these strategies has not yet been addressed. To begin with, the first model of an effective national strategy that has been presented in one country is presented: Finland.

Finland is a prime example of how a well-structured national approach can have a significant impact in reducing suicide rates. In the 1980s and 1990s, the country faced one of the highest suicide rates in Europe. In response, the Finnish health authorities launched a comprehensive national strategy that included training of health workers, public awareness campaigns, and improving access to care services. These efforts led to a substantial decrease in suicide rates in Finland, demonstrating the effectiveness of a coordinated, multifactorial approach. This multidimensional effort has included a number of initiatives focusing on education, early intervention, access to services and legislation, with the aim of reducing suicide rates throughout the country.

Key initiatives of the strategy included:

- training of health workers: implementation of training programmes to improve the ability of health workers to recognise and treat depression and suicidal behaviour;
- public awareness campaigns: launching awareness-raising campaigns to reduce the stigma associated with mental illness and encourage people to seek help;

- Restriction of access to means of suicide: adoption of legislative measures to restrict access to drugs commonly used in suicide attempts and improvement of security in places known for suicide acts;
- Community support and crisis services: development of accessible community support networks and crisis services to provide immediate assistance to people in need.

The combination of these strategies has led to significant results. Between the late 1990s and the early 2000s, Finland experienced a reduction in the suicide rate of around 30%, from more than 30 deaths per 100,000 inhabitants to around 20 (in the interesting Figures 1 and 2, Finland shows that it even achieved a truly remarkable reduction between 1990 and 2016, from almost 33 suicides per 100,000 inhabitants to just over 14). This decrease was particularly evident among middle-aged men, previously identified as the highest risk group (Ministry of Social Affairs and Health, Finland, 2001).

Figura 1 - Rapporto tra i tassi grezzi di suicidio nel 1990 e nel 2016, 224 paesi del mondo

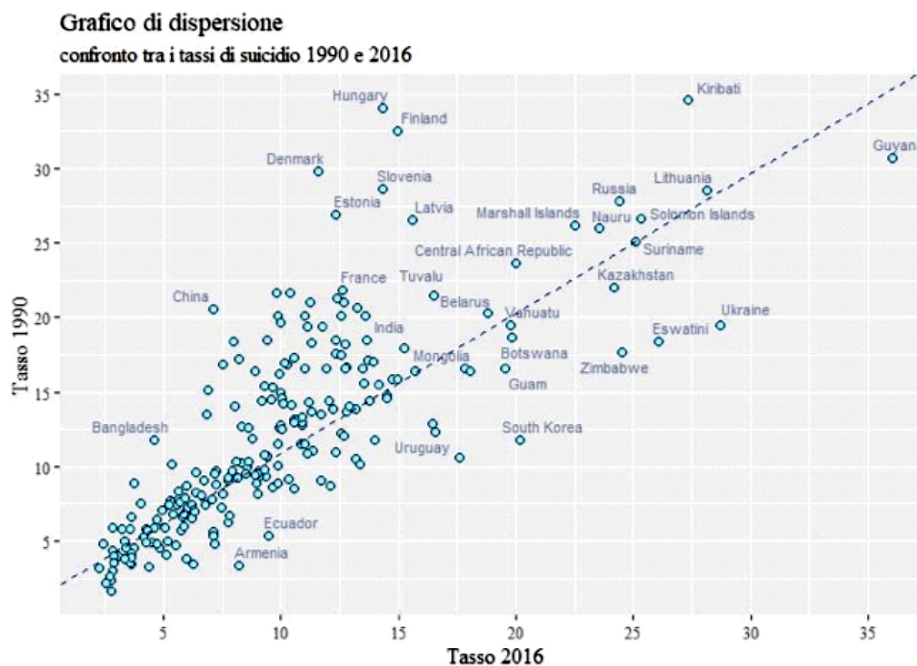
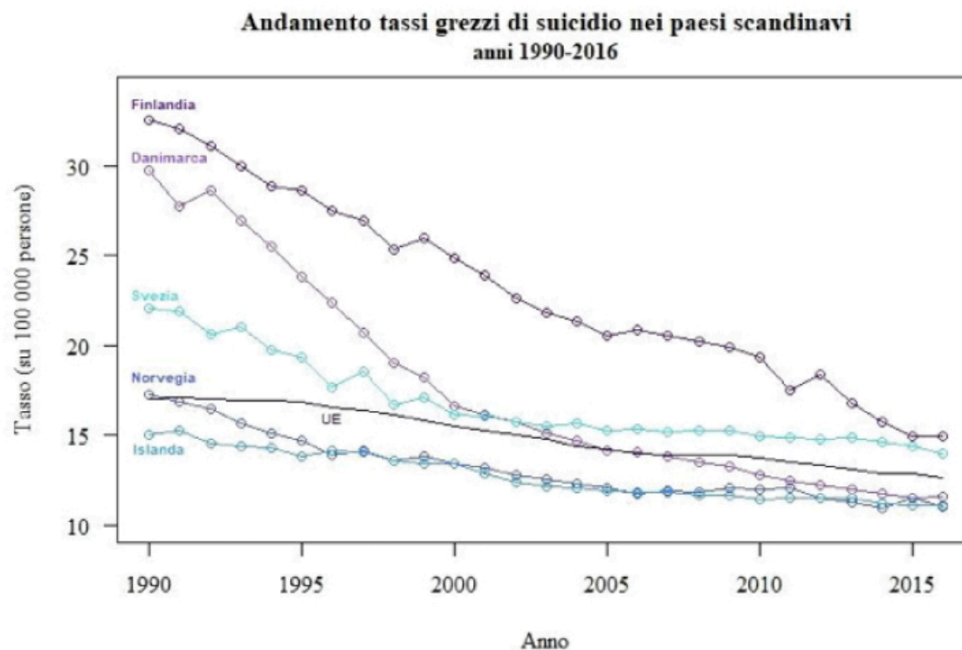


Figura 2 - Serie storiche tassi grezzi di suicidio, paesi scandinavi. Periodo 1990-2016, dati dell'Institute for Health Metrics and Evaluation



Despite successes, national suicide prevention strategies face several challenges, including the need for adequate resources, the difficulty of reaching at-risk populations and overcoming the stigma associated with mental illness and suicide. A significant opportunity lies in the use of digital technologies and social media platforms to improve awareness and access to support, as well as the adoption of community-based approaches that actively involve people in the prevention process.

National suicide prevention strategies are essential to effectively address the problem of suicide at the population level. Based on scientific evidence and practical experience, these strategies require ongoing commitment and collaboration between governments, health professionals, communities and individuals. Success in reducing suicide rates depends on the ability to implement holistic and inclusive interventions, supported by adequate resources and strong political will.

The effectiveness of national suicide prevention strategies depends on many factors, including their ability to address the complex and multifactorial causes of suicide. This section reviews the available evidence on the effectiveness of these strategies and provides recommendations for improving future prevention efforts.

Recent studies emphasise the importance of integrated, evidence-based national strategies for suicide prevention. For example, Mann et al. (2005) discussed the effectiveness of various suicide prevention strategies, emphasising the importance of treating depression and controlling access to

suicide means as key interventions. Furthermore, Zalsman et al. (2016) conducted a systematic review that confirmed the effectiveness of multi-level approaches to suicide prevention, including public education and training of health professionals.

A specific study demonstrating the effectiveness of physical barriers in suicide prevention was conducted by Pirkis et al. (2013), who analysed the impact of installing barriers on bridges and other high-risk locations and found a significant reduction in suicide attempts at such sites.

With regard to the training of health professionals, Hegerl et al. (2009) pointed out that specific training programmes can improve the ability to recognise and manage mood disorders and suicide risk, leading to a reduction in suicide rates in areas where these programmes have been implemented.

Hawton, K., & van Heeringen, K. (2009) provided a comprehensive overview of suicide risk factors in their study 'Suicide', published in *The Lancet*. This work emphasises the importance of prevention strategies including restricting access to the means of suicide, treatment of people with mental disorders and public awareness as key components of an effective approach to suicide prevention.

Cavanagh, J. T. O., Carson, A. J., Sharpe, M., & Lawrie, S. M. (2003) explored psychological autopsy studies of suicide, highlighting psychological and psychiatric risk factors in their article 'Psychological autopsy studies of suicide: a systematic review'. The review illustrates the complexity of suicidal behaviour and the need for targeted interventions based on an in-depth understanding of individual risk factors.

Gunnell, D., & Frankel, S. (1994), in their article "Prevention of suicide: aspirations and evidence", discussed the basis and effectiveness of suicide prevention strategies. This study emphasises the critical need to base prevention policies on a solid foundation of scientific evidence, highlighting the gap between the aspirations of prevention strategies and what is supported by concrete evidence.

Nock, M. K., Borges, G., Bromet, E. J., Cha, C. B., Kessler, R. C., & Lee, S. (2008) provided a comprehensive epidemiological analysis of suicidal behaviour and its risk factors in their study 'Suicide and suicidal behaviour'. The work emphasises the importance of an in-depth understanding of the causes of suicide in order to develop effective prevention strategies.

These studies provide concrete evidence of the effectiveness of well-planned, evidence-based suicide prevention strategies. They emphasise the importance of a multi-sectoral approach that

includes targeted interventions, training of health professionals, restrictions on access to suicide means, and support for survivors.

However, research also shows that not all prevention strategies are equally effective, and the implementation and maintenance of prevention programmes require substantial resources and a long-term commitment from governments and public health agencies. Furthermore, the stigma associated with mental illness and suicide remains a significant barrier to the effectiveness of prevention, limiting people's willingness to seek help and discuss these issues openly.

Based on the analysis of the effectiveness of suicide prevention strategies, recommendations can be outlined to create and improve national suicide prevention strategies:

- Implementation of evidence-based interventions: national strategies should continue to incorporate and adapt interventions that have demonstrated effectiveness in reducing suicide rates, customising them to fit specific cultural and social contexts;
- holistic and multi-sectoral approaches: suicide prevention requires the collaboration of different sectors, including health, education, justice and media. A coordinated approach can improve the identification and support of people at risk;
- stigma reduction: public awareness campaigns and training can help reduce the stigma associated with mental illness and suicide by encouraging more people to seek help;
- Support for survivors: strategies should include specific services to support those affected by suicide, recognising the traumatic impact of such experiences and providing resources for recovery;
- investment in research and surveillance: increased funding for suicide research can help identify causes, trends and effective interventions, while improved surveillance systems can provide timely and accurate data to guide prevention planning.

National suicide prevention strategies have the potential to significantly reduce the number of lives lost to suicide. However, their success depends on continued commitment to investing in evidence-based interventions, promoting access to treatment, reducing stigma and supporting research. A comprehensive and coordinated approach, involving all levels of society, is essential to effectively address this complex public health problem.

EFFECTIVENESS OF NATIONAL SUICIDE PREVENTION STRATEGIES

The analysis of national suicide prevention strategies is critically important, as it offers the possibility of assessing the effectiveness of diverse, public policy-based approaches in reducing suicide rates.

The World Health Organisation (WHO) recognises suicide prevention as a global health priority, emphasising the importance of evidence-based interventions that can be implemented at various levels, from the local community to the national context. However, evaluating the effectiveness of such strategies presents significant challenges, related to both the availability and reliability of data and the complexity of the socio-economic and cultural dynamics that influence suicide.

In 2002, an estimated 877,000 people lost their lives to suicide, highlighting the urgent need for effective prevention strategies. Despite the existence of national suicide prevention plans in some developed nations, such plans are rarely systematically evaluated for their effectiveness. The following paragraphs review some studies that have moved in this direction, with interesting results.

The study by Mann et al. 2005

Mann et al. (2005), were among the first to conduct a systematic review to examine the effectiveness of specific preventive interventions against suicide. Through an in-depth analysis of studies published between 1966 and June 2005, the authors sought to identify and evaluate the impact of various prevention strategies, ranging from public education campaigns and vocational training, to screening of at-risk individuals, treatment of psychiatric disorders, restriction of access to lethal means, and responsible media reporting on suicide.

In this context, Mann et al. (2005) provide a crucial overview of the available evidence, helping to outline recommendations for future prevention programmes and research. Their study highlights the importance of educating physicians in the recognition and treatment of depression and restricting access to lethal means as proven methods for reducing suicide rates. Other strategies, including public education and screening programmes, require further testing to confirm their effectiveness.

The implication of this review work is clear: to optimise the use of the limited resources available, it is essential to determine which components of suicide prevention programmes are effective in reducing suicide rates and suicide attempts. By understanding and applying the lessons learned from

studies such as Mann et al.'s (2005), we can move closer to the goal of significantly reducing the number of lives lost to suicide.

The present study uses a systematic literature review to examine and evaluate the effectiveness of various preventive strategies against suicide. The methodology adopted by Mann et al. (2005) follows a rigorous research protocol, outlined below, to ensure maximum transparency and replicability.

Relevant publications were identified by electronic searches in the MEDLINE, Cochrane Library and PsychINFO databases, using a combination of search terms related to suicide prevention. The temporal selection of studies ranged from 1966 to June 2005, inclusive. The studies included in the review were those that evaluated preventive interventions in the main areas of interest: education and awareness for both the general public and professionals; screening tools for at-risk individuals; treatment of psychiatric disorders; restriction of access to lethal means; and responsible media coverage of suicide.

Data were extracted focusing on the primary outcomes of interest: suicidal behaviour (completed, attempted, ideation), intermediate or secondary outcomes (help-seeking behaviour, identification of at-risk individuals, rates of prescription/use of antidepressants, referrals) or both. The articles included were those reporting on completed and attempted suicides, and suicidal ideation; or, where applicable, intermediate outcomes including help-seeking behaviour, identification of at-risk individuals, treatment entry and antidepressant prescription rates. Due to the heterogeneity of study populations and methodologies, it was not possible to conduct a formal meta-analysis; therefore, a narrative synthesis was presented.

All studies underwent a critical review to assess the methodological quality and reliability of the results. This process involved experts from 15 countries, who reviewed the studies to ensure that the conclusions were based on robust and reliable evidence.

The data synthesis aimed to identify interventions with solid evidence of effectiveness in suicide prevention, as well as those areas where further research is needed. In this context, distinctions were made between interventions with direct evidence of effectiveness, such as educating physicians and restricting access to lethal means, and those requiring further evaluation.

The systematic review by Mann et al. (2005) explored various suicide prevention strategies, leading to significant results that highlight the effectiveness of specific interventions. By integrating quantitative data, we can provide a more detailed view of the impact of these strategies.

Training of doctors, screening and public education programmes

The intervention of training general practitioners, especially in the recognition and treatment of depression, has proven to be particularly effective. Studies included in the review revealed that this approach led to a 22%-36% increase in the prescription of antidepressants in the intervention areas, which correlated with a decrease in suicide rates in regions such as Hungary and Slovenia, where specific training programmes for general practitioners were implemented.

Screening-based interventions for the early identification of at-risk individuals have not shown uniformly positive results, with some studies suggesting a potential benefit in linking identified at-risk individuals with appropriate treatment. Pharmacological therapies, particularly the use of antidepressants, have shown a correlation with reduced suicide rates in several populations, although further investigation is needed to fully understand the implication of these findings.

Results regarding the effectiveness of public education programmes have been mixed. Although some initiatives have led to increased awareness of mental disorders and suicide prevention, the direct impact of such programmes on suicide rates and suicidal behaviour has not been universally confirmed, indicating the need for further research to evaluate the effectiveness of specific information campaigns.

Restricting access to lethal means and media considerations

The strategy of restricting access to lethal means has shown a significant impact, with notable examples including gun control legislation in countries such as Canada and Australia, which has led to a reduction in firearm suicides. The review found that in some regions, stricter gun control laws were associated with a reduction in suicide rates of up to 10%.

Analysis of the impact of media coverage on suicides has underlined the importance of responsible guidelines for reporting suicide events. Specific studies have shown how sensational media coverage can have a contagion effect, while careful and well-managed media strategies can contribute to suicide prevention.

Conclusion of Results

The systematic review showed that education of physicians and restriction of access to lethal means are among the most effective strategies in suicide prevention. However, the need for further research became clear, especially with regard to the long-term effectiveness of public education

programmes, the optimisation of screening interventions and the role of the media in suicide prevention.

The systematic review conducted by Mann et al. (2005) represents a significant step in understanding the effectiveness of suicide prevention strategies. The results highlight two key areas of intervention - physician education and restriction of access to lethal means - as the most promising for reducing suicide rates. These results support the idea that targeted, evidence-based interventions can have a substantial impact in the fight against suicide. However, several critical considerations emerge that require further reflection.

The study by Matsubayashi and Ueda, 2011

In a pioneering study, Matsubayashi and Ueda (2011) addressed these challenges by analysing the impact of national suicide prevention programmes in 21 Organisation for Economic Co-operation and Development (OECD) member countries between 1980 and 2004, using a fixed-effects estimator to examine statistically significant differences in suicide rates before and after the implementation of prevention programmes (Matsubayashi & Ueda, 2011). This research offered an opportunity to explore how various prevention strategies were adopted and what effects they had on suicide rates in different national contexts. Through a longitudinal analysis covering a time span of more than two decades, the authors provided valuable information on the effectiveness of suicide prevention policies, emphasising the importance of targeted approaches based on the demographic and cultural specificities of each country.

The objective of this section is twofold: firstly, to present a methodological and results summary of the Matsubayashi and Ueda study, providing an overview of suicide prevention strategies adopted globally; secondly, to discuss the relevance of these findings in the context of public health policies and future research in the field of suicide prevention. Through this analysis, we aim to highlight how a holistic, evidence-based approach can significantly contribute to the reduction of suicide worldwide, while highlighting the challenges and opportunities associated with suicide prevention in the 21st century.

Country selection and data analysis

The selection of countries for the study was based on the availability of reliable data on suicide rates and the documented presence of national suicide prevention programmes up to 2004. In particular, Finland, Australia, and New Zealand are among the countries that have introduced

national prevention programmes on the dates specified in the paper, with Finland starting its first national suicide prevention programme in 1992 .

To identify and rank national suicide prevention programmes, the authors used WHO monitoring surveys and other authoritative sources. This process made it possible to determine which countries had implemented documented national suicide prevention strategies, highlighting the importance of common themes such as public education, reducing access to the means of suicide, and improving access to mental health care.

The analysis faced significant methodological challenges, including the need to interpolate missing data for some years in some countries and the difficulty in determining the exact year when some national suicide prevention programmes began.

The analytical approach employed a statistical model, which assumes that suicide rates in each country are determined by a linear function of the presence of national suicide prevention programmes and other time-specific variables, such as macroeconomic and political conditions, and socio-demographic characteristics. Data analysis was conducted using a fixed effects estimator to test for statistically significant differences in suicide rates before and after the implementation of prevention programmes.

Results

The analysis by Matsubayashi and Ueda produced significant results concerning the impact of national suicide prevention programmes on suicide rates in the 21 OECD member countries examined. Using the fixed effects estimator for the period 1980-2004, the authors showed that the introduction of these programmes was associated with a significant reduction in suicide rates, with the effect being more pronounced among certain demographic groups.

In general, it was found that the introduction of national suicide prevention programmes led to an average decrease in suicide rates of 1.384 suicides per 100,000 people, a significant effect considering the average suicide rate of 21 per 100,000 (Matsubayashi & Ueda, 2011). This reduction highlights the effectiveness of nationally coordinated efforts.

Analysing suicide rates by age, it was found that prevention programmes had the most noticeable effect among the elderly (over 65 years) and the young (under 24 years), indicating that these initiatives may be particularly beneficial for these vulnerable groups. For example, among elderly men, suicide rates decreased by 3.457 per 100,000 after the introduction of prevention programmes.

It has also been observed that suicide prevention programmes tend to have a greater impact on male suicide rates than female suicide rates. This suggests the importance of considering gender differences when designing and implementing prevention strategies, as suicide rates among men have been significantly reduced following the adoption of national programmes.

The significant reduction in suicide rates among the young and the elderly, as well as the greater impact observed among males, raises important questions for the future development and optimisation of suicide prevention programmes. These results underline the need for targeted strategies that take into account the specific needs of different demographic groups in order to maximise the effectiveness of prevention initiatives.

The significant reduction in suicide rates among the elderly and the young underlines the effectiveness of interventions targeted towards these age groups. These results indicate the need for prevention strategies that specifically consider the needs of these groups, as evidenced by the particularly strong effect of prevention programmes on suicide rates among elderly men and young men of both sexes. Similarly, the greater impact of programmes on male suicide rates highlights the need to more effectively address gender issues in suicide prevention, potentially through initiatives that aim to overcome cultural barriers to accessing care for men.

In conclusion, the introduction of national suicide prevention programmes was associated with a significant decrease in suicide rates, confirming the importance of coordinated action at national level. These programmes showed variable effectiveness according to age and gender, indicating the need for targeted strategies that take into account the specificities of different demographic groups. The study emphasised the importance of a holistic, evidence-based approach to suicide prevention that takes into account the cultural, demographic and social specificities of each country.

The study by Zalsman et al. 2016

The systematic review led by Gil Zalsman and colleagues (2016), published in *The Lancet Psychiatry*, updated the evidence on the effectiveness of suicide prevention strategies up to 2014. This review evaluated seven main interventions: public and physician education, media strategies, screening, restricting access to the means to commit suicide, treatments (pharmacological and psychological), and support via the Internet or hotlines.

The work of Zalsman et al. represents an important step forward in the understanding of suicide prevention strategies, providing a solid basis for the development of national prevention programmes. In particular, robust evidence supports the effectiveness of restricting access to the means to commit suicide and the importance of pharmacological and psychological treatments of depression in suicide prevention.

The systematic review conducted by Zalsman et al. used a rigorous methodology to evaluate the effectiveness of suicide prevention strategies. The process included an exhaustive search of the PubMed and Cochrane Library databases, using a combination of terms related to suicide prevention. The search covered the period from 1 January 2005 to 31 December 2014, aiming to include studies published since the previous major review by Mann et al. in 2005 .

Seven main interventions were evaluated: public and physician education, media strategies, screening, restricting access to the means to commit suicide, pharmacological and psychological treatment, and support via the Internet or hotlines. Selected articles had to report primary outcomes of interest, such as suicidal behaviour (suicide attempts or suicidal ideation), as well as intermediate or secondary outcomes (seeking treatment, identification of at-risk individuals, prescription or use rates of antidepressants, or referrals).

A total of 1797 studies were identified, including 23 systematic reviews, 12 meta-analyses, 40 randomised controlled trials (RCTs), 67 cohort studies and 22 ecological or population-based surveys. Due to the heterogeneity of the study populations and methodologies used, it was not possible to conduct a formal meta-analysis. Therefore, a narrative analysis of the results was presented.

Eighteen suicide prevention experts from 13 European countries reviewed all articles and assessed the strength of evidence using the Oxford criteria¹ . This collaborative approach and the wide range of experts involved ensured a thorough and multifaceted evaluation of suicide prevention strategies.

The methodology adopted in this systematic review reflects the rigorous approach required to synthesise the large body of research on the effectiveness of suicide prevention interventions. The combination of a comprehensive search strategy, collaborative evaluation by experts in the field,

¹ The Oxford Criteria, often mentioned in the context of systematic reviews and meta-analyses, refer to established standards for assessing the quality of evidence and the strength of recommendations in medicine and health care. These criteria are associated with the University of Oxford's 'Centre for Evidence-Based Medicine' (CEBM), which has developed a system to rank both the quality of individual pieces of evidence and the overall strength of clinical recommendations derived from this evidence.

and the adoption of standardised criteria for the evaluation of evidence has resulted in a comprehensive and up-to-date overview of the state of suicide prevention research.

The systematic review conducted by Zalsman et al. led to a deeper understanding of the effectiveness of different suicide prevention strategies. From the 1797 articles initially identified, careful selection and analysis led to the synthesis of results on seven main prevention interventions.

Restricting access to the means to commit suicide

The most effective strategy identified was the restriction of access to the means to commit suicide. This includes the control of analgesics, which has shown an overall reduction of 43% in overdose suicides since 2005, and the intervention in so-called suicide hot-spots², with an 86% reduction in cases of suicide by jumps since 2005. These measures have shown that limiting the availability of lethal methods can significantly lower suicide rates.

Awareness programmes in schools

Awareness programmes in schools have been recognised for their effectiveness in reducing suicide attempts (odds ratio [OR] 0.45; p=0.014) and suicidal ideation (OR 0.5; p=0.025). These results highlight the importance of mental health education within the school environment.

Pharmacological and psychological treatments

The anti-suicidal effects of clozapine and lithium were confirmed, underlining the role of pharmacological treatments in suicide prevention. Furthermore, the importance of pharmacological and psychological treatment of depression emerges as a key pillar in prevention.

Media strategies and online support

Despite the lack of sufficient evidence to evaluate the benefits of suicide prevention through screening in primary care, public education and media guidelines, the need for further research in these areas has been recognised. Likewise, support via the Internet and hotlines requires further investigation to assess its effectiveness.

² Intervention on so-called suicide 'hot-spots' refers to specific strategies aimed at reducing the number of suicide attempts in places known to have a high incidence of suicide. Hot-spots may include bridges, tall buildings, railway stations and other public places from which people may attempt to jump or engage in other means of committing suicide. The aim of these strategies is to make it more difficult for people to commit suicide in these places through physical or other preventive measures.

The review also highlighted the lack of randomised controlled trials (RCTs) in the field of suicide prevention, indicating a significant limitation in the evaluation of preventive interventions.

In summary, the systematic review highlighted the complexity of suicide prevention and the importance of combining different evidence-based strategies at individual and population level. Although significant progress has been made since 2005, there remain areas that need further research to optimise suicide prevention interventions.

The systematic review conducted by Zalsman et al. represents a significant contribution to the suicide prevention literature, highlighting notable advances and identifying gaps in existing research. This discussion explores the implications of the findings, limitations of the study, and future directions for research and intervention.

The confirmation of the effectiveness of restricting access to the means to commit suicide and of awareness-raising programmes in schools places strong emphasis on the importance of multidimensional prevention strategies. Reducing accessibility to suicide methods, combined with mental health education and the promotion of help-seeking behaviour, can form a solid basis for national suicide prevention programmes.

The crucial role of pharmacological and psychological treatments in suicide prevention underlines the importance of access to adequate and timely treatment for people at risk. The confirmation of the anti-suicidal effects of specific pharmacological agents such as clozapine and lithium emphasises the need for personalised and evidence-based management of psychiatric conditions associated with suicide risk.

The shortage of RCTs in the field of suicide prevention is a significant limitation, reducing the ability to draw definitive conclusions on the effectiveness of many preventive strategies. Furthermore, methodological heterogeneity and the variety of study populations further complicate data synthesis and generalisation of results. These limitations highlight the need for well-designed future studies that adopt standardised methodological approaches and aim to fill specific gaps in current knowledge.

In conclusion, the systematic review conducted by Zalsman and colleagues offered an up-to-date and comprehensive overview of the effectiveness of suicide prevention strategies, highlighting significant progress and identifying areas in need of further investigation. The results support the importance of a multidimensional approach to suicide prevention, integrating individual and population-level interventions.

Restricting access to the means to commit suicide and awareness-raising programmes in schools emerge as particularly effective strategies, underlining the need for proactive and evidence-based interventions. At the same time, the role of pharmacological and psychological treatments in suicide risk reduction draws attention to the importance of early identification and appropriate treatment of persons at risk.

Suicide prevention remains a global public health priority that requires an ongoing commitment to research, innovation and implementation of effective strategies. Collaboration between researchers, health professionals, policy makers and communities is essential to transform research evidence into concrete actions that can significantly reduce suicide rates and improve the well-being of at-risk populations worldwide.

The Bremberg Study, 2017

Another work worth mentioning is that of Bremberg (2017), which aims to explore the evolution of suicide rates in the European OECD nations over the period between 1990 and 2010, adopting a multiple regression analysis approach to assess the impact of selected national characteristics on the rate of decline in suicides, taking into account the initial levels of suicide.

The interest in suicide rates is not only academic but reflects the search for empirical foundations on which to base effective preventive policies. Previous ecological studies have attempted to explain variations in suicide rates between different countries to identify levers for intervention (Milner et al., 2012; Yamamura et al., 2012). However, the comparability of suicide rates is complicated by several factors, including variations in autopsy rates, which alone explain a significant portion of the cross-national variation in suicide rates (Kapusta et al., 2011).

The choice to investigate suicide reduction rates rather than absolute rates reflects a more dynamic understanding of the phenomenon, allowing for the consideration of both previous and current exposures that contribute to suicide rates at a given point in time (Bremberg, 2016). This perspective opens up a more nuanced interpretation of the effectiveness of prevention policies and the impact of socioeconomic and public health factors on suicide rates.

In summary, Bremberg's (2017) contribution is within a crucial area of public health research, offering new insights into the evolution of suicide rates and the underlying dynamics in a European context. Through the use of advanced statistical methodologies, the study not only provides a detailed overview of changes in suicide rates among European OECD nations but also emphasises

the importance of considering national characteristics and initial levels of suicide when formulating and implementing targeted prevention strategies.

This study adopted a quantitative approach to investigate the effect of specific national characteristics on the rate of decline in suicides among European OECD nations during the period 1990-2010. The choice to focus on this time interval and these specific variables was driven by the need to better understand how certain socio-economic and public health factors may influence the variation in suicide rates across countries.

Country Selection and Methods

Twenty-one European OECD member states with populations above 1.5 million in 2010 were selected for analysis. This selection included a wide range of socio-economic and health policy contexts, allowing for a meaningful comparison between different national systems. The study period, 1990 to 2010, was chosen to examine long-term trends in suicide rates and the impact of sustained socioeconomic changes over time.

Data on suicide rates were obtained from the WHO mortality database, a source recognised for the reliability and completeness of mortality information at a global level. To estimate the rate of decline in suicides, a linear regression was adopted for each country, with the suicide rate in 1990 and 2010 as the variables of interest, and the slope of the regression line (β -value) as the indicator of the rate of decline.

The independent variables selected for the analysis include: the average employment rate (age 15-64) over the period 1990-2010, the average poverty rate after taxes and transfers (poverty line set at 60% of median income) over the period 1990-2010, and suicide rates. These variables were chosen on the basis of previous research suggesting a possible correlation with suicide rates. Data sources for these variables include reliable international databases, such as the OECD, States for employment and poverty rates, and the WHO European Health for All database for autopsy rates.

Statistical analysis was performed using Microsoft Excel and the StatPlus supplement. Prior to the application of multiple regression analysis, bivariate analysis and visual inspection of scatterplots were performed to confirm the linearity and normal distribution of correlations between the variables of interest. This preliminary step ensured that the basic assumptions for the use of multiple regression analysis were fulfilled.

Bremberg's (2017) study produced significant findings regarding the change in suicide rates in European OECD nations during the period 1990-2010. The analysis revealed important trends and assessed the impact of selected socio-economic variables on suicide reduction rates.

Initial and final suicide rates

In 1990, the average suicide rate among the 21 selected European OECD countries was 18.29 per 100,000 inhabitants, with significant variation between countries, ranging from a low of 3.67 to a high of 41.77 per 100,000. By 2010, the average rate had decreased to 11.93 per 100,000, with a range from 2.99 to 21.02 per 100,000 inhabitants. These data indicate a substantial reduction in suicide rates across the region over the study period.

The average annual reduction in suicide rates was 0.20 per 100,000 inhabitants, although there was considerable variability between countries, with rates of decrease ranging from 0.01 to 0.41. This shows that although all countries experienced a decrease in suicide rates, the speed of this reduction varied considerably.

Influencing factors

The analysis showed that initial suicide rates in 1990 played a predominant role in determining the speed of decline in suicide rates. In particular, countries with initially higher rates showed a faster decrease, suggesting a convergence effect, whereby countries with greater problems tend to improve faster.

The results of the multiple regression analyses revealed that, despite the inclusion of the selected socio-economic variables (average employment rates, average poverty rates after taxes and transfers, and autopsy rates), most of the variation (83%) in suicide reduction rates could be explained by the initial suicide rates in 1990 alone. The other variables, although taken into account, had a minor or non-significant impact once initial suicide rates were controlled for.

Considerations and interpretation of results

These results highlight an important trend towards convergence of suicide rates among European OECD countries, with countries that started from more critical situations showing more progress. Furthermore, the analysis suggests that suicide prevention policies and health initiatives may have had a positive impact, particularly in countries with initially higher rates. However, they also highlight the complexity of the influence of socio-economic and public health factors on suicide rates, calling for further research to better understand these links.

The results of Bremberg's (2017) study make a significant contribution to understanding patterns of variation in suicide rates in European OECD nations over the period 1990-2010. Through a multiple regression analysis, the study found that the convergence of suicide rates between countries was mainly driven by initial suicide rates. This convergence phenomenon, or catch-up effect, suggests that nations with higher suicide rates at the beginning of the period studied experienced a faster decline than those with initially lower rates.

The finding that initial suicide rates play a predominant role in determining the rate of reduction of suicide rates opens up interesting perspectives on the nature of suicide prevention strategies and the effectiveness of public health policies. This result is in line with the theory of beta convergence, according to which there is a process of normalisation or equilibration between states with initially disparate levels of a given variable.

However, the finding that selected socio-economic variables (employment rates, poverty and autopsies) had a minor or non-significant impact once initial suicide rates were controlled for raises important questions. This could indicate that general economic conditions and measures of social inequality, although intuitively related to psychological well-being, may not have a direct impact on suicide rates or that this impact may be mediated by other factors not examined in the study.

A critical reflection must be devoted to the limitations of the study. The use of aggregated data at country level might hide significant variations within countries themselves, such as regional, urban vs. rural differences, or between different socio-economic groups. Furthermore, the limited selection of independent variables may not capture the full range of factors influencing suicide rates.

Despite these limitations, the findings have important implications for the development of suicide prevention policies. They suggest that interventions should be particularly targeted in countries with initially high rates of suicide and that prevention strategies should consider the complexity of underlying factors contributing to suicide. They also highlight the need for further research to explore other potential determinants of suicide rates, including those related to mental health, access to care, and social support.

NATIONAL STRATEGIES FOR SUICIDE PREVENTION IN THE WORLD

Although the recognition of suicide as a public health problem is now widely declared and accepted throughout the world, thanks in part to the efforts of the World Health Organisation, this research found only 44 countries (out of 195 recognised by the international community as sovereign states) that possess, are developing or have structured elements that actually produce a national suicide prevention strategy. However, both states and supranational organisations -such as the Pan American Health Organization (PAHO), a structured agency within the United Nations (UN) responsible for international health cooperation in the Americas- participate in research, studies, conferences and other recognised events to express interest (the most important of which is the World Suicide Prevention Day, established by its creator, Professor Diego De Leo), attention and operational intentions with regard to suicide prevention and the need to establish national strategies and plans. In the following paragraphs, the countries within which an active national suicide prevention strategy has been found are listed, national plans that have produced lasting prevention and intervention practices or at least elements that build effective practices, despite the absence of other elements. These strategies will be briefly described below.

The countries in the world where a concrete commitment resulting in a national suicide prevention strategy can be detected are:

Africa: Algeria, Congo and Madagascar³ , and also Kenya⁴ , Namibia⁵ , Nigeria⁶ and Tunisia⁷ .

America: Canada⁸ , Costa Rica^{9,10} , Grenada (helpline)¹¹ , Guyana¹² , Mexico¹³ , Dominican Republic¹⁴ , United States of America¹⁵ , Uruguay^{16,17} .

³ <https://pubmed.ncbi.nlm.nih.gov/32208755/>

⁴ <https://mentallyunsilenced.com/2023/08/21/kenya-suicide-prevention-strategy-a-step-in-the-right-direction/>

⁵ <https://economist.com.na/39334/health/health-ministry-to-develop-national-strategic-plan-on-suicide/>

⁶ <https://guardian.ng/news/fg-launches-policy-framework-to-address-increasing-cases-of-suicide/>

⁷ <https://www.mhinnovation.net/innovations/suicide-prevention-tunisia>

⁸ <https://www.canada.ca/en/public-health/services/publications/diseases-conditions/2022-progress-report-federal-framework-suicide-prevention.html>

⁹ <https://ticotimes.net/2019/11/05/costa-rican-organizations-launch-suicide-prevention-campaign>

¹⁰ <https://thecostaricanews.com/listening-is-preventing-costa-rican-institutions-maintain-a-community-call-for-suicide-prevention/>

¹¹ <https://theconnectiongrenada.com/listing/suicide-prevention-hotline-sweet-water-foundation-intl/>

¹² <https://www.health.gov.gy/index.php/21-mhu/55-mhusuicideplan>

¹³ https://extranet.who.int/mindbank/collection/country/mexico/suicide_prevention_

¹⁴ <https://extranet.who.int/mindbank/item/6094>

¹⁵ <https://www.samhsa.gov/grants/grant-announcements/sm-23-017>

¹⁶ <https://extranet.who.int/mindbank/item/3288>

¹⁷ <https://english.elpais.com/international/2023-07-27/the-paradox-of-uruguay-suicide-record-in-the-happiest-country-in-south-america.html>

Asia: Afghanistan¹⁸ , Bhutan¹⁹ , Brunei²⁰ , China²¹ , South Korea²² , Philippines²³ , Japan²⁴ , India²⁵ , Indonesia²⁶ , Iraq^{27,28} , Nepal (in preparation)²⁹ , Sri Lanka (some measures proven effective)³⁰ , Thailand³¹ .

Europe: Austria³² , Belgium (in Flanders³³) , Finland³⁴ , Greece (hotline)³⁵ , Ireland³⁶ , Luxembourg³⁷ , North Macedonia³⁸ , Norway³⁹ , Netherlands⁴⁰ , Portugal⁴¹ , United Kingdom⁴² , Czech Republic⁴³ , Slovenia⁴⁴ , Spain⁴⁵ , Sweden⁴⁶ , Switzerland⁴⁷

Oceania: Australia^{48,49} , Fiji⁵⁰ , New Zealand⁵¹

¹⁸ <https://moph.gov.af/index.php/en/strategies>

¹⁹ <https://www.iasp.info/2020/12/01/suicide-prevention-in-bhutan/>

²⁰ <https://www.cambridge.org/core/journals/bjpsych-international/article/suicide-prevention-in-brunei/42C8CD66984452A772DA59FCC88B734B>

²¹ <https://gpsych.bmj.com/content/36/5/e101133>

²² <https://www.koreaherald.com/view.php?ud=20230414000451>

²³ <https://ekwentomo.dswd.gov.ph/other-crisis-hotline/>

²⁴ <https://pubmed.ncbi.nlm.nih.gov/25041482/>

²⁵ [https://www.thelancet.com/journals/lanpsy/article/PIIS2215-0366\(23\)00027-5/abstract#:~:text=India%20launched%20its%20National%20Suicide,%20on%20Nov%202021%2C%202022.&text=Natio%20nal%20Suicide%20Prevention%20Strategy.&text=This%20is%20the%20first%20policy,by%202030%20compared%20with%202020.](https://www.thelancet.com/journals/lanpsy/article/PIIS2215-0366(23)00027-5/abstract#:~:text=India%20launched%20its%20National%20Suicide,%20on%20Nov%202021%2C%202022.&text=Natio%20nal%20Suicide%20Prevention%20Strategy.&text=This%20is%20the%20first%20policy,by%202030%20compared%20with%202020.)

²⁶ <https://www.inasp.id/en>

²⁷ <https://www.sciencedirect.com/science/article/abs/pii/S1876201823000400?via%3Dihub>

²⁸ <https://pubmed.ncbi.nlm.nih.gov/36753962/>

²⁹ <https://kathmandupost.com/national/2024/01/01/national-planning-commission-set-to-bring-suicide-prevention-strategy-this-fiscal-year>

³⁰ <https://www.who.int/srilanka/news/detail/10-09-2022-creating-hope-through-action/>

³¹ <https://www.iasp.info/bangkok2024/aboutthailand/>

³² <https://www.frontiersin.org/journals/psychiatry/articles/10.3389/fpsy.2023.1118319/full>

³³ https://academic.oup.com/eurpub/article/26/suppl_1/ckw169.039/2448728

³⁴ <https://thl.fi/en/research-and-development/research-and-projects/programme-for-suicide-prevention>

³⁵ <http://suicide-help.gr>

³⁶ <https://www.gov.ie/en/publication/7dfe4c-connecting-for-life-irelands-national-strategy-to-reduce-suicide-201/>

³⁷ <https://chronicle.lu/category/medical/35447-strengths-weaknesses-of-luxembourgs-suicide-prevention-plan-unveiled>

³⁸ <https://www.coe.int/en/web/skopje/-/healthcare-and-prison-staff-trained-on-applying-the-first-suicide-prevention-strategy-in-north-macedonia>

³⁹ <https://www.med.uio.no/klinmed/english/research/centres/nssf/resources/prevention/>

⁴⁰ https://academic.oup.com/eurpub/article/30/Supplement_5/ckaa165.1216/5914016#

⁴¹ https://extranet.who.int/mindbank/collection/topic/suicide_prevention_/all?page=3

⁴² <https://www.gov.uk/government/publications/suicide-prevention-strategy-for-england-2023-to-2028>

⁴³ https://extranet.who.int/mindbank/collection/country/czech_republic/suicide_prevention_

⁴⁴ https://academic.oup.com/eurpub/article/30/Supplement_5/ckaa165.1217/5914027

⁴⁵ https://english.elpais.com/elpais/2018/09/11/inenglish/1536656107_277760.html#

⁴⁶ <https://www.folkhalsomyndigheten.se/the-public-health-agency-of-sweden/living-conditions-and-lifestyle/suicide-prevention/>

⁴⁷ <https://www.bag.admin.ch/bag/en/home/strategie-und-politik/politische-auftraege-und-aktionsplaene/aktionsplan-suizidpraevention.html>

⁴⁸ <https://lifeinmind.org.au/suicide-prevention/strategies-and-frameworks/national>

⁴⁹ <https://lifeinmind.org.au/suicide-prevention/strategies-and-frameworks/national>

⁵⁰ <https://www.fbcnews.com.fj/news/national-mental-health-and-suicide-prevention-policy-for-fiji/>

National Suicide Prevention Strategies in Africa

Concerning the African continent, although the need to start an organic suicide prevention programme is recognised in many countries, out of 54 countries, only 4 have a national strategy, and 3 others (Algeria, Congo and Madagascar) are seriously investing in planning.

The Kenya Suicide Prevention Strategy 2021-2026 represents a pioneering effort in the region to proactively address the problem of suicide. This action plan is distinguished by its holistic and multi-sectoral approach, which includes education and continuous training of health workers, with an emphasis on improving access to mental health services. In addition, public awareness campaigns are promoted to inform and educate the population on the importance of psychological wellbeing and the support avenues available, aiming at de-stigmatising mental health issues and strengthening community support networks.

Namibia has embarked on the development of its second National Strategic Plan on Suicidology, highlighting the seriousness with which the country is addressing the growing concern about suicide rates. The initiative is based on a strong partnership with the World Health Organisation and aims at a deeper understanding of the dynamics and causes leading to suicide in the national context. Through the analysis of data and studies on the prevalence of suicide, the plan aims to develop evidence-based interventions that can be effectively integrated into public policy and health practices.

Nigeria has taken significant steps with the launch of its National Suicide Prevention Strategic Framework 2023-2030 and the National Mental Health Policy 2023. These initiatives are designed to address the problem of suicide in the country in a coordinated and integrated manner. The strategy includes the training of frontline health workers, the creation of psychological helplines, and the implementation of public awareness programmes. The aim is to create a more accessible safety net for those in crisis, reducing the stigma associated with mental health and improving the support services available.

In Tunisia, the suicide prevention project initiated in 2015 marks a major national effort to address this public health challenge. Through research and innovation, the project aims to map suicide trajectories with a particular focus on young people and the role of the media. The programme

⁵¹ <https://www.health.govt.nz/our-work/mental-health-and-addiction/suicide-prevention-new-zealand/suicide-prevention-strategy-and-action-plan>

includes the training of health professionals in the recognition and early intervention in suicide crises, and works closely with the media to promote responsible coverage of suicide events. The aim is to develop a preventive strategy that is sensitive to the Tunisian cultural and social context and to integrate these efforts into the national public health strategy.

National Suicide Prevention Strategies in America

In the context of national suicide prevention strategies in the Americas, a closer analysis of the methods adopted reveals a mosaic of approaches that, while differing according to the cultural, economic and health system specificities of each country, share the ultimate goal of safeguarding human life. These methods, implemented through action plans and public policies, reflect the complexity and multifactorial nature of suicide, addressing it from multiple angles.

In Canada, the Federal Framework for Suicide Prevention emphasises a three-dimensional approach. Reducing stigma, which is fundamental to encouraging help-seeking, is addressed through public awareness campaigns and targeted training for health professionals to change social perceptions of mental disorders and suicide. The connection between people and resources is manifested through the implementation of accessible support networks, such as hotlines and online services, which ensure accessibility to the help needed at critical times. Accelerating research and innovation translates into dedicated funding for studies on the causes of suicide and the most effective prevention strategies, with a strong emphasis on scientific evidence to guide public policy.

Costa Rica, through its national campaigns, takes a holistic approach to awareness, integrating suicide prevention into public health policies and educational programmes, targeting both the general population and specific groups, such as youth and health professionals. These programmes emphasise the importance of mental health, early recognition of signs of psychological distress and the elimination of barriers to accessing care.

Grenada, with its psychological support helpline, illustrates the importance of immediate intervention services. This initiative provides accessible 24-hour support, offering a vital first contact for people in crisis, and acts as a bridge to more structured support services.

Guyana, aiming for a quantifiable reduction in suicide rates, emphasises the importance of data-driven strategies. Its national plan includes the establishment of surveillance systems to monitor

suicide rates and evaluate the effectiveness of interventions, combining awareness-raising actions with the training of mental health professionals in communities.

Mexico and the Dominican Republic have integrated the analysis of specific risk factors and the development of targeted interventions into their national programmes. This includes training for health workers in the recognition and management of suicide risk, as well as the promotion of community support environments that encourage the expression and sharing of personal experiences.

In the United States, the emphasis on community partnerships translates into a participatory approach, where schools, workplaces, and religious organisations are actively involved in suicide prevention. The training of gatekeepers, individuals trained to recognise the warning signs of suicide and intervene appropriately, is a key aspect of this strategy.

By emphasising mental health services and education, Uruguay demonstrates how targeted interventions can be integrated into a national strategy. The availability of educational workshops and free helplines are examples of how information and support is made accessible to the entire population, with a special focus on prevention among young people and in schools.

These strategies, while adapted to national contexts, illustrate a shared commitment to innovative and evidence-based methodologies in the fight against suicide. Their effectiveness depends not only on policy implementation but also on the ability to adapt and respond to the changing needs of the populations served, emphasising the importance of flexibility, continuous monitoring and adjustment of strategies based on results.

National Suicide Prevention Strategies in Asia

Asia, characterised by vast socio-cultural and geographical diversity, faces a growing challenge in suicide prevention. Suicide rates vary widely among different Asian nations, influenced by unique cultural, social and economic factors. However, suicide prevention efforts are emerging as a priority for many Asian governments, which are developing targeted national strategies and specific initiatives to address this growing problem.

In Afghanistan, a combination of armed conflict, political instability and poverty has contributed to an increase in suicide rates. The Afghan government, in collaboration with international organisations, is implementing research and intervention programmes to better understand specific

risk factors and provide psychological support to trauma victims. These efforts also aim to improve access to mental health services and reduce the stigma associated with suicide in Afghan society.

Bhutan, which has 16.2 suicide deaths per 100,000 inhabitants, has made significant progress in raising awareness about suicide and providing support services through its 'Fighting Suicide in Bhutan' initiative. This initiative, launched by the government in collaboration with non-governmental organisations and other stakeholders, focuses on educating the community and providing accessible mental health services to reduce stigma and improve awareness of the warning signs of suicide.

Brunei, despite its relatively small size, has demonstrated a remarkable commitment to suicide prevention through the establishment of a dedicated national committee. This committee, consisting of government representatives, mental health professionals and members of civil society, works to develop integrated policies that address the social, economic and cultural causes of suicide. It also works to raise community awareness and access to psychological support services for those in need.

China, which has 7.9 suicide deaths per 100,000 inhabitants, with its large population and socio-economic complexity, is facing significant challenges in suicide prevention. The Chinese government has recognised the importance of a multidisciplinary approach and has taken a number of measures to address the issue. These include educational programmes to improve awareness of mental health problems, screening interventions to detect at-risk cases early, and the implementation of accessible mental health services nationwide.

South Korea, which has 28.5 suicide deaths per 100,000 inhabitants, despite its high standard of living, has one of the highest suicide rates in the world (the second highest after Greenland). The South Korean government has responded to this figure with a series of large-scale preventive measures. These include the introduction of media guidelines for responsible coverage of suicide, the promotion of emotional and psychological support programmes in schools and communities, and the implementation of interventions to address risk factors specific to the Korean population.

The Philippines, which has an official figure of 2.75 suicide deaths per 100,000 inhabitants, with its vast cultural and geographic diversity, is integrating mental health into its national health plans. The Philippine government has recognised the importance of suicide prevention and is working to improve access to mental health services and reduce the stigma associated with seeking care. In addition, educational and awareness programmes have been initiated to increase awareness of the warning signs of suicide and promote mental wellbeing in the population.

Japan, which has 20.7 suicide deaths per 100,000 inhabitants, with its intense work culture and strong social stigma associated with seeking mental health care, has seen a worrying increase in suicide rates, particularly among the young and elderly. The Japanese government has adopted a number of targeted strategies, including setting up listening and support centres, promoting awareness of mental health issues and implementing interventions to reduce risk factors specific to the Japanese population.

With the suicide rate standing at 10.5 deaths per 100,000 population, the Indian government has recognised the importance of addressing the underlying causes of suicide, including poverty, social distress and deteriorating mental health. Educational and awareness programmes have been initiated to increase awareness of mental health problems and reduce the stigma associated with seeking care. In addition, interventions are being implemented to improve access to mental health services, especially in rural and remote areas.

Indonesia, with its vast geography and ethnic complexity, has implemented suicide prevention programmes in rural communities. These programmes focus on training local communities to recognise the warning signs of suicide and provide emotional and psychological support to people at risk. In addition, the Indonesian government is working to improve access to mental health services in rural and remote areas, where care is often limited.

Iraq, after years of conflict and political instability, is tackling the problem of suicide by training health workers and raising public awareness. Educational programmes and targeted psychological interventions have been initiated to provide support to people in crisis and reduce suicide rates in the country.

Nepal continues to organise a national suicide prevention strategy to address the growing challenge of suicide in the country. The Nepalese government continues to consult with national and international experts to develop effective policies and interventions that aim to reduce suicide rates and promote the mental health of the population.

Sri Lanka, which has 21.3 suicide deaths per 100,000 population, despite progress in public health, is still facing significant challenges in suicide prevention. The government has identified effective measures, including community-based interventions and mental health promotion, that are helping to reduce suicide rates in the country.

Finally, Thailand, which has 6.1 suicide deaths per 100,000 inhabitants, has launched several suicide prevention initiatives, including emotional support and counselling programmes. The Thai

government is working to improve access to mental health services and reduce the stigma associated with seeking help. In addition, targeted interventions are being implemented to address the specific risk factors of the Thai population.

National Suicide Prevention Strategies in Europe

Austria, with 13.69 suicides per 100,000 inhabitants, has adopted a proactive approach to suicide prevention through the SUPRA programme, which stands for Suicidprävention Austria (Suicide Prevention Austria). This national strategy is distinguished by its multifaceted approach, which includes targeted support for at-risk groups, limiting access to suicide means, and training of key individuals in the community, known as 'gatekeepers'. The latter are trained to recognise the warning signs of suicide and to refer people to the necessary support services.

Belgium, with 17.11 deaths by suicide per 100,000 inhabitants, although it has made significant progress in the field of mental health, has not yet developed a national strategy specifically focused on suicide prevention that is widely documented. However, there are initiatives and programmes aimed at raising awareness and educating the population on the issue of suicide. These include mental health promotion, crisis intervention and post-suicide support, which are delivered through various channels and organisations. Although a unified national approach could enhance the effectiveness of these initiatives, Belgium has demonstrated a commitment to identifying and assisting people at risk, especially in Flanders.

Finland, which has 14.26 suicides per 100,000 inhabitants, is often cited as a success story in suicide prevention due to its national strategy that emphasises public awareness, professional training and close monitoring of suicide cases. The reduction in suicide rates in Finland is attributed to the well-structured national approach, which includes targeted interventions and support programmes, as well as community involvement in prevention. The Finnish strategy is based on a broad collaboration between the public health sector, education, and non-governmental organisations, ensuring that preventive measures are integrated into all aspects of society.

Despite not having a widely publicised national suicide prevention strategy, Greece maintained one of the lowest suicide rates among middle- and high-income countries (4.29 per 100,000 inhabitants). This result is partially attributed to awareness-raising and support initiatives, such as telephone help lines and public education programmes, which have helped to create greater awareness of mental health issues and provide immediate support to people in crisis. These

measures, although not formalised in a unified national plan, highlight the importance of accessible resources and open dialogue on mental health.

'Connecting for Life' is Ireland's national strategy for suicide prevention, a country with 9.37 suicides per 100,000 inhabitants). This strategy is based on the principle that suicide prevention is a task for the whole community, not just mental health professionals. 'Connecting for Life' sets out clear goals and strategic actions, aiming to further reduce the suicide rate through education, support for people in crisis and improvement of mental health services. The plan emphasises the importance of research to inform prevention practices and community involvement to create a supportive environment. With a focus on early recognition of warning signs and early intervention, Ireland aims to build a society where people feel able to seek help and support.

Luxembourg, with 9.38 suicides per 100,000 inhabitants, has distinguished itself by adopting a national action plan focused on suicide prevention, with a strong emphasis on public awareness and the involvement of mental health professionals. The plan includes a series of measures to improve understanding of mental health among the population, promote access to support services and prevent suicide through education and collaboration. The Luxembourg strategy reflects a nationwide commitment to treating suicide prevention as a public health priority, integrating preventive actions across different sectors of society.

Recently, North Macedonia (which has a figure of 8 suicides per 100,000 inhabitants) introduced its first suicide prevention strategy, emphasising the training of health and prison staff to recognise and manage the risk factors associated with suicide. This approach indicates a growing awareness of the need for specific and targeted interventions to prevent suicide, especially in high-risk environments such as health and prison institutions. The strategy aims to create a safety net for vulnerable individuals through education and prevention, emphasising the importance of a proactive and informed approach.

Norway, with 12.08 suicide deaths per 100,000 inhabitants, has implemented national strategies to tackle suicide, emphasising the importance of research and preventive actions at the community level. These efforts are aimed at better understanding the causes of suicide and developing effective evidence-based interventions. The Norwegian strategy includes training programmes for mental health professionals, public awareness campaigns and support for families affected by suicide.

In the Netherlands, which has 11.28 suicide deaths per 100,000 inhabitants, the approach to suicide prevention is integrated within a broader mental health context, with a focus on collaboration

between health services and communities. This country has adopted a network model, in which various stakeholders, including health professionals, non-governmental organisations and educational institutions, work together to reduce suicide and its impacts. Initiatives include training programmes for professionals, public awareness campaigns and the use of digital technologies to offer support to people in crisis. The Dutch strategy emphasises the importance of a proactive and accessible approach, focusing on eliminating the stigma associated with mental health and suicide.

Portugal, with 8.95 suicides per 100,000 inhabitants, has developed a national plan that focuses on early identification of persons at risk and early intervention to prevent suicide. This strategy includes the training of health professionals to strengthen their skills in detecting warning signs and providing the necessary support. Portugal also recognises the importance of community education and awareness-raising campaigns as vital tools to change public perceptions about suicide and promote help-seeking.

The United Kingdom has launched a suicide prevention strategy that aims to reduce suicide rates through a multifactorial approach. Key features include improving the support offered to people affected by suicide attempts or suicidal thoughts and strengthening crisis services. A distinctive feature is the focus on suicide prevention in high-risk locations, such as railways, through collaboration with industry organisations. The UK strategy emphasises the importance of quality data and research to inform prevention practices, as well as promoting community involvement and support for survivors of suicide.

The Czech Republic presented a national action plan for the decade 2020-2030, outlining a structured, multi-sectoral approach to suicide prevention. This plan focuses on educating and training health professionals, expanding access to psychological support services, and promoting public awareness campaigns. The Czech strategy recognises the complexity of the causes of suicide and seeks to intervene on several fronts, including reducing stigma and improving the quality of life of people with mental disorders.

Slovenia has shown a strong commitment to suicide prevention through awareness-raising and education initiatives, integrating a well-formulated national strategy. This country emphasises the importance of cooperation between health, educational and social services to create an effective prevention network. The Slovenian strategy includes the implementation of training programmes for various professional groups and support for community initiatives aimed at promoting psychological well-being and preventing suicide.

Spain is working hard on a national suicide prevention strategy that aims at early detection and intervention. This strategy plans to address suicide with a holistic approach, integrating prevention into all levels of health care and promoting collaboration between the public, private and third sectors. The Spanish strategy aims to improve the training of mental health professionals, implement public awareness campaigns to combat the stigma associated with mental health and develop support programmes for people at risk and their families. Spain recognises the crucial importance of open communication and community support in suicide prevention.

Although no readily identifiable national suicide prevention strategies have emerged, both Sweden and Switzerland have undertaken significant research and local initiatives. These countries continue to invest in mental health and well-being, with projects including promoting access to psychological support services, implementing public education campaigns and conducting studies to better understand the risk factors associated with suicide. Their approach emphasises the importance of basing preventive actions on sound scientific evidence and involving local communities in creating supportive environments.

National Suicide Prevention Strategies in Oceania

In Oceania, out of 14 states, only 3 have a national suicide prevention strategy: Australia, Fiji and New Zealand. However, these strategies are known for the attention given by the institutions in charge of such efforts.

In Australia, the National Mental Health and Suicide Prevention Plan of 2021 represents a commitment of A\$2.3 billion to support mental health and suicide prevention. This plan responds to both the Mental Health Productivity Commission Inquiry Report and the final intentions of the National Suicide Prevention Adviser, supporting, in whole or in part, all of the recommendations that emerged. The plan is based on five pillars reflecting the key themes that emerged from the results of these surveys and recommendations: prevention and early intervention, suicide prevention, treatment, support for vulnerable people, work and governance. In addition, the National Mental Health and Suicide Prevention Agreement has been established between the Australian federal government and state and territory governments, with the common goal of improving the mental health of Australians, reducing the suicide rate to zero and enhancing services in the mental health and suicide prevention system. In parallel, there is a National Suicide Prevention Strategy specific to the Australian health system 2020-2023, which provides a platform

for national suicide prevention policy, aligning state and territory prevention strategies and frameworks with the national framework. This strategy supports and promotes the existing efforts of governments, non-governmental organisations, primary health networks, the private sector, research institutions and individuals with direct experience of suicidal behaviour, aiming to create a suicide prevention system where evidence-informed strategies, programs and services are coordinated across all sectors. Finally, the strategy is committed to building resilient communities and individuals, supporting people at risk, and providing effective and compassionate care for people experiencing or affected by suicidal behaviour, with the goal of promoting mentally strong and resilient individuals and communities.

Fiji's Suicide Prevention Strategy, included in the National Mental Health and Suicide Prevention Policy, based on the Ministry of Health's Corporate Plan and the WHO Mental Health Action Plan (2013-2020), which was endorsed by endorsement by Parliament, aims to reduce suicide cases through training of health professionals, promotion of mental health, increasing knowledge on positive coping mechanisms and support for help-seeking. It emphasises the importance of timely access to high quality care, the involvement of stakeholders, including family members and people with mental disorders, in policy development and implementation. The strategy also strives for the continuous availability of essential psychotropic medication and the integration of mental health into routine health information systems. In addition, the approach includes shifting the place of care from long hospital stays to non-specialised healthcare settings, promoting community-based mental health services and collaboration with non-governmental organisations

The 'Every Life Matters - He Tapu te Oranga o ia Tangata' Suicide Prevention Strategy 2019-2029 and the related New Zealand Action Plan 2019-2024 were designed with the aim of reducing suicide in the country. The vision behind this strategy is to create a future where there is no suicide in New Zealand, emphasising that every life matters and that working together we can achieve these goals. The strategy focuses on two key outcomes: reducing suicide rates and achieving well-being for all. The strategy encompasses specific actions ranging from promoting wellbeing, responding to suicidal distress, intervening in suicidal behaviour, to providing post-suicide support to those affected (postvention, also known as secondary prevention). A key element is the creation of the Suicide Prevention Bureau, charged with guiding, promoting and coordinating the implementation of the strategy, as well as specific investments such as the development of a national suicide bereavement response service, additional post-suicide services in the DHBs (District Health Boards), community suicide prevention funds for Māori and Pacific, and improved information services for families and the media To achieve these objectives the strategy is based on shared

values and ways of working, such as teamwork (mahi tahi), Māori leadership (hautūtanga Māori), trauma-informed responses (poipoi wairua), individual wellbeing (mauri ora), family- and community-centred (whānau ora), healthy environments (wai ora), empowerment of people (rangatiratanga) and dignified treatment of all (whakamana tāngata).

THE NATIONAL STRATEGY FOR SUICIDE PREVENTION IN ITALY⁵²

The state of the art in Italy

Talking about suicide prevention in Italy is a very difficult undertaking. This is not due to a lack of professionals and high professionalism in the sector, but to a structural absence of general organisation. Suicide, more than any other form of expression of distress, is subject to stigma and shame, it has been -as we have seen in the historical section of the paper- indicated by religious faiths as a very serious sin, so much so as to be considered a violation of a fundamental commandment, the fifth, 'thou shalt not kill'⁵³ .

Italy, even at the time of writing this thesis, has not yet given effect to parliamentary acts useful for establishing a national strategy for the prevention of suicide, for reasons related to the nature of such acts, but also for the structural lack of attention to this issue⁵⁴ .

Before mentioning the parliamentary acts that have addressed the issue of suicide prevention, it must be stated that there are administrative levels and bodies that deal with the issue in an effective and organised manner. Outside the political-administrative institutions, there is a fabric of foundations, associations, non-profit organisations, clinics, individual professionals, as well as health services and hospitals that deal with suicide prevention. Among these, it is important to mention the De Leo Foundation, the Minotauro Foundation, chaired by Prof. Matteo Lancini, Stay Aleeve, Paninabella OdV, AMA Ceprano OdV, La Tazza Blu, the Psychiatry Unit of the Sant'Andrea Hospital in Rome, headed by Prof. Maurizio Pompili, the Child Neuropsychiatry Unit of the IRCCS Children's Hospital Bambino Gesù in Rome, headed by Prof. Stefano Vicari, the Psychiatry Unit of the IRCCS Children's Hospital Bambino Gesù in Rome, and the Department of Psychiatry of the Sant'Andrea Hospital in Rome, headed by Prof. Maurizio Pompili. Stefano Vicari, the Department of Neurology and Psychiatry of Childhood and Adolescence of the IRCCS Fondazione Mondino in Pavia, headed by Prof. Renato Borgatti, the Veneto Region's InOltre Service, the National Suicide Observatory in Biella, the newly-established Committee for the

⁵² https://temi.camera.it/leg18/post/OCD15_14757/suicidio-approvata-alla-camera-mozione-che-impegna-governo-ad-attuare-interventi-prevenzione-contrasto-e-monitoraggio-del-fenomeno.html

⁵³ It is not within the scope of this thesis to discuss the meaning of the commandment, as different interpretations of it would indicate that the prohibition concerned the shedding of innocent blood, without valid reasons. However, for the Christian faith, this commandment was violated in the case of killing oneself, since it was equivalent to killing a person, to whom God had granted the gift of life.

⁵⁴ This statement is not political in nature, it is an observation of the lack of debate and legislation addressing the issue at hand, unless otherwise stated.

prevention of suicidal behaviour, chaired by Prof. Diego De Leo, former president of the De Leo Fund and creator of the World Suicide Prevention Day, and also headed by Prof. Fulvia Signani and the editor.

These agencies deal with fundamental aspects of suicide prevention, but do not have an activity that coordinates the different elements that typically make up general prevention strategies. Some agencies deal with training, others with information, some provide telephone support services, some deal with postvention, hospital services with in-patient clinics, professionals with out-patient clinics. The Veneto Region's InOltre service is the first body that has tried to coordinate various aspects of prevention by producing a structured service under the aegis of the Region itself.

At an institutional political level, Italy has so far lacked a path aimed at setting up a general plan to meet the needs of the sector, although the numbers are worthy of attention. An exception, however, is the Veneto Region, the administrative reality most affected by the suicides of entrepreneurs⁵⁵ following the great crisis that hit our country, among others, after 2006 (as a result of the so-called subprime mortgage crisis). In 2012, in fact, in order to respond to the growing number of suicidal entrepreneurs, the Veneto administration set up a service, initially dedicated to entrepreneurs' suicides, but which has become much more extensive over time, according to the needs that have arisen.

The InOltre Service was initially implemented as a project, in accordance with a Regional Council Resolution⁵⁶ and subsequently elevated to the rank of 'Essential Level of Care' for a subsequent two-year period⁵⁷. Renewals of the service further extended its operation until January 2023⁵⁸, when it was renamed 'Psychological Service for Emergency Management in the Community', and further renewed, at present, until 31 December 2024⁵⁹. These regulatory developments extended the value of inOther as an effective solution to community crises, outlining the evolution of the service, which resulted in the implementation of specific interventions, tailored to the different crises faced by the community.

By way of example, the crisis of entrepreneurs was initially perceived as an individual difficulty, which, however, also impacted on collaborators and employees, while for savers a collective problem emerged that needed a coordinated response. In the first years of operation, the service's

⁵⁵ One example of the news reports circulated at the time headlined 'Veneto, cemeteries are filled with suicidal entrepreneurs: <https://www.linkiesta.it/2012/04/veneto-i-cimiteri-si-riempiono-di-imprenditori-suicidi/>

⁵⁶ See D.G.R. no. 939 of 2012

⁵⁷ See D.G.R. no. 1888 of 2013 and no. 980 of 2014 and D.G.R. no. 2280 of 2015

⁵⁸ with D.G.R. No. 388 of 2021

⁵⁹ By D.G.R. No. 104 of 2023

intervention was directed individually towards the entrepreneur, while with the banking crisis, initiatives were implemented that favoured a collective approach, such as collaboration with branches of savings protection associations and participation in public events.

Starting in 2020, inOltre extended its activities to deal with the consequences of the health emergency, developing targeted interventions to support different categories of citizens: those in a state of anxiety about themselves and their loved ones, those who needed assistance to adapt their lifestyles to the restrictions aimed at limiting the contagion, those who perceived the health emergency as a personal crisis, entrepreneurs and workers affected by the economic crisis related to COVID-19, social and health workers engaged in managing the personal and professional repercussions of the pandemic, parents looking for strategies to manage their children, and individuals coping with grief for the loss of loved ones due to the health emergency⁶⁰.

The inOltre Service is configured as a specialised intervention in the management of community emergencies through an integrated psychological approach. It operates through a conceptual framework based on the intersection of emergency psychology and community mental health promotion. Through an approach that privileges scientific evidence and participatory methodologies, inOltre aims to strengthen individual and collective resilience, providing tools and strategies to effectively navigate through the emotional and psychological turmoil triggered by critical events.

The core of inOltre's work lies in its ability to carry out a thorough and timely analysis of emerging needs within the community, facilitated by an effective communication network with local authorities and partner organisations. This enables the design of highly specialised psychosocial interventions that dynamically adapt to the specificities of the context and the characteristics of the target populations.

The interventions offered by inOltre range from individual assistance, as in the case of personalised psychological support for entrepreneurs, to collective actions to deal with large-scale crises, such as financial or health crises. Particular attention is paid to creating safe listening spaces and facilitating support groups, where coping strategies and lived experiences can be shared and processed collectively.

The global health emergency triggered by COVID-19 forced a rapid recalibration of inOltre's intervention strategies. In response, the service developed specific protocols for managing the

⁶⁰ See Laugelli, E. et al., in Romaniello, C., (ed.) 2023, *Psicologia di un suicidio. Elementi di studio del fenomeno suicidario*, Rome, Armando Editore

varied psychosocial needs emerging from this crisis, integrating digital technologies for remote counselling and experimenting with new modes of interaction to overcome the barriers imposed by containment measures.

One element that the service claims is the integration of multidisciplinary expertise, i.e., collaboration between psychologists, sociologists, health workers and social workers. This approach allows emergencies to be approached from multiple perspectives, ensuring a holistic understanding of community needs and promoting interventions that extend beyond mere psychological support, also addressing the social, economic and cultural dimensions of crises.

The approach adopted by inOltre not only aims at immediate relief from crisis situations, but also seeks to build a solid foundation for long-term community resilience. Through the promotion of self-help practices, individual and community capacity building training and the implementation of prevention projects, inOltre contributes to the creation of a more aware, prepared and psychologically resilient society.

In conclusion, the inOltre Service represents an advanced model of psychosocial care in Italy, so far unique.

Parliamentary elements of suicide intervention

As already pointed out above, in Italy, despite the growing interest in the field, a national suicide prevention plan has not yet been established, even though, on paper, there is an intervention project unanimously approved in the Chamber of Deputies. Below is the full act, which will be followed by a discussion highlighting the limits of this measure's action.

House Act

Motion 1-00536

presented by

ROMANIELLO Cristian

text presented

Wednesday 20 October 2021

modified

Tuesday, 14 June 2022, sitting No. 707

The Chamber,

WHEREAS:

suicide is and must be recognised as a serious public health problem;

Every year, according to data from the World Health Organisation, more than 800,000 people worldwide die by suicide, the equivalent of one victim every 40 seconds. The overall mortality rate exceeds the number of deaths from malaria, breast cancer or dementia. Moreover, for every suicide, there are about 20 suicide attempts. Suicide is the second leading cause of death for young people between the ages of 15 and 29;

According to a 2019 study by *Global Burden Disease*, in 2016 suicide was among the top 10 causes of death in Europe, as well as in Central Asia, Australasia, South Latin America and high-income countries in North America. Furthermore, according to a 2014 World Health Organisation *report*, suicide comprises 56 per cent of all violent deaths, a higher number than deaths caused by war and homicide. Specifically, 81 per cent of violent deaths in high-income countries and 44 per cent and 70 per cent in low- and middle-income countries, respectively;

suicide is an age- and gender-related phenomenon: in high-income countries, the most recent studies confirm a suicide rate in men that is three times higher than in women; the gap decreases in low- and middle-income countries where the male suicide rate is 57 per cent higher. The choice of self-harming methods, which have a higher potential for a fatal outcome, is a relevant factor regarding the gender difference;

in general, men have higher suicide mortality rates at all ages, except for the 15-29 age group, for which suicide is the second leading cause of death worldwide (8.5 per cent) and the leading cause of death among young women globally;

Reducing the suicide rate is one of the goals of the UN 2030 Agenda for Sustainable Development;

in 2014, the first *World health organisation world suicide report* 'Preventing suicide: a global imperative' was published, which aimed to raise awareness of the public health importance of suicide attempts and suicide in order to make suicide prevention a high priority on the global public

health agenda. The *report* also aimed to encourage and support countries to develop or strengthen global suicide prevention strategies with a multi-sectoral public health approach;

To date, only a few countries in the world have included suicide prevention among their health priorities and only 38 states have a national suicide prevention strategy;

the World Health Organisation has encouraged prevention efforts towards a national strategy that recognises suicide and suicide attempts as a serious public health problem and commits governments to address it. Specifically, it is necessary to provide a structural framework that incorporates various aspects of suicide prevention and provides authoritative guidance on key evidence-based prevention activities;

The national strategies aim to identify the main structures in charge and assign specific responsibilities to them and coordinate their work. The structure in charge of coordinating the national strategy must also be responsible for identifying the main gaps in existing legislation, service provision and data collection, and for suggesting elements to resolve structural limitations, such as the need for human and financial resources to implement new intervention models. Such a structured prevention plan is able to change and raise awareness in *media* communications, propose a solid monitoring and evaluation framework, instil a sense of trust in institutions and facilitate scientific research on suicidal behaviour;

In high-income countries, hanging accounts for 50 per cent of suicides, with firearms coming second, accounting for 18 per cent of cases. In the United States, where gun sales are a real problem, the National Suicide Prevention Strategy identified gun ownership as one of four critical factors to be addressed in order to reduce the phenomenon by 20 per cent by 2025;

the most important suicide risk factor is one or more previous suicide attempts;

A well-known critical aspect related to the phenomenon of suicide concerns the so-called 'contagion', a common phenomenon that manifests itself with an increase in suicidal behaviour in the period immediately following a suicide episode, or with stress-related disorders resulting from the traumatic event. Currently, our country does not invest in *postvention* services. *Postvention* is a programme that serves to manage the traumatic aspects of a suicide or attempted suicide when it occurs within educational institutions. It aims to minimise the risks of emasculation, to take charge of the most distressed individuals, and to help the institution overcome the major difficulties involved in the trauma. These services, which represent the answer to this peculiar phenomenon, have been implemented in the intervention protocols of many countries, including the United

Kingdom, Australia and New Zealand, allowing positive effects to be observed. Some services also exist in Italy, among which those of a number of organisations such as, for example, the De Leo Fund, whose services are also replicated abroad, and the Minotauro Foundation, chaired by Matteo Lancini, are of particular importance, but there is no effective public *network* in the country;

According to the *dossier* compiled by the ONS, the use of antidepressant drugs can offer indications of psychological state, and depression, which has an extremely high incidence in people aged between 18 and 64, is one of the causes of suicidal acts;

suicide mortality rates are highest among the elderly, but suicide is among the leading causes of death for young people aged 15-29. Such deaths have devastating impacts on the social environment and families, and it is often found that the suicide has never turned to health and social services;

In our country, about 4,000 people take their own lives every year, and it is estimated that at least half of them could be saved with proper intervention. The number of victims, which does not include the submerged figure produced by the absence of a dedicated observatory and advanced detection systems, is comparable to that of an atomic bomb spread over 10 years, capable of wiping out a medium-sized city forever;

There is a relationship between suicides and socio-economic crises, as the course of history has always shown. In 2016, Istat reported that suicide is the cause of death most directly influenced by economic crises;

According to a note published by Professor Daniele of the Magna Graecia University, between 2007 and 2010, the number of suicides increased by 34 per cent among the unemployed, 19 per cent among the employed and 13 per cent among those who left the labour market;

In 2009, 4,884 suicides occurred, in excess of the number expected on the basis of previous trends (2000-2007). As far as Europe is concerned, the excess suicides occurred mainly in men aged between 15 and 24, while in the Americas it was men aged between 45 and 64 that showed the greatest increase. The increase was observed particularly in countries with low levels of unemployment in the pre-crisis period, in countries with higher levels of job losses and in men;

To date, the COVID-19 pandemic is having a particularly serious impact on suicidal behaviour within the already alarming picture described above. Some relevant data on the state of the art

emerge from surveys conducted by research organisations that deal with specific categories of at-risk individuals and specific age groups of the population;

in the last few months, between October 2020 and January 2021, there has been a 30 per cent increase in suicide attempts and acts of self-harm in the complex operational unit of child and adolescent neuropsychiatry at the Bambino Gesù paediatric hospital in Rome, and the ward was 100 per cent occupied, whereas in other years, on average, the figure was around 70 per cent;

Between February 2020 and February 2021, there was a 32 per cent increase in mental health-related requests, such as suicidal ideation, self-harming acts and suicide attempts, received by the 114 'Child Emergency' service promoted by the Department for Family Policies and managed by Telefono Azzurro;

A recent study involving parents of children and adolescents in Italy, Spain and Portugal found that 19 per cent of children and 38 per cent of adolescents showed symptoms of anxiety and depression and that there was a marked increase in these levels compared to those reported in other studies conducted in the same countries in the pre-COVID-19 period;

Already in 2008, in a communication presented at the 24th national congress of the Italian Neuropsychiatry Society of Childhood and Adolescence (Sinpia), entitled 'Complexity and specificity in neuropsychiatry of the developmental age: The development of knowledge and the improvement of care', Sinpia highlighted the issues relating to admissions and psychiatric emergencies in adolescence, which even then failed to become a national organisational priority, despite the periodic alarm on the phenomenon and the evidence of an increase in the number of admissions for mental disorders in minors, and despite the fact that 'epidemiological studies indicate that between 18 per cent and 21 per cent of minors present over the course of the years, a psychopathological disorder leading to a significant *impairment* and that, throughout adolescence, it is estimated that between 9 and 13 per cent of boys and girls may present a psychiatric pathology requiring treatment by mental health services';

It is therefore essential to monitor trends in the psychological conditions of Italians and to build a support network for those most vulnerable and at risk;

The data is also alarming with regard to entrepreneurs, the category most affected by suicides for economic reasons. The observatory of the same name, which seeks to find this specific section of data, reports a 79.5 per cent increase in suicides for economic reasons and a 78.3 per cent increase in suicide attempts;

Another category seriously affected is that of women victims of violence. The 7th Eures report on femicide/suicide in Italy shows that from March to October 2020, the period of the most intense activity of the Coronavirus and the adoption of the most restrictive measures, the increase in so-called femicide-suicides increased by 90.3 per cent;

the risk of suicide is then increased for people who, being carriers of discrimination factors, are in greater danger of suffering aggression, marginalisation and exclusion. Particularly worrying among these are the data referring to LGBTIQ+ persons;

suicide in the Armed Forces and Police Corps in Italy is a widespread and transversal phenomenon, and there are higher suicide rates among military personnel and police officers than among other professional categories; it is noted that the dysfunctional psychological states experienced by military personnel are often concealed and kept hidden, as there is a reluctance to manifest such forms of distress, in order to prevent the compromise of one's career or, in borderline situations, to avoid being dismissed from one's post;

persons sentenced to the prison regime have a higher suicide mortality rate than the general population, and prison staff are subject to negative psychological conditions related to their particular working environment;

the National Health Service, in the field of mental health, is lacking in terms of the number of inpatient, *day hospital* and outpatient places, but also in terms of investment in territorial, residential and home-based services;

suicides are preventable with timely, evidence-based and often low-cost interventions. In relation to evidence, the adoption of social survey methods, such as longitudinal suicide studies, to understand the extent of *post-lockdown* effects and the aftermath of the pandemic is promising. For national responses to be effective, a comprehensive multisectoral suicide prevention strategy is needed;

During the World Suicide Prevention Day, celebrated on 10 September 2021, Professor Maurizio Pompili, professor of psychiatry at the Sapienza University of Rome and director of the suicide prevention service at the Sant'Andrea Hospital in Rome, a unique national organisation, operating at a public hospital and which effectively takes care of the whole clinical-assistance activity, starting from the first listening and telephone reception service and ending with the management of the so-called survivors, people who have survived the tragedy of suicide occurring in their own family or immediate surroundings;

stated that prevention is possible and concerns everyone: informing the public, helping family and friends to recognise the warning signs, dispelling false myths about those who attempt an extreme gesture and counteracting the stigma, would make it possible to halve the scale of the phenomenon; as a result of the pandemic crisis, numerous risk conditions associated with suicide have intensified and worsened, including loss of income and the consequent reduction in spending capacity, loss of employment, difficulties in accessing the health network for the weaker sections of the population the aggravation of precarious mental conditions and the increase in psycho-social frailty, the possible forced cohabitation with violent people during the *lockdown*, the failure to satisfy basic needs, such as decision-making autonomy, spatial mobility, and freedom of contact with loved ones;

the first fundamental aspect related to suicide prevention is the need to collect accurate data. Indeed, as stated by Professor Diego De Leo, recognised as one of the world's leading experts in the field, suicide is more prone to misclassification than other causes of death. Moreover, the data currently available are not up-to-date and the latest ISTAT statistical yearbook of 2020 contains data for 2017, when 3,940 suicidal acts were recorded. It is noted that this figure does not account for suicide attempts, in respect of which no data is recorded, and it is impossible to determine an accurate and reliable trend over time;

it is necessary to ensure the monitoring of suicide attempts and suicides for effective suicide prevention strategies. It is well known, in fact, that in countries where there is an observatory capable of providing plausible estimates of how many people take their own lives, determining geographical and temporal parameters and taking into account the methods by which extreme gestures are made, it is possible to identify the population at risk and, consequently, to activate an effective prevention strategy;

It is internationally known that telephone helplines are an important support that can successfully reduce suicidal ideation and the tendency to self-harm. To date, there are a number of active helplines in Italy, some of which are public, others private and run by voluntary organisations. On the public side, in addition to the aforementioned service, there are some noteworthy sector experiences such as a public psychological support service in the Veneto region, called Servizio inOltre, which is active through a toll-free number offering a 24-hour, 7-day response to all crisis situations. This service is *unique* on the territory and represents an important model of analysis and intervention, equipped with a tool for analysing suicide risk, through an assessment scale representing a mental health *triage*;

However, there is no national hotline, nor is there a specific structure equipped with qualified personnel capable of carrying out emergency, intake, support, investigation, *follow-up* and *postvention* tasks;

In the international literature, studies have established that early intervention in first aid departments shows significant effectiveness. There is a need to equip the healthcare system with tools for the early detection of suicide risk;

The perinatal period - understood as the period from conception to the child's first birthday - is among the most emotionally important times in a woman's life. After childbirth, 30 to 75 per cent of women experience a transient mood disorder (called *maternity blues*) that tends to resolve spontaneously within about ten days after delivery. For some women, however, the perinatal period may be overshadowed by the symptoms of a more serious and disabling psychological condition, which recurs or begins at this time of life. The most common disorders are anxiety and depressive disorders, which affect between 10 and 15 per cent of women during the perinatal period. These can have an impact on obstetrical outcomes and exert a long-term negative effect on the health of the woman and the child. Therefore, if disorders do occur, it is very important that timely access to care and treatment is available; furthermore, data show that approximately 60 per cent of women who die from maternal suicide have a previous 'psychiatric history' and that more than three quarters of diagnoses of severe mental disorders were not recorded with obstetric information;

education and information play an important role in suicide prevention. Every age has its own risks related to the issue. In schools, at all levels, it is necessary to know the suicide risk in order to offer intervention and control tools to every school operator, as well as to students and parents, in order to intervene at an early stage on alarming suicidal behaviour, such as self-harm, on which little attention is paid,

commits the Government:

- 1) to recognise suicide and related phenomena as serious public health problems;
- 2) to implement a national suicide prevention strategy, providing authoritative guidance on key evidence-based prevention activities, through the implementation of the subsequent commitments of the operative part of this guideline;
- 3) to set up a public study centre/observatory that would work to achieve effective monitoring of data on suicide cases and related phenomena, throughout the territory of the Italian Republic,

paying due attention to trends in the conditions of the psychological state of citizens and building a support network for the most vulnerable and at-risk individuals;

4) to set up a toll-free suicide hotline to take charge of those at risk, based on cutting-edge national and international experience, as well as a digital application and any new tools useful for tackling the problem, to be promoted on institutional and governmental communication channels and on public television;

5) to take the initiatives within its competence to include a diagnostic detection system, such as an identification code, in the digital health system, in order to be able to better investigate possible suicide attempts, within the casuistry determined by the protocols established by the bodies in charge, as well as in order to respond to the most important suicide risk mentioned in the introduction;

6) to promote awareness and prevention campaigns in schools, starting from primary school, through:

a) the provision of specific *training for* school operators, so that they are in a position to provide clear links with professionals;

b) the inclusion of emotional education within the school curriculum;

c) the inclusion of dedicated projects and debates in first and second grade secondary schools aimed at improving knowledge and prevention of suicide in adolescence, highlighting the risks arising from bullying, cyberbullying and any phenomenon that may lead to discomfort such as to lead to self-harm, suicidal ideation or suicide;

d) the implementation of peer support programmes, i.e. programmes to ensure effective support between peers;

7) to take the initiatives within its competence to allocate dedicated resources for the recruitment and training of qualified personnel in the territorial and intervention networks, so that there are people specifically trained to meet the needs;

8) with a view to acquiring more knowledge on the subject, to take initiatives to provide a specific and sufficient budget for scientific research in the field in general, including the funding of dedicated scholarships and the promotion of scientific/institutional cooperation, as well as to target

research on the contingent causes, of all kinds, that present a risk of an increase in the incidence of suicide phenomena;

9) to take effective initiatives to provide access to treatment to an increasing number of citizens and to encourage *follow-up* activities to monitor the progress of support programmes over time;

10) to promote *postvention* services, aimed at offering support to people susceptible to infection;

11) in order to protect minors in particular, but not only, to take initiatives to discourage incitement to suicide by preventing access to *websites* that encourage the use of self-harm practices;

12) to set up a specific interactive digital application for pre-adolescents, adolescents and young adults, containing useful information for recognising psychic distress, psycho-educational information for mental health and useful numbers to get in touch with dedicated territorial services, evaluating the possibility of enhancing the services offered by school psychologists;

13) to promote nationwide information, prevention and awareness campaigns extended to the entire population, offering guidelines in the State-Regions Conference, in order to standardise intervention processes, without prejudice to specific regional competences;

14) with particular reference to certain types of suicide committed by young people and adolescents, to take initiatives to finalise its work on suicide prevention in the domestic environment, starting with the implementation of information and awareness-raising campaigns concerning the prevention of the risks associated with the possession of weapons and, specifically, the suicide risk stemming from them, monitoring scientific updates and recalling best policy practices conducted at international level;

15) to consider the possibility of setting up a specific working table, with the involvement of associations and other bodies that deal specifically with those most sensitive to the issue: teenagers and victims of bullying, entrepreneurs in crisis, economically vulnerable people, members of the LGBTQ+ community, people with alcohol and drug addiction problems, and any existing category that needs due attention;

16) to promote, within the framework of interventions to combat the suicide phenomenon, projects with socialising and educational purposes open to the population, by means of integrated multidisciplinary pathways capable of promptly meeting the needs of patients and families;

17) to take the initiatives within its competence so that psychological intervention services are activated, through resources already operating within the Armed Forces and the Police Corps, for the treatment of the forms of psychological suffering of employees, with particular reference to suicide prevention, by setting up specific professional training programmes for the professionals operating within the Corps responsible for the tasks set out above and for incentives to be provided for the use of external resources, such as professionals not working within the Armed Forces and Police Corps, in order to meet the needs set out above, by putting a stop to the stigma effect that in many cases prevents an effective request for intervention and its consequent effective performance;

18) again with particular reference to the categories indicated in the previous commitment, to prepare a specific digital application useful for peer support, modelled on existing international best practices;

19) To take initiatives to investigate and address the causes of suicides in prison, as well as to protect prison staff from factors that lead to unfavourable psychological conditions and that may increase the risk of suicide;

20) to adopt, with a view to suicide prevention, initiatives to introduce specialised services dedicated to perinatal mental health, guaranteeing continuity of care and the structuring of active policies providing support to pregnant women;

21) To consider supporting the activities of voluntary associations and self-help groups and other humanitarian initiatives working in the field of suicide prevention;

22) to submit an annual report to the Houses of Parliament on an update of the country's conditions in relation to the issue of suicide, its prevention and related phenomena, the state of knowledge, new scientific findings in the field, and the effectiveness of the national suicide prevention strategy.

Despite the fact that the intentions approved by the legislature are considered to be of a high preventive level, as of today it is necessary to wait for the norms to become effective and for governments to make a direct commitment so that Italy, too, can align itself with the service standards of other advanced countries. The dissertation also hopes to be a contribution in this direction.

THE FUNDAMENTAL IMPORTANCE OF MASS COMMUNICATION

Suicide is such a complex phenomenon that it can generate very special effects. Some of these effects would seem difficult to conceive of, if the scientific literature had not already explored them in depth over the past decades. One of the best known effects has taken on the name of the 'Werther effect' (which we will focus on later) and is a true contagion effect, much like the contagion we experienced with the Covid-19 pandemic or that of any contagious flu or disease. Just as coming into contact with a pathogen, transmissible through contact with an infected person, is possible and well known, so it is possible to be infected by an act such as suicide. To come into contact with the pathogen, in the case of transmission of a viral nature, physical contact between the respiratory particles (or droplets) of the infected person and the new host is required. In this case, the physical distance between the two parties involved in the contact (the infected person and the healthy one receiving the infection) must be reduced, allowing the pathogen to enter the infected person. With suicide, on the other hand, the contact is not necessarily physical, but is often represented by the spread of news of suicide, which succeeds in being contagious in people who are, metaphorically, at a reduced mental distance, people who are suffering a great deal psychologically and who are receptive to the opening of what appears to be a possibility to end a painful life.

Containing suicide, therefore, is not an easy task, and activities aimed at its prevention must take into broad consideration certain sectors that we would not think of convening for this purpose. One of these is the world of mass communication. Current research suggests that suicide prevention, although feasible, involves a series of interventions ranging from creating the best possible conditions for the education of our children and young people, through an accurate and timely assessment of mental disorders, their effective treatment, to the environmental control of risk factors. Correct dissemination of information and awareness-raising are key elements for the success of suicide prevention actions. In all these activities, it is essential to take into account cultural, age and gender variations, among others.

In 1999, the World Health Organisation (WHO) launched a global initiative to prevent suicide. The phenomenon of suicide has far-reaching social, emotional and economic repercussions. Considering the global figure of almost 800,000 suicide victims worldwide each year, it is estimated that for every suicide, at least six individuals are directly affected. In this sense, it emerges how decisive the influence of the media is. The ways in which the media present suicide can have both a protective and a harmful effect. The dissemination of information through the media can be of great benefit, if conveyed correctly, whereas misleading information can cause significant harm.

Individuals in fragile situations may be prompted to engage in behaviour of an imitative nature⁶¹ if they are exposed to excessive or sensationalistic media coverage, especially if this is accompanied by explicit details of the method used. This risk is even higher when the person who committed suicide is socially influential or well recognisable. This media-influenced tendency towards imitation is often called the 'Werther effect', in reference to Goethe's literary character who committed suicide because of unrequited love (Goethe, 1774).

However, it is noted that a responsible approach in the media can also emphasise the importance of suicide prevention, motivating those at risk to seek alternative solutions. This constructive approach is sometimes referred to as the 'Papageno effect', taking its cue from the character in Mozart's opera 'The Magic Flute', who, although tempted to commit suicide, manages to find an alternative at the critical moment (Mozart, 1791).

Media guidelines should be applied to the digital world as well as to the scientific and public world, with the aim of reaching as many people as possible. A peculiar aspect of the digital world is the ability to disseminate information quickly, which can make it more complicated to control.

The aim of this chapter is to focus on the power of influence of mass communication, as well as to represent the suggestions provided by the scientific community on how professionals should deal with the topic of suicide. To this end, the valuable guidance provided by the World Health Organisation (WHO, 2017; 2023) is discussed and, as requested by the body, it should be noted that in relation to the translated parts, the WHO is not responsible for the content or accuracy of the translation.

Guidelines for correct information on suicide and the Werther effect

Regarding the quoted publication, the first source of information, which makes it possible to structure any publication on the subject of suicide, is a list of elements 'allowed' in order to provide correct information, and a list of elements 'to be avoided'.

The permitted elements, which we will discuss in more detail in the final part of the chapter, are as follows:

⁶¹ although the candidate does not like this definition, since a person's suicide is not so much the trigger of an imitative attitude as a real contagion. It is, according to the candidate, like considering viral contagion, i.e., imagining that the mental distance for suicide is comparable to the physical distance for Covid-19. It would be preferable, in this sense, to speak of inspired conduct of suicidal behaviour, instead of 'imitative'.

- Provide precise information on where to seek help.
- Informing people about the facts about suicide and its prevention, avoiding spreading myths.
- Reporting stories on how to cope with life difficulties or suicidal thoughts and how to get help.
- Be particularly careful when spreading news of suicides involving known suicide victims.
- Be cautious when interviewing grieving family members or friends.
- Keep in mind that media professionals can also be influenced by news about suicide.

The elements to be avoided, which we will focus on later, are the following:

- Do not overemphasise suicide stories and do not repeat them unnecessarily.
- Do not use language that sensationalises or normalises suicide, nor present it as a constructive solution to problems.
- Do not explicitly describe the method used.
- Do not give details of the location of the event.
- Do not use sensationalist headlines.
- Do not use photographs, films or links to social media.

The greater the attention and research on the suicide phenomenon, the greater the evidence concerning the media, which can play a significant role in strengthening or weakening suicide prevention efforts. Media reports on suicide may reduce the risk of suicides or increase it. Furthermore, the media may provide useful educational information on suicide or spread misinformation.

On the one hand, vulnerable people are at risk of adopting imitative behaviour following media reports on suicide, especially when the coverage is intense, the language sensationalistic, if the news broadcast explicitly describes the method of suicide and if it echoes or reinforces common myths about suicide. The risk increases, in particular, when the person who committed suicide had a high social status or was easily identifiable. Suicide reports that lead to other suicides are often repeated over time. The effect of such reports, which increase suicide cases, is known as the 'Werther effect'.

On the other hand, responsible information on suicide can help to inform the public about suicide and its prevention, encourage those at risk to seek alternative solutions and can stimulate a more open and less stigmatised dialogue on the topic. Stories showing help-seeking in adverse circumstances can strengthen protective factors and thus contribute to its prevention. Media reports

on suicide should always include information on where to seek help, preferably from recognised 24-hour suicide prevention services. The protective effects of responsible communication on suicide have been referred to in the scientific literature as the 'Papageno effect', from the character Papageno in Mozart's opera 'The Magic Flute'. In the opera, Papageno becomes a suicide temptress when he fears he has lost his love, but at the crucial moment he is called back (by the three geniuses, or children) to alternatives to suicide and chooses to avoid the fatal act.

In this regard, it is worth remembering that suicide hardly constitutes a choice. It is in fact better interpreted as the absence of a choice. In the work 'Psychology of Suicide' (Romaniello et al., 2023) the authors address an important element concerning the suicide phenomenon, that of 'freedom of choice' or free will. There is no doubt that if a person engages in a series of behaviours to procure his or her own death, he or she must decide to do so, but the authors emphasise the incongruity of thinking that a person who commits suicide can really have a 'choice'. We can argue that there is always an alternative, that one can choose to go on living and not go to the extreme gesture. However, the experience reported by suicide tempters is not this, but the opposite. The impossibility of seeing a different future, the impossibility of conceiving a future, the lack of hope, leads one to perceive only one possibility, death. If the possibility is one, then there is no choice (although this lack occurs in personal perception, but it is the individual person who enacts the suicidal behaviour, so it is not possible, from the outside, to determine that there were alternatives) and therefore suicide is configured as a constraint, as a condition.

Returning to the topic of communication, media recommendations must be adapted to both traditional and digital media, trying to reach as many people as possible about suicide prevention. A specific feature of digital social media is that information is spread very fast, making it difficult to monitor and control.

Below, we summarise the current evidence on the impact of media communication on suicide, which is useful for media professionals, crucial on the suicide prevention front, on how to communicate suicide news.

Scientific evidence on the influence of the media on suicidal behaviour

The first evidence of the impact of the media on suicidal behaviour dates back to the end of the 18th century, when Goethe published 'The Sufferings of Young Werther', in which Werther commits suicide because he falls in love with a woman who is precluded from him. The novel was associated

with a series of suicides throughout Europe. Many of those who died by suicide were dressed similarly to Werther and adopted his method or were found with a copy of Goethe's book. As a result, the book was banned in several European countries, including Italy.

Evidence of imitative suicidal behaviour in response to the reporting or portrayal of suicide remained anecdotal until the 1970s, when Phillips (1974) published a study that retrospectively compared the number of suicides that occurred in the months in which a front-page article on suicide appeared in the US press with the number that occurred in the months in which no such article appeared. During the 20-year study period, considering the 33 months in which front-page suicide articles were published, a significant increase in the number of suicides was observed in 26 of those 33 months. Imitation effects were also found by Schmidtke & Häfner (1988) after the broadcast of a television series⁶² in Germany.

Since Phillips' study, more than 100 other investigations into suicides of an imitative nature have been conducted, which have strengthened the initial hypotheses and also improved the sensitivity of the line of research in various ways. For instance, Wasserman (1984) and Stack (1990) replicated the results from Phillips' original study and extended the observation period, using more complex time series regression techniques, and considered rates rather than absolute numbers of suicides. Furthermore, these studies extended the research to different types of media. For example, Bollen & Phillips (1982) and Stack (1989) examined the impact of suicide stories that received national coverage in television news broadcasts in the USA and found significant increases in suicide rates following such broadcasts. Although most of the initial studies were conducted in the USA and considered only suicide, subsequent studies have broadened the scope to Asian and European countries and included a focus on suicide attempts. For example, several research groups (Cheng et al., 2007; Yip et al., 2006; Chen et al., 2014) found increases in suicides and suicide attempts following media coverage of celebrity suicides in China (Taiwan Province and Hong Kong), and the Republic of Korea.

Systematic reviews of more than one hundred studies conducted on the imitative behaviour of suicidal behaviour came to the same conclusion: media reporting of suicides can lead to subsequent suicidal behaviour (Pirkis et al., 2001; Sisask et al., 2012). These studies have also observed that the

⁶² In the Federal Republic of Germany, in the early 1980s, the six-episode TV series, 'Death of a Student', was broadcast twice by ZDF (one of the two national TV channels in Germany). In this series, a 19-year-old student is hit by a train. The first episode deals with the consequences of the suicide act and the start of the police investigation. The consequences of the suicide act were repeated at the beginning of each episode, and the beginning of the suicide act was shown in episodes 2-6. These five episodes depicted the events leading up to the suicide from the perspectives of his parents, his fellow students, his teachers, his girlfriend and himself.

likelihood of an increase in suicidal behaviour varies as a function of the time after the news is reported, generally peaking in the first three days and stabilising in about two weeks (Bollen and Phillips, 1982; Phillips et al., 1986), but sometimes lasting longer (Fu et al., 2007). The increase is evidently related to the quantity and relevance of the coverage. Repeated covers and high-impact stories are indeed more strongly associated with imitative behaviours (Chen et al., 2014; Etzersdorfer et al., 2001; Hassan, et al., 1995; Niederkrotenthaler et al., 2009; Niederkrotenthaler et al., 2010). Such behaviours are accentuated when the person described in the story and the reader (or viewer) have some form of similarity (Niederkrotenthaler et al., 2009, Stack et al, 1990)⁶³, or when the person described in the story is a celebrity and is held in high regard by the reader or viewer (Wasserman et al., 1984; Stack et al., 1990; Stack et al., 1987; Yip et al., 2012; Cheng et al., 2007a; Niederkrotenthaler et al., 2009). A study by Etzersdorfer, Voracek & Sonneck (2001) reported similar results following coverage of a celebrity suicide in Austria's largest newspaper, with increases in suicides more pronounced in regions where the newspaper's distribution was greater.

Sensationalist or glamourised reports of celebrity suicides in the entertainment industry appear to be associated with the greatest increases in subsequent suicides. Combined evidence across studies has shown that the average increase in suicide rates in the month following sensationalist media reports on celebrity suicide is 0.26 per 100,000 population, but the estimated effect is even more pronounced for reports on artist suicides (0.64 per 100,000 population) (Niederkrotenthaler et al., 2012). The effects of the media also depend on the characteristics of the audience. Certain subgroups in the population (young people, people suffering from depression and people who identify with the deceased) seem particularly vulnerable and, therefore, more prone to show increased rates of suicidal thoughts or imitative suicidal behaviour (Phillips et al., 1986; Cheng et al., 2007c; Phillips et al., 1988; Till et al., 2006; Scherr and Reinemann, 2011). Explicit description of suicide using a particular method often leads to increases in suicidal behaviour through the use of the same method (Chen et al., 2014; Ashton and Donnan, 1979; Ashton and Donnan, 1981; Veysey et al., 1999; Hawton et al., 1996).

More recent studies have also evaluated the content characteristics of media reports before assessing media effects. This is reflected in studies by Pirkis and colleagues who differentiated

⁶³ As an example, in the study by Niederkrotenthaler and colleagues, celebrity status and the age between 30 and 64 years of the reported suicide were linked to a higher risk of copycat behaviour, whereas pending loads were linked to a lower risk. Only celebrity status was predictive of an overall increase in suicides post-report. The data suggest that social characteristics influence suicidal imitation, particularly when there are similarities in age group, gender and method.

various types of media reports on the basis of differences in content (Pirkis et al., 2006). This research found that repetitive stories that report suicide methods and reinforce public misconceptions about suicide are associated with subsequent increases in suicides. Specifically, Gould and colleagues report that juvenile 'copycat' suicides were more likely to occur after newspaper stories that were more prominent (e.g. through front-page placement or inclusion of a photo), more explicit (e.g. with headlines containing the word 'suicide' or where the method used is specified), more detailed (e.g. by including the name of the deceased, details of the method, or the presence of a suicide victim's note) and by focusing the text on the death by suicide rather than the suicide attempt (Gould et al, 2014).

While research on the negative repercussions of media accounts of suicide is fairly well established, recent years have seen a growing interest in the potential benefits of positive media communication on the topic. Accounts of people who, despite adversity in life, managed to deal constructively with suicidal thoughts have been associated with a decrease in suicidal behaviour. Other studies suggest that educational media portrayals on how to deal with suicidal thoughts may help reduce such behaviour. There is, therefore, some evidence regarding the media's potential to exert a positive influence. This evidence comes from studies that considered whether media reporting of suicide based on best practices could lead to a reduction in suicide rates and suicide attempts. Etzersdorfer and colleagues demonstrated that the introduction of media reporting guidelines on suicide in the Vienna Metro led to a reduction in sensationalistic reporting of these suicides and, in turn, to a 75% decrease in the suicide rate in the Metro and a 20% decrease in the overall suicide rate in Vienna (Etzersdorfer and Sonneck, 1992; Etzersdorfer and Sonneck, 1998; Sonneck et al., 1994). The repeated distribution of these guidelines led to an improvement in the quality of reports on suicide and a reduction in the Austrian national suicide rate, with the positive impact being most pronounced in regions with a strong media partnership (Niederkrotenthaler and Sonneck, 2007). Studies from Australia, China, Hong Kong, Germany and Switzerland similarly showed that media guidelines were positively correlated with the quality of reporting on suicide. However, the effectiveness of media guidelines depends on their proper implementation (Stack and Niederkrotenthaler, 2017; Tatum et al., 2010).

Further evidence of a possible protective effect against suicide of certain media reports comes from the interesting, aforementioned study by Niederkrotenthaler and colleagues (2010), who found that a specific class of articles that focused on positive crisis management was associated with decreases in suicide rates in the geographic area where published media reports reached a large proportion of the population. Following this initial study on the Papageno effect, a number of other studies have

identified protective impacts from media materials that address constructive coping and provide suicide prevention information (Till et al., 2015; Stack and Niederkrotenthaler, 2017; Till et al., 2017).

Overall, the reviews on media and suicide find that while there is evidence of both beneficial and harmful impacts of media on suicide prevention, most research to date has focused on the harmful impacts (Sisask and Värnik, 2012).

Correct dissemination of suicide news

As we have mentioned, guidelines for the correct reporting of suicide have been formalised over the past decades. Previously, these guidelines were listed, but without discussing the reasons why these guidelines make sense. In the following, we address these reasons, addressing each guideline on the basis of the quoted WHO document.

Provide accurate information on where to seek help

Every story dealing with suicide should provide information on support resources at the end. This information should include referrals to suicide prevention centres, helplines, health and welfare professionals, and self-help groups. It is essential to provide referrals of services that are recognised in the community as being of high quality and accessible 24 hours a day. Such referrals should aim to offer support to those who are in distress or are led to consider suicide as the only way out of distress. The information of listed services should be checked regularly to ensure that it is up-to-date. However, providing an excessive list can be counterproductive. Therefore, only a limited number of references should be provided, e.g. a telephone number and a website.

The importance of this indication clearly lies in offering the possibility of finding a positive answer to suffering and preventing the answer from being found elsewhere.

Educating the public on the facts and prevention of suicide, without spreading myths

There are many false beliefs about suicide. Several studies have shown that news stories that repeat these myths are prone to trigger imitative behaviour. The public tends to remember myths even when presented contrary to the facts. Therefore, it is preferable to focus on the actual facts of suicide. In addition to accurate research on the facts, it is always useful to report on how to prevent suicide, emphasising that people in crisis should seek help and how to access such support. For the

sake of completeness, myths and facts will be presented at the end of the chapter.

This indication is necessary, as beliefs about suicide increase the stigma of suicide and do not emphasise the real characteristics related to suicide.

Telling stories about coping with stress and suicidal thoughts, and how to get help

Providing personal stories of those who managed to cope with adverse situations and suicidal thoughts can help others in difficult situations to adopt positive coping strategies. Stories that include educational material on how to seek help are particularly good. These stories illustrate specific ways in which some people have overcome their suicidal thoughts, emphasising how to seek help.

It is important to dwell on this indication, since the 'imitative' or contagion effect, as we have discussed, does not only occur when suicide is 'proposed', but also when alternative, positive paths are proposed.

Take special care when reporting celebrity suicides

Celebrity suicides are considered newsworthy, and it is often considered in the public interest to report them. However, such news can easily induce copycat behaviour in vulnerable people. Glorifying the death of a celebrity could suggest that society honours suicidal behaviour by incentivising it in others. For this reason, one should proceed with caution when reporting celebrity suicides. These accounts should not glamorise the suicide or detail the method used. Focusing on the celebrity's life, his or her contributions to society and how his or her death negatively affected others is preferable to providing details of the suicide or superficial motivations. Additional caution should be used when the cause of death is not immediately known. Speculating on the possible suicidal cause may be harmful. It is more appropriate to wait until the cause of death is confirmed and investigate the circumstances thoroughly. As mentioned, any report should always include information on available support resources.

Caution with those who have lost a person to suicide

The opinions of those who have suffered a loss through suicide can be valuable in educating others about the reality of suicide. However, there are several considerations to keep in mind when collecting these testimonies for a suicide report. It is essential to act with caution when involving family members, friends and other bereaved individuals who may be in a crisis situation. These individuals, while coping with their grief, are at an increased risk of suicide or self-harm. Respect

for their privacy should take priority over writing a dramatic news story. It is essential for media professionals to recognise that they may learn details about the suicide or deceased that family or friends may ignore. Publishing such information could harm those bereaved by suicide. Journalists must also carefully assess the accuracy of information received during an interview, as the memory of the bereaved may be clouded by acute grief.

In cases where the news is not about a recent loss, people who have grieved through suicide and wish to contribute their story can be a valuable resource to raise awareness and provide alternatives on how to deal with similar situations. However, even if the loss occurred a long time ago, it is important to remember that talking about past experiences may bring back painful memories and emotions. Those who have suffered a loss should be informed of the possible personal consequences of public disclosure of private, detailed information; this should be discussed in advance and measures taken to protect their privacy. If possible, they should have the opportunity to view the article containing their testimony before publication to allow for corrections or changes.

The well-being of media professionals

Preparing a journalistic piece on a suicide can affect media professionals personally. The effect can occur in all contexts, but may be particularly pronounced in small communities where journalists have strong local ties. Media organisations have an obligation to ensure that adequate supports, such as debriefing and mentorship opportunities, are available for their professionals. The latter should not hesitate to seek help if they feel that a story has affected them negatively. In fact, it should be remembered that for no one can rule out a contagion effect, so any strategy to counter suicide must take into account the sensitivity of those who carry out reporting and dissemination work.

Do not overemphasise suicide stories and do not repeat them unnecessarily

Placing suicide stories prominently or repeating them excessively is more likely to lead to suicidal behaviour of an imitative nature. Articles on suicide should ideally be placed in the inside pages of newspapers, towards the back, rather than on the front page or at the beginning of an inside page. Similarly, television news stories on suicide should be presented in the second or third news block, and further down in the order of radio reports or online posts, rather than as the main feature. Care should be taken not to unnecessarily repeat or update the original story.

Avoiding language that sensationalises or normalises suicide

Language that sensationalises suicide should be avoided. For example, it is better to talk about 'rising suicide rates' rather than 'suicide epidemic'. When reporting suicide, using language that communicates that suicide is a public health problem and identifies risk factors, along with a message about prevention, can educate the public about the importance of suicide prevention. Language that misinforms, normalises suicide or provides simplistic explanations should be avoided. Any variations in suicide statistics should be checked, as they may indicate temporary fluctuations rather than statistically reliable increases or decreases. The out-of-context use of the word 'suicide', such as 'political suicide', may desensitise the public to its seriousness. Terms such as 'successful suicide' or 'failed suicide' should not be used; expressions such as 'non-lethal suicidal behaviour' are more accurate and less ambiguous. The phrase 'committed suicide' implies a form of culpability (remember that in some countries suicide is still a crime) and unnecessarily increases the stigma for those who have lost a person to suicide. It is better to say 'died by suicide' or 'took his own life'.

Do not explicitly describe the method used

Detailed description and/or discussion of the method should be avoided, as it will increase the likelihood that a vulnerable person will assume relevant information in order to perform the act as copycat conduct. When reporting an overdose, for instance, it may be harmful to detail the brand/name, nature, quantity or combination of drugs taken, or how they were obtained.

One should also be careful when the method of suicide is rare or new. While the use of an unusual method may seem to make the death more noteworthy, reporting the method may lead other people to adopt it. New methods can easily spread through sensationalist reporting, an effect that can be accelerated by social media.

Do not provide location/site details

There are places that can acquire a reputation as a 'suicide site', for example a bridge, a tall building, a cliff or a railway station where suicidal acts have occurred⁶⁴. Particular care should be taken to avoid promoting such places as suicide sites by using sensationalist language to describe them or overemphasising the number of incidents that occur there. Similar caution should be exercised when reporting suicides or suicide attempts in educational settings or specific institutions, particularly those for vulnerable individuals (such as prisons and psychiatric hospital units).

Avoid sensationalist headlines

⁶⁴ To give an example, the Ariccia bridge

Headlines aim to attract the reader's attention by providing the essence of the story in as few words as possible. The word 'suicide' should not be used in the title and explicit reference to the method or location of suicide should be avoided. If titles are written by other media professionals than those working on the main text, the author of the main text should work with the title editor, or seek expert advice, to ensure that an appropriate title is chosen.

Do not use photographs, video footage or links to digital media

Photographs, video footage or social media links of the scene of a suicide should not be used, particularly when referring to specific details of the location or method. Furthermore, great caution is needed when using images of a person who has died by suicide. If images are used, explicit permission should be obtained from family members. These images should not be placed prominently and should not 'glamorise' the individual or the suicidal act. Several previously cited research studies show that images associated with suicidal acts can be reactivated by vulnerable readers later on, such as during a personal crisis, and could thus trigger suicidal behaviour. Coordination of editorial work on text and pictures is recommended, as the person in charge of the text is sometimes not responsible for the use of pictures. One should not publish suicide notes, last text messages, social media posts or emails of the deceased person.

Reliable sources of information

When discussing suicide, media professionals should rely on reliable sources of statistics and other information on suicide. Government statistical agencies in many countries provide data on their annual suicide rates, usually broken down by age and sexual gender. WHO member states report data on mortality, including suicide, to WHO. Data and statistics should be interpreted carefully and fairly.

Media professionals should seek advice from local suicide prevention experts when preparing suicide news. These experts can help interpret suicide data, ensure that suicide reports avoid increasing the risk of copycat suicides, dispel myths about suicidal behaviour, and provide useful information on recognising and helping people who are considering taking their own lives.

National or regional suicide prevention organisations often have specific contact details for the media. Many countries have associations that provide information on suicide. Some of these associations also play a role in suicide prevention, offer support to people who are experiencing suicidal thoughts or have been affected by the suicide of a relative, provide advocacy services and/or promote research on suicide. The International Association for Suicide Prevention (IASP) is

the international equivalent of these associations. The IASP website includes useful background information for media professionals who are preparing stories on suicide, including lists of suicide prevention services and guidelines for media on how to report on suicide from different countries. Leading experts, suicide prevention services and public health organisations have also developed recommendations on best practices for reporting suicide news in many languages.

Digital media

The scant research available on the impact of online representations of suicide suggests that both protective and harmful effects are possible. Digital media are considered a potentially valuable resource for people seeking help when having suicidal thoughts, as online media sites are easily accessible and often used by young people. People at risk of suicide frequently report feeling less 'alienated' when using social media and sometimes claim that their online activities have reduced suicidal thoughts. This is especially true for activities on websites and forums that offer constructive help and actively avoid normalising suicidal behaviour.

However, the potential normalisation of suicidal behaviour, access to images about suicide and suicidal methods, and the creation of communication channels that can be used for bullying and harassment are of great concern (Robinson et al., 2016, Daine et al., 2013). There are also sites that incite suicide, which detail different suicide methods, encourage suicidal behaviour or recruit individuals for suicide pacts. A growing number of studies indicate that forums can be tools for learning about suicidal methods and can promote suicidal behaviour in vulnerable people.

Beliefs and facts about the suicide phenomenon

It is good to distinguish between beliefs and facts when talking about suicide. Below, based on WHO (2017), are some known beliefs, and the facts that disprove these myths:

Belief: talking about suicide is a bad idea and can be interpreted as encouragement.

Fact: Given the widespread stigma surrounding suicide, many people contemplating suicide do not know who to talk to. Rather than encouraging suicidal behaviour, talking about it openly can offer a person other options or time to rethink their decision, thus preventing suicide.

Belief: people who talk about suicide do not really mean to do it.

Fact: Those contemplating suicide may be seeking help or support. A significant number of people contemplating suicide experience anxiety, depression and feelings of helplessness and may feel they have no other options.

Belief: a suicidal person is determined to die.

Fact: In contrast, suicidal people are often ambivalent about life or death. Someone might act impulsively, for example by drinking pesticides, and die a few days later, even though they would have wanted to continue living. Access to emotional support at the right time can prevent suicide.

Belief: most suicides happen suddenly without warning.

Fact: The majority of suicides were preceded by warning signs, both verbal and behavioural. Of course, some suicides occur without warning. But it is important to recognise and pay attention to these signals.

Belief: once someone attempts suicide, they will always remain a suicide tempter.

Fact: The high risk of committing suicide is often short-term and situation-specific. Although suicidal thoughts may return, they are not permanent and a person with previous suicidal thoughts and attempts can live a long life.

Belief: only people with mental disorders are suicidal.

Fact: Suicidal behaviour indicates deep suffering but not necessarily a mental disorder. Many people with mental disorders do not exhibit suicidal behaviour and not all people who take their own life have a mental disorder.

Belief: suicidal behaviour is easy to explain.

Fact: Suicide is never the result of a single factor or event. The factors that lead a person to suicide are usually multiple and complex. Health, mental health, stressful life events, social and cultural factors must be taken into account when trying to understand suicidal behaviour. Impulsivity is an important element.

Belief: suicide is an appropriate way to deal with problems.

Fact: Suicide is not a constructive or appropriate way to deal with problems, nor is it the only possible way to cope with severe suffering or adverse life circumstances. Stories of people with personal experiences of suicidal ideation who have managed to cope with their difficult life situations may help to highlight viable options for others who may currently be contemplating suicidal behaviour.

CONCLUSIONS

Summary of Main Results

The present doctoral work explored the phenomenon of suicide through a multidisciplinary analysis, integrating sociological, psychological and public policy perspectives to outline a comprehensive picture of suicide as a complex and layered phenomenon. Through the investigation, several key findings emerged that contribute significantly to the existing literature and provide new insights for prevention and intervention:

- Interaction between social and individual factors: research has shown that suicide is not the result of single isolated factors but the outcome of an intense interaction between social dynamics and individual vulnerabilities. This finding underlines the importance of approaches that integrate an understanding of social support networks, inclusion policies and individualised care;
- influence of sociological and psychological theories: through the analysis of Durkheim's theories and modern perspectives on clinical psychology, it was possible to trace how the various currents of thought complement each other, offering a more comprehensive view that can be used to develop more effective prevention strategies;
- Evaluation of prevention initiatives: The thesis critically evaluated several suicide prevention initiatives, both at global and national level. This analysis showed that, while some strategies have achieved significant successes, others need further adaptation to better meet specific local and cultural needs;
- The role of the media and mass communication: The importance of the media in suicide prevention was explored, highlighting both the opportunities and risks associated with their use. Guidelines for responsible suicide communication emerge as crucial tools for minimising the risks of emulation and maximising the effectiveness of information interventions.

These findings not only enrich our approach to the phenomenon of suicide but also open new avenues for future research and the development of more context-sensitive and targeted intervention policies.

Theoretical Implications

The present work has deepened our understanding of suicide, bringing together different theories to provide a more comprehensive and integrated view. The analysis revealed important theoretical implications that deserve to be discussed for their academic and applicative value:

- Extension of Durkheim's sociological theories: The research extended Durkheim's observations on the functions of integration and social regulation in preventing suicide. It was shown how globalisation and contemporary socio-economic changes alter traditional integration structures, introducing new risks and opportunities for suicide prevention. These findings suggest that Durkheim's theories can be updated and adapted to reflect the complexities of modern societies;
- Integration of psychological perspectives: by examining cognitive theories and dynamic psychology, the thesis illustrated how individual factors, such as mental disorders and distorted cognitive processes, interact with social contexts to influence suicide risk. This integrated approach supports the idea that suicide prevention strategies should operate at both individual and collective levels, offering personalised psychological interventions along with community support policies;
- Reflections on contemporary suicidology: The work contributed to the increasingly emerging field of suicidology with new reflections on psychological pain as a critical factor in suicidal behaviour. This approach emphasises the need to develop intervention techniques that not only treat symptoms but also address the root causes of mental pain, suggesting a paradigm shift in the treatment of potential suicides.

These theoretical implications not only strengthen the academic understanding of suicide but also offer new insights for the improvement of policy and intervention practices. The challenge is to transpose the theories into practical actions that can be effectively implemented to reduce suicide rates and improve the quality of life of individuals at risk.

Practical implications

The research has brought to light several findings that have important practical implications for suicide prevention, intervention and public policy. These implications are crucial for translating theoretical knowledge into concrete actions that can have a real impact on reducing suicide incidents:

- innovation in prevention strategies: The results emphasise the importance of prevention strategies that are multidimensional and personalised. It became clear that the most effective

- initiatives are those that combine individual-level interventions (such as cognitive-behavioural therapy for those at high risk) with awareness-raising campaigns and community education to raise awareness about suicide and reduce the stigma associated with mental illness. The adoption of such integrated strategies could significantly improve the effectiveness of prevention programmes;
- Role of the media in suicide prevention: The thesis highlighted how the media can play a dual role in the context of suicide prevention. On the one hand, uninformed communication can increase the risk of imitation, while, on the other hand, informed and sensitive communication can contribute significantly to prevention. These findings suggest the need to develop increasingly sensitive guidelines for media covering the topic of suicide, ensuring that coverage is carried out in a way that minimises risks and maximises benefits;
 - Implications for public policy: Research has highlighted the importance of well formulated public policies that support both suicide prevention and intervention. Effective policies should include adequate funding for mental health services, training programmes for health professionals, and substantial support for future research on suicide. This holistic approach can help create a more robust support environment for individuals at risk;
 - Integration of technology and digital innovation: Finally, the growing role of technology in contemporary society offers new opportunities for suicide prevention. Applications, online platforms and big data technologies can be harnessed to identify signs of risk, provide real-time support and connect individuals with resources and help. The challenge will be to integrate these technologies in an ethical and effective manner, while ensuring the privacy and safety of users.

Limitations and Critical Reflections

Every disciplinary study, no matter how neat, has limitations, and understanding these is crucial to correctly interpreting the results and guiding future research. Below, we highlight some of the main limitations of this thesis and the critical reflections associated with them:

- Data scope and generalisability: One of the main limitations of this study lies in the scope and generalisability of the data used. Although the research attempted to cover a wide range of prevention theories and initiatives, the specific data may not be fully representative of all populations or cultures, for reasons related to the availability of reliable data. Therefore, the results may not be universally applicable, requiring complementary studies in different contexts to confirm or modify the conclusions reached;

- variability of the interventions studied: The research analysed several suicide prevention initiatives, but the inherent variability of these interventions -differences in design, implementation and evaluation criteria- could influence the interpretation of their successes or failures. This suggests the need for standardisation in future research to ensure that comparisons between different programmes are as fair and informative as possible;
- temporal and contextual changes: finally, the dynamics of suicide may change rapidly in response to global social, economic or political events. This means that some of the conclusions of the work may need to be continually updated to remain relevant and useful in prevention strategies.

Trusting that this work will provide inspiration for further investigation aimed at improving the phenomenon in question, future endeavours should focus on a more in-depth analysis of each of the aspects presented.

BIBLIOGRAPHY

- Addis M.E. & Mahalik J.R. (2003). Men, masculinity, and the contexts of help seeking. *American Psychologist*, 58, 5-14.
- Augustine of Hippo. "De Civitate Dei." Translated by R.W. Dyson, Cambridge University Press, 1998
- Ajdacic-Gross V., Weiss M.G., Ring M., Hepp U., Bopp M. & Gutzwiller F. (2008). Methods of suicide: international suicide patterns derived from the WHO mortality database. *Bulletin of the World Health Organization*, 86(9), 726-732.
- Allen, James P. (2011). *The Debate between a Man and His Soul: A Masterpiece of Ancient Egyptian Literature*. Leiden, The Netherlands: Brill
- American Association of Suicidology. AAS statement on the economy and suicide. 2009. Retrieved August 18, 2009, from <http://www.suicidology.org/web/guest/current-research>
- Arensman E., Scott V., De Leo D. & Pirkis J. (2020). Suicide and Suicide Prevention From a Global Perspective. *Crisis*. 41(Suppl 1), S3-S7.
- Ashton JR, Donnan S. Suicide by burning: a current epidemic. *BMJ*. 1979;2(6193):769-70.
- Ashton JR, Donnan S. Suicide by burning as an epidemic phenomenon: an analysis of 82 deaths and inquests in England and Wales in 1978-79. *Psychol Med*. 1981;11(4):735-9.
- Berman A.L., Litman R.E. & Diller J. (1989). *Equivocal death casebook*. Washington DC: American University.
- Andriessen K. (2006). On "intention" in the definition of suicide. *Suicide & Life-Threatening Behavior*, 36, 533-538.
- Beck, A.T. 1967, "Depression: Clinical, Experimental, and Theoretical Aspects." University of Pennsylvania Press.
- Beck AT, Weissman A, Lester D, Trexler L. The measurement of pessimism: the hopelessness scale. *J Consult Clin Psychol*. 1974 Dec;42(6):861-5. doi: 10.1037/h0037562. PMID: 4436473.

- Beck, A.T., Rush, A.J., Shaw, B.F., & Emery, G. (1979). *Cognitive therapy of depression*. New York: Guilford Press.
- Beck AT, Steer RA, Kovacs M, Garrison B. Hopelessness and eventual suicide: a 10-year prospective study of patients hospitalised with suicidal ideation. *Am J Psychiatry*. 1985 May;142(5):559-63. doi: 10.1176/ajp.142.5.559. PMID: 3985195.
- Beck A.T., Brown G., Berchick R.J., Stewart B.L. & Steer R.A. (1990). Relationship between hopelessness and ultimate suicide: a replication with psychiatric outpatients. *American Journal of Psychiatry*. 147(2), 190-195.
- Beck A.T., Rush J., Shaw B., Emery, G. In King R., *Cognitive therapy of depression*. New York: Guilford, 1979. *Aust N Z J Psychiatry*. 2002 Apr;36(2):272-5. doi: 10.1046/j.1440-1614.2002.t01-4-01015.x. PMID: 11982560.
- Bender T.W., Gordon K.H., Bresin K. & Joiner T.E. (2011). Impulsivity and suicidality: The mediating role of painful and provocative experiences. *Journal of Affective Disorders*, 129, 301-317.
- Berman A.L. (2011). Estimating the population of survivors of suicide: seeking an evidence base. *Suicide & Life-Threatening Behavior*, 41(1), 110-116.
- Besnard, Philippe (1993). Anomie and fatalism in Durkheim's theory of regulation. In Stephen P. Turner (ed.), *Emile Durkheim: Sociologist and Moralist*. Routledge. pp. 169--90.
- Bollen KA, Phillips DP. Imitative suicides: a national study of the effects of television news stories. *Am Sociol Rev*. 1982;47(6):802-9.
- Borges G, Haro JM, Chiu WT, Hwang I, de Girolamo G, Medina-Mora ME et al. Prevalence and identification of groups at risk for 12-month suicidal behaviour in the WHO World Mental Health Surveys. In: Nock MK, Borges G, Ono Y, editors. *Suicidality in the WHO World Mental Health Surveys*. New York (NY): Cambridge University Press; 2012:185-98.
- Brent DA, Mann JJ. Family genetic studies, suicide, and suicidal behavior. *Am J Med Genet C Semin Med Genet*. 2005 Feb 15;133C(1):13-24. doi: 10.1002/ajmg.c.30042. PMID: 15648081.

- Bremberg SG. Suicide rates in European OECD nations converged during the period 1990-2010. *Soc Psychiatry Psychiatr Epidemiol.* 2017 May;52(5):559-562. doi: 10.1007/s00127-017-1367-z. Epub 2017 Mar 4. PMID: 28260127.
- Brown GK, Ten Have T, Henriques GR, Xie SX, Hollander JE, Beck AT. Cognitive therapy for the prevention of suicide attempts: a randomized controlled trial. *JAMA.* 2005 Aug 3;294(5):563-70. doi: 10.1001/jama.294.5.563. PMID: 16077050.
- Brundin L, Bryleva EY, Thirtamara Rajamani K. Role of Inflammation in Suicide: From Mechanisms to Treatment. *Neuropsychopharmacology.* 2017 Jan;42(1):271-283. doi: 10.1038/npp.2016.116. Epub 2016 Jul 5. PMID: 27377015; PMCID: PMC5143480.
- Brunstein Klomek A., Sourander A. & Gould M. (2010). The association of suicide and bullying in childhood to young adulthood: a review of cross-sectional and longitudinal research findings. *Canadian Journal of Psychiatry.* 55(5), 282-288.
- Burkert, Walter. "Greek Religion." Harvard University Press, 1985.
- Cantarella, Eva. "Capital punishments in Greece and Rome." Il Mulino, 1991
- Casiano H., Katz L.Y., Globerman D. & Sareen J. (2013). Suicide and deliberate self-injurious behaviour in juvenile correctional facilities: a review. *Journal of the Canadian Academy of Child and Adolescent Psychiatry,* 22(2), 118-124.
- Cavanagh J.T., Carson A.J., Sharpe M. & Lawrie S.M. (2003). Psychological autopsy studies of suicide: a systematic review. *Psychological medicine,* 33(3), 395-405.
- Centers for Disease Control and Prevention (CDC, 2013); Brener ND, Kann L, Shanklin S, Kinchen S, Eaton DK, Hawkins J, Flint KH; Centers for Disease Control and Prevention (CDC). Methodology of the Youth Risk Behavior Surveillance System--2013. *MMWR Recomm Rep.* 2013 Mar 1;62(RR-1):1-20. Erratum in: *MMWR Morb Mortal Wkly Rep.* 2021 Jan 01;69(5152):1663. PMID: 23446553.
- Centers for Disease Control and Prevention (CDC, 2014); Web-based injury statistics query and reporting system. Atlanta (GA): Centers for Disease Control and Prevention; 2014 (<http://www.cdc.gov/injury/wisqars/index.html>)
- Conwell Y. Suicide and terminal illness: Lessons from the HIV pandemic. *Crisis: The Journal of Crisis Intervention and Suicide Prevention.* 1994;

- Conwell Y. Management of suicidal behaviour in the elderly. *Psychiatric Clinics of North America*. 1997; 20:667-683.
- Chang SS, Chen YY, Yip PSF, Lee WJ, Hagihara A, Gunnell D. Regional changes in charcoal-burning suicide rates in East/Southeast Asia from 1995 to 2011: a time trend analysis. *PLoS Medicine*. 2014;11(4):e1001622.
- Chen YY, Yip PS, Chan CH, Fu KW, Chang SS, Lee WJ et al. The impact of a celebrity's suicide on the introduction and establishment of a new method of suicide in South Korea. *Arch Suicide Res*. 2014;18(2):221-6.
- Cheng ATA, Hawton K, Lee CTC, Chen THH. The influence of media reporting of the suicide of a celebrity on suicide rates: a population-based study. *Int J Epidemiol*. 2007;36(6):1229-34.
- Cheng ATA, Hawton K, Chen THH, Yen AMF, Chen CY, Chen LC, et al. The influence of media coverage of a celebrity suicide on subsequent suicide attempts. *J Clin Psychiatry*. 2007;68(6):862-6.
- Cheng ATA, Hawton K, Chen THH, Yen AMF, Chang JC, Chong MY et al. The influence of media reporting of a celebrity suicide on suicidal behaviour in patients with a history of depressive disorder. *J Affect Disord*. 2007;103:69-75.
- Cho J., Lee W.J., Moon K.T., Suh M., Sohn J., Ha K.H. (2013). Medical care utilization during 1 year prior to death in suicides motivated by physical illnesses. *Journal of Preventive Medicine and Public Health*, 46(3), 147-154.
- Chopin E., Kerkhof A. & Arensman E. (2004). Psychological dimensions of attempted suicide: Theories and data. In De Leo D., Bille-Brahe U., Kerkhof A.J.F.M. & Schmidtke A. (eds.). *Suicidal behaviour: Theories and research findings*, pp. 41-60. Gottingen: Hogrefe & Huber.
- Colt, G.H. (1991). *November of the Soul: The Enigma of Suicide*. New York: Scribner.
- Daine K., Hawton K., Singaravelu V., Stewart A., Simkin S. & Montgomery P. (2013). The power of the web: a systematic review of studies of the influence of the internet on self-harm and suicide in young people. *PLoS ONE*, 8(10).

- Dante Alighieri. "Divine Comedy: Inferno." Translation by Allen Mandelbaum, Bantam Classics, 1982
- Davis J.H. (1988). Suicidal investigation and classification of death by coroners and medical examiners. In Nolan J. (ed.). *The suicide case: investigation and trial of insurance claims.* Tort and insurance practice section, pp. 35-50. Washington DC: The American Bar Association.
- Dawson AH, Eddleston M, Senarathna L, Mohamed F, Gawarammana I, Bowe SJ et al. Acute human toxicity of agricultural pesticides: a prospective cohort study. *PLoS Medicine.* 2010;7(10):e1000357. doi:10.1371/journal.pmed.1000357.
- De Leo D., Burgis S., Bertolote J.M., Kerkhof A. & Bille-Brahe U. (2004). Definitions of Suicidal Behaviour. In De Leo D., Bille-Brahe U., Kerkhof A. & Schmidtke A. (eds.), *Suicidal Behaviour: Theories and Research Findings*, pp. 17-39. Gottingen: Hogrefe & Huber Publishers.
- De Leo D., Cerin E., Spathonis K. & Burgis S. (2005). Lifetime risk of suicide ideation and attempts in an Australian community: Prevalence, suicidal process, and help-seeking behaviour. *Journal of Affective Disorders*, 86, 215-224.
- De Leo D., Burgis S., Bertolote J.M., Kerkhof A.J., Bille-Brahe U. (2006). Definitions of suicidal behaviour: lessons learned from the WHO/EURO multicentre Study. *Crisis*, 27(1), 4-15.
- De Leo D. (2017). Suicidal behaviour in refugees: a neglected emergency. *Quaderni degli Argonauti*, 2017, 37-47.
- De Leo D. (2020). *Requests for help: telephone and telematic assistance.* Rome: Alpes.
- De Leo D. & Trabucchi M. (2020). *Io Sono la Solitudine.* Milan: Gribaudo.
- De Leo D., Goodfellow B., Silverman M., Berman A., Mann J., Arensman E., Hawton K., Phillips Mr., Vijayakumar L., Andriessen K., Chavez-Hernandez Am., Heisel M., Kolves K. (2021). International study of definitions of English language terms for suicidal behaviours: a survey exploring preferred terminology, *BMJ Open*, 11: e043409, 1-10.
- Dervic K, Brent DA, Oquendo MA. Completed suicide in childhood. *Psychiatric Clinics of North America.* 2008; 31:271-291.

- Dinzelbacher, Peter, 1996. "Visions of Heaven and Hell in the Middle Ages." Jaca Book
- Dodds, E.R. (1951). *The Greeks and the Irrational*. Berkeley and Los Angeles, University of California Press.
- Douglas J.D. (1967). *The social meanings of suicide*. Princeton: Princeton, University Press.
- Dowsett S. (2012). Spain suspends home evictions for most needy. Reuters, 15 November, www.reuters.com/article/2012/11/15/usspain-evictions-idUSBRE8AE10A20121115.
- Durkeim E. (1951). *Suicide: a study in sociology* (JA Spaulding & G Simpson, Trans.). The Free Press, London. (Original work published 1897).
- D'Zurilla, T. J., & Nezu, A. M. (2006). *Problem-solving therapy: A positive approach to clinical intervention* (3rd ed.). New York: Springer.
- Ernst C, Lalovic A, Lesage A, Seguin M, Tousignant M, Turecki G. Suicide and no axis I psychopathology. *BMC Psychiatry*. 2004; 4:7.
- Etzersdorfer E, Sonneck G, Nagel Kuess S. Newspaper reports and suicide. *N Engl J Med*. 1992;327(7):502-3.
- Etzersdorfer E, Sonneck G. Preventing suicide by influencing mass-media reporting: the Viennese experience 1980-1996. *Arch Suicide Res*. 1998;4(1):64-74.
- Etzersdorfer E, Voracek M, Sonneck G. A dose-response relationship of imitational suicides with newspaper distribution. *Aust N Z J Psychiatry*. 2001;35(2):251.
- Farberow, N. L. (Ed.) (1980). *The Many Faces of Suicide*. New York: McGraw-Hill Book Company.
- Fazel S., Grann M., Kling B. & Hawton K. (2011). Prison suicide in 12 countries: an ecological study of 861 suicides during 2003-2007. *Social Psychiatry and Psychiatric Epidemiology*, 46, 191-195.
- Foster T. (2011). Adverse life events proximal to adult suicide: a synthesis of findings from psychological autopsy studies. *Archives of Suicide Research*, 15(1), 1-15.
- Freud S. (1917). *Introductory lectures on psychoanalysis*. New York: Liveright.

- Freud, S. (1917). Mourning and Melancholia. The Standard Edition of the Complete Psychological Works of Sigmund Freud, Volume XIV (1914-1916): On the History of the Psycho-Analytic Movement, Papers on Metapsychology and Other Works, 237-258.
- Freud, Sigmund. "Mourning and Melancholia." 1917. In *Metapsychology*, edited by Cesare L. Musatti, Turin: Bollati Boringhieri, 1976.
- Freud, Sigmund. "Beyond the pleasure principle." 1920. In "Works of Sigmund Freud (OSF)," vol. 9, Turin: Bollati Boringhieri, 1977.
- Fu KW, Yip PSF. Long-term impact of celebrity suicide on suicidal ideation: Results from a population-based study. *J Epidemiol Community Health*. 2007;61(6):540-6.
- Gibbs N. & Thompson M. (2012). The war on suicide?, *Time*, 23 July. www.time.com/time/magazine/article/0,9171,2119337,00.html.
- Gilbert P, Allan S. The role of defeat and entrapment (arrested flight) in depression: an exploration of an evolutionary view. *Psychol Med*. 1998 May;28(3):585-98. doi: 10.1017/s0033291798006710. PMID: 9626715.
- Global Burden of Disease (GBD) (2019). Global, regional, and national burden of suicide mortality 1990 to 2016: systematic analysis for the Global Burden of Disease Study 2016. *BMJ*, 364, 194.
- Goethe, J. W. von. (1983). *The sorrows of young Werther*. Rizzoli.
- Goldsmith SK, Pellmar TC, Kleinman AM, Bunney WE (Eds). (2002), *Reducing suicide: A national imperative*, , Institute of Medicine National Academies Press
- Gould M., Kleinman MH, Lake AM, Forman J, Basset Midle J. Newspaper coverage of suicide and initiation of suicide clusters in teenagers in the USA, 1988-96: a retrospective, population-based, case-control study. *Lancet Psychiatry*. 2014;1(1): 34-43. doi: 10.1016/S2215-0366(14)70225-1.
- Grande E, Grippo F, Cialesi R, Marchetti S, Frova L. Suicide mortality in Italy during the first year of the COVID-19 pandemic. *J Affect Disord*. 2023 Oct 15;339:776-780. doi: 10.1016/j.jad.2023.07.101. Epub 2023 Jul 20. PMID: 37479041.
- Griffin M, 1976, *Seneca. A Philosopher in Politics*. Oxford, Clarendon Press

- Griffith, M, 1999. "Sophocles: Ajax." Cambridge University Press.
- Gunnell, D., & Frankel, S. (1994). Prevention of suicide: aspirations and evidence. *BMJ*, 308(6938), 1227-1233.
- Gunnell D., Eddleston M., Phillips M.R., Konradsen F. (2007). The global distribution of fatal pesticide self-poisoning: systematic review. *BMC public health*, A, 7, 357.
- Haas A.P., Eliason M., Mays V.M., Mathy R.M., Cochran S.D. & D'Augelli A.R. (2011). Suicide and suicide risk in lesbian, gay, bisexual, and transgender populations: review and recommendations. *Journal of Homosexuality*, 58(1), 10-51.
- Harris EC, Barraclough B. Suicide as an outcome for mental disorders. A meta-analysis. *British Journal of Psychiatry*. 1997; 170:205-228.
- Hassan R. Effects of newspaper stories on the incidence of suicide in Australia: a research note. *Aust N Z J Psychiatry*. 1995;29(3):480-3.
- Haw C, Bergen H, Casey D, Hawton K. Repetition of deliberate self-harm: a study of the characteristics and subsequent deaths in patients presenting to a general hospital according to extent of repetition. *Suicide and Life Threatening Behavior*. 2007;
- Hawton K, Simkin S, Deeks J, O'Connor S, Keen A, Altman DG et al. Effects of a drug overdose in a television drama on presentations to hospital for self poisoning: time series and questionnaire study. *BMJ*. 1996;318(7189):972-7.
- Hawton K, van Heeringen K. Suicide. *Lancet*. 2009 Apr 18;373(9672):1372-81. doi: 10.1016/S0140-6736(09)60372-X. PMID: 19376453.
- Hegerl, U., Althaus, D., Schmidtke, A., & Niklewski, G. (2006). The alliance against depression: 2-year evaluation of a community-based intervention to reduce suicidality. *Psychological Medicine*, 36(9), 1225-1233.
- Höfer P, Rockett IR, Värnik P, Etzersdorfer E, Kapusta ND. Forty years of increasing suicide mortality in Poland: undercounting amidst a hanging epidemic? *BMC Public Health*. 2012;11(12):644.
- Hume, David. "Of Suicide." In "Essays: Moral, Political, and Literary," edited by Eugene F. Miller, Liberty Fund, 1985.

- Istat (2016). Impact of major economic crises on health and mortality. The Italian case.
- Istat (2023).
https://esploradati.istat.it/databrowser/#/it/dw/categories/IT1,Z0810HEA,1.0/HEA_DEATH/DCIS_SUICIDI
- James B. Pritchard ed., *Ancient Near Eastern Texts Relating to the Old Testament*, Princeton University Press 1950
- Jané-Llopis E., Barry M., Hosman C. & Patel V. (2005). Mental health promotion works: a review. *Promotion & Education*, 12(2), 9-25. Joiner T.E. (2005). *Why people die by suicide*. Cambridge: Harvard University Press.
- Jansen E, Buster MCA, Zuur AL, Das C. Fatality of suicide attempts in Amsterdam 1996-2005. *Crisis*. 2009;30 (4):180-5.
- Joiner T.E. (2005). *Why people die by suicide*. Cambridge: Harvard University Press.
- Joiner, T.E., Van Orden, K.A., Witte, T.K., & Rudd, M.D. (2009). *The Interpersonal Theory of Suicide: Guidance for Working with Suicidal Clients*. American Psychological Association.
- Johnson J.G., Cohen P., Gould M.S., Kasen S., Brown J., Brook J.S. (2002). Childhood adversities, interpersonal difficulties, and risk for suicide attempts during late adolescence and early adulthood. *Archives of General Psychiatry*, 59(8), 741-749.
- Johnson J., Wood A.M., Gooding P., Taylor P.J. & Tarrrier N. (2011). Resilience to suicidality: the buffering hypothesis. *Clinical Psychology Review*, 31, 563-591.
- Jollant F, Lawrence NS, Giampietro V, Brammer MJ, Fullana MA, Drapier D, Courtet P, Phillips ML. Orbitofrontal cortex response to angry faces in men with histories of suicide attempts. *Am J Psychiatry*. 2008 Jun;165(6):740-8. doi: 10.1176/appi.ajp.2008.07081239. Epub 2008 Mar 17. PMID: 18346998.
- Kalt A., Hossain M., Kiss L. & Zimmerman C. (2013). Asylum seekers, violence and health: a systematic review of research in high-income host countries. *American Journal of Public Health*, 103(3), 30-42.

- Kessler R, Ustun TB, editors. The WHO World Mental Health Surveys. New York (NY): Cambridge University Press; 2008.
- Klonsky, E. D., & May, A. M. (2015). The Three-Step Theory (3ST): A new theory of suicide rooted in the "ideation-to-action" framework. *International Journal of Cognitive Therapy*, 8(2), 114-129. <https://doi.org/10.1521/ijct.2015.8.2.114>
- Klonsky ED, Saffer BY, Bryan CJ. Ideation-to-action theories of suicide: a conceptual and empirical update. *Curr Opin Psychol*. 2018 Aug;22:38-43. doi: 10.1016/j.copsy.2017.07.020. Epub 2017 Jul 24. PMID: 30122276.
- Klonsky ED, Pachkowski MC, Shahnaz A, May AM. The three-step theory of suicide: Description, evidence, and some useful points of clarification. *Prev Med*. 2021 Nov;152(Pt 1):106549. doi: 10.1016/j.ypmed.2021.106549. Epub 2021 Sep 16. PMID: 34538372.
- Kotila L, Lonnqvist J. Adolescents who make suicide attempts repeatedly. *Acta Psychiatrica Scandinavica*. 1987; 76:386-393.
- Kposowa AJ. (2003). Divorce and suicide risk. *Journal of Epidemiology and Community Health*, 57(12), 993.
- Kristeller, Paul Oskar, 1945. "The Philosophy of Marsilio Ficino." Columbia University Press
- Lee C. & Owens R.G. (2002a). Issues for a psychology of men's health. *Journal of Health Psychology*, 7, 209-217.
- Lee C. & Owens R.G. (2002b). *The Psychology of Men's Health*. Buckingham: Open University Press.
- Lichtheim M. (1973), *Ancient Egyptian Literature*, vol. 1, University of California Press
- Long, A. A., and Sedley, D. N. "The Hellenistic Philosophers." Cambridge University Press, 1987
- Linehan, M. M. (1993). *Cognitive-behavioral treatment of borderline personality disorder*. Guilford Press

- Ludvigsson JF, Andersson E, Ekblom A, Feychting M, Kim JL, Reuterwall C et al. External review and validation of the Swedish national inpatient register. *BMC Public Health*. 2011;11:450. doi:10.1186/1471-2458-11-450.
- Luoma J.B., Martin C.E. & Pearson J.L. (2002). Contact with mental health and primary care providers before suicide: A review of the evidence. *American Journal of Psychiatry*, 159, 909-916.
- Luxton D.D., June J.D. & Comtois K.A. (2013). Can post-discharge follow-up contacts prevent suicide and suicidal behaviour? A review of the evidence. *Crisis*, 34(1), 32-41.
- Ma J, Batterham PJ, Calear AL, Han J. A systematic review of the predictions of the Interpersonal-Psychological Theory of Suicidal Behavior. *Clin Psychol Rev*. 2016 Jun;46:34-45. doi: 10.1016/j.cpr.2016.04.008. Epub 2016 Apr 20. PMID: 27155061.
- Mäkinen I.H. (2006). Suicide mortality of Eastern European regions before and after the Communist period. *Social Science & Medicine*, 63, 307-319.
- Maltzberger, J. T., & Goldblatt, M. J. (Eds.). (1996). *Essential papers on suicide*. New York University Press.
- Mann JJ, Waternaux C, Haas GL, Malone KM. Toward a clinical model of suicidal behaviour in psychiatric patients. *Am J Psychiatry*. 1999 Feb;156(2):181-9. doi: 10.1176/ajp.156.2.181. PMID: 9989552.
- Mann JJ. Neurobiology of suicidal behaviour. *Nat Rev Neurosci*. 2003 Oct;4(10):819-28. doi: 10.1038/nrn1220. PMID: 14523381.
- Mann, J., Apter, A., Bertolote, J., Beautrais, A., Currier, D., Haas, A. & Hendin, H. (2005). Suicide prevention strategies: A systematic review. *JAMA*, 294(16), 2064-2074.
- Mann J.J., Currier D.M. (2010). Stress, genetics and epigenetic effects on the neurobiology of suicidal behaviour and depression. *European Psychiatry*, 25(5), 268-271.
- Matthieu M. & Hensley M. (2013). Gatekeeper training outcomes: enhancing the capacity of staff in substance abuse treatment programmes to prevent suicide in a high-risk population. *Mental Health Substance Use*, 6(4), 274-86.

- May, A. M., & Klonsky, E. D. (2016). What distinguishes suicide attempters from suicide ideators? A meta-analysis of potential factors. *Clinical Psychology: Science and Practice*, 23(1), 5-20. <https://doi.org/10.1037/h0101735>.
- Mayo D.J. (1992). What is being predicted? The definition of suicide. In Maris R.W., Berman A.L., Maltzberger J.T. & Yufit R.I. (eds.). *Assessment and prediction of suicide*, pp. 88-101, New York: Guilford.
- Maris RW, Berman AL, Silverman MM, 2000, *Comprehensive textbook of suicidology*. Guilford, New York.
- Matsubayashi T, Ueda M. The effect of national suicide prevention programmes on suicide rates in 21 OECD nations. *Soc Sci Med*. 2011 Nov;73(9):1395-400. doi: 10.1016/j.socscimed.2011.08.022. Epub 2011 Sep 12. PMID: 21940085.
- Miller M, Azraek D, Hemenway D. The epidemiology of case fatality rates for suicide in the Northeast. *Inj Prev Res*. 2004;43(6):723-30.
- Milner A. & De Leo D. (2010). Who seeks treatment where? Suicidal behaviours and health care: Evidence from a community survey. *Journal of Nervous and Mental Disease*, 198, 412-419.
- Ministry of Social Affairs and Health, Finland. (2001). *National Suicide Prevention Project in Finland*. Helsinki: Ministry of Social Affairs and Health.
- Mishara B.L. & Weisstub D.N. (2016). The legal status of suicide: A global review. *International Journal of Law and Psychiatry*, 44, 54-74.
- Morselli E. (1879). *Il suicidio: saggio di statistica morale comparata*. Milan: Dumolard.
- Moscicki, E.K. (2001) *Epidemiology of Completed and Attempted Suicide: Toward a Framework for Prevention*. *Clinical Neuroscience Research*, 1, 310-323. [http://dx.doi.org/10.1016/S1566-2772\(01\)00032-9](http://dx.doi.org/10.1016/S1566-2772(01)00032-9)
- Mozart, W. A. (1791/1990). *Die Zauberflöte (The Magic Flute) [CD]*. Sir Neville Marriner conducting the Academy of St. Martin in the Fields. Deutsche Grammophon 431 689-2.
- Murray, A. (1998). *Suicide in the Middle Ages: Volume 1: The Violent Against Themselves*.

- Murray, Alexander. "Suicide in the Middle Ages: Volume II: The Curse on Self-Murder." Oxford University Press, 2000.
- Nezu, A.M., Nezu, C.M., & D'Zurilla, T.J. (2013). *Problem-Solving Therapy: A Treatment Manual*. New York: Springer Publishing Company.
- Niederkrotenthaler, T., et al., "Role of Media Reports in Completed and Prevented Suicide," 2010, Shneidman, E.S., "Definition of Suicide," 1985
- Niederkrotenthaler T, Sonneck G. Assessing the impact of media guidelines for reporting on suicides in Austria: interrupted time series analysis. *Aust N Z J Psychiatry*. 2007;41(5):419-28.
- Niederkrotenthaler T, Till B, Voracek M, Dervic K, Kapusta ND, Sonneck G. Copycat-effects after media reports on suicide: a population-based ecologic study. *Soc Sci Med*. 2009; 69:1085-90. doi: 10.1093/eurpub/ckp034.
- Niederkrotenthaler T, Voracek M, Herberth A, Till B, Strauss M, Etzersdorfer E et al. Role of media reports in completed and prevented suicide - Werther v. Papageno effects. *Br J Psychiatry*. 2010;197:234-43.
- Niederkrotenthaler T., Fu K.W., Yip P.S., Fong D.Y., Stack S. & Cheng Q. (2012). Changes in suicide rates following media reports on celebrity suicide: a metaanalysis. *Journal of Epidemiology and Community Health*, 66(11), 1037-1042.
- National Violent Death Reporting System (NVDRS) Coding manual, version 3. Atlanta (GA): Centers for Disease Control and Prevention; 2014.
(http://www.cdc.gov/violenceprevention/pdf/NVDRS_Coding_Manual_Version_3-a.pdf)
- Nock, M.K., Borges, G., Bromet, E.J., Cha, C.B., Kessler, R.C., & Lee, S. (2008). Suicide and suicidal behaviour. *Epidemiologic Reviews*, 30(1), 133-154.
- O'Connor R.C. & Nock M.K. (2014). The psychology of suicidal behaviour. *Lancet Psychiatry*, 1(1), 73-85.
- Pariante CM, Lightman SL. The HPA axis in major depression: classical theories and new developments. *Trends Neurosci*. 2008 Sep;31(9):464-8. doi: 10.1016/j.tins.2008.06.006. Epub 2008 Jul 31. PMID: 18675469.

- Paris, J. (2007). *Half in Love With Death: Managing the Chronically Suicidal Patient* (1st ed.). Routledge. <https://doi.org/10.4324/9781315093307>
- Patel V, Ramasundarahettige C, Vijayakumar L, Thakur J S, Gajalakshmi V, Gururaj G et al. Suicide mortality in India: a nationally representative survey. *Lancet*. 2012;379(9834):2343-51.
- Paulozzi LJ, Mercy J, Frazier L Jr, Annett JL. CDC's National Violent Death Reporting System: background and methodology. *Inj Prev*. 2004;10(1):47-52.
- Perry IJ, Corcoran P, Fitzgerald AP, Keeley HS, Reulbach U, Arensman E. The incidence and repetition of hospital-treated deliberate self-harm: findings from the world's first registry. *PLoS ONE*. 2012;7(2):1-7.
- Phillips DP. The influence of suggestion on suicide: substantive and theoretical implications of the Werther effect. *Am Sociol Rev*. 1974;39(3):340-54.
- Phillips DP, Carstensen LL. Clustering of teenage suicides after television news stories about suicide. *N Engl J Med*. 1986;315(11):685-9.
- Phillips DP, Carstensen LL. The effect of suicide stories on various demographic groups, 1968-1985. *Suicide Life Threat Behav*. 1988;18(1):100-14.
- Phillips M.R., Yang G., Zhang Y., Wang L., Ji H. & Zhou M. (2002). Risk factors for suicide in China: a national case-control psychological autopsy study. *Lancet*, 360, 1728-1736.
- Pirkis J, Blood RW. Suicide and the media: (1) Reportage in non-fictional media. *Crisis*. 2001;22(4):146-54.
- Pirkis JE, Burgess PM, Francis C, Blood RW, Jolley DJ. The relationship between media reporting of suicide and actual suicide in Australia. *Soc Sci Med*. 2006;62:2874-86.
- Pirkis, J., Spittal, M. J., Cox, G., Robinson, J., Cheung, Y. T. D., & Studdert, D. (2013). The effectiveness of structural interventions at suicide hotspots: a meta-analysis. *International Journal of Epidemiology*, 42(2), 541-548.
- Pollock LR, Williams JM. Problem-solving in suicide attempters. *Psychol Med*. 2004 Jan;34(1):163-7. doi: 10.1017/s0033291703008092. PMID: 14971637.

- Pompili M., Vichi M., Innamorati M., Lester D., Yang B., Leo D.D. & Girardi P. (2014). Suicide in Italy during a time of economic recession: some recent data related to age and gender based on a nationwide register study. *Health Soc Care Commun.*, 22(4), 361-367.
- Pompili M. *The prevention of suicide*. Bologna: il Mulino 2013
- Radhakrishnan R. & Andrade C. (2012). Suicide: an Indian perspective. *Indian Journal of Psychiatry*, 54(4), 304-319.
- Reinecke, M. A., DuBois, D. L., & Schultz, T. M. (2001). Social problem solving, mood, and suicidality among inpatient adolescents. *Cognitive Therapy and Research*, 25(6), 743-756. <https://doi.org/10.1023/A:1012971423547>.
- Rimkeviciene J., O'Gorman J., De Leo D. (2015). Impulsive suicidal attempts: a systematic literature review of definitions, characteristics and risk factors. *Journal of Affective Disorders*, 171, 93-104.
- Romaniello, C., (ed.) 2021, *Ogni Vita Conta. Intercepting suicide risk and intervening effectively*, Milan, FrancoAngeli.
- Romaniello, C., (ed.) 2023, *Psicologia di un suicidio. Elementi di studio del fenomeno suicidario*, Rome, Armando Editore.
- Rosenberg M.L., Davidson L.E., Smith J.C., Berman A.L., Buzbee H., Gantner G., Gay G.A., Moore-Lewis B., Mills D.H. & Murray D. (1988). Operational criteria for the determination of suicide. *Journal of Forensic Science*, 1933(6), 1445-1456.
- Rudd MD. The suicidal mode: a cognitive-behavioral model of suicidality. *Suicide Life Threat Behav.* 2000 Spring;30(1):18-33. PMID: 10782716.
- Sadowski, C., & Kelley, M. L. (1993). Social problem solving in suicidal adolescents. *Journal of Consulting and Clinical Psychology*, 61(1), 121-127. <https://doi.org/10.1037/0022-006X.61.1.121>.
- Scherr S, Reinemann C. Belief in a Werther effect: third-person effects in the perceptions of suicide risk for others and the moderating role of depression. *Suicide Life Threat Behav.* 2011;41(6):624-34.

- Schmidtke A, Häfner H. The Werther effect after television films: new evidence for an old hypothesis. *Psychol Med.* 1988;18(3):665-76.
- Shneidman E.S. (1985). *Definition of suicide*. New York: John Wiley & Sons.
- Shneidman, E.S., 'The Suicidal Mind,' 1996, Oxford University Press
- Shneidman E.S., Farberow N. The Los Angeles suicide prevention centre: a demonstration of public health feasibilities. *am j public health nations health.* 1965 jan;55(1):21-6. doi: 10.2105/ajph.55.1.21. pmid: 14246103; pmcid: pmc1256136.
- Silverman MM, Berman AL, Sanddal ND, O'Carroll PW, Joiner TE. Rebuilding the Tower of Babel:A revised nomenclature for the study of suicide and suicidal behaviors: Part 1: Background, rationale, and methodology. *Suicide and Life-Threatening Behavior.* 2007a; 37:248-263. [PubMed: 17579538].
- Silverman MM, Berman AL, Sanddal ND, O'Carroll PW, Joiner TE. Rebuilding the Tower of Babel: A revised nomenclature for the study of suicide and suicidal behaviors: Part II: Suicide-related ideations, communications and behaviors. *Suicide and Life-Threatening Behavior.* 2007b; 37:264-277. [PubMed: 17579539].
- Silverman M.M., De Leo D. (2016). Why there is a need for an international nomenclature and classification system for suicide [Editorial]. *Crisis: The Journal of Crisis Intervention and Suicide Prevention*, 37(2), 83-87.
- Sisask M., Värnik A., Kolves K., Konstabel K. & Wasserman D. (2008). Subjective psychological well-being (WHO-5) in assessment of the severity of suicide attempt. *Nordic Journal of Psychiatry*, 62(6), 431-435.
- Sisask M, Värnik A. Media roles in suicide prevention: a systematic review. *Int J Environ Res Public Health.* 2012;9(1):123-38.
- Sisask M. & Värnik A. (2012). Media roles in suicide prevention: a systematic review. *International Journal of Environmental Research and Public Health*, 9, 123-138.
- Smith J.A., Braunack-Mayer A. & Wittert G. (2006). What do we know about men's help-seeking and health service use? *Medical Journal of Australia*, 184, 81-83.
- Sophocles. "Ajax." In *Tragedies*, edited by G. Cerri, Milan, BUR Rizzoli, 2007

- Sonneck G, Etzersdorfer E, Nagel Kuess S. Imitative suicide on the Viennese subway. *Soc Sci Med.* 1994;38(3):453-7.
- Stack S. Celebrities and suicide: a taxonomy and analysis. *Am Sociol Rev.* 1987;52(3):401-12.
- Stack S. The effect of publicized mass murders and murder-suicides on lethal violence, 1968-1980: a research note. *Soc Psychiatry Psychiatr Epidemiol.* 1989;24(4):202-8.
- Stack S. A reanalysis of the impact of non-celebrity suicides: a research note. *Soc Psychiatry Psychiatr Epidemiol.* 1990;25(5):269-73.
- Stack S. Audience receptiveness, the media, and aged suicide, 1968-1980. *J Aging Stud.* 1990;4(2):195-209.
- Stack S, Niederkrotenthaler T, editors. *Media and suicide: international perspectives on research, theory & policy.* Piscataway (NJ): Transaction Publishers; 2017.
- Stuckler D., King L. & McKee M. (2009). Mass privatisation and the post-communist mortality crisis: a cross-national analysis. *Lancet*, 373, 399-407.
- Stuckler D. & Basu S. (2013). *The body economic: why austerity kills: recession, budget battles, and the politics of life and death.* London: Penguin Press.
- Stuckler D., Meissner C., Fishback P., Basu S. & McKee M. (2012). Banking crises and mortality during the Great Depression: Evidence from US urban populations, 1929-1937. *Journal of Epidemiology and Community Health*, 66(5), 410-419.
- Tang N.K. & Crane C. (2006). Suicidality in chronic pain: a review of the prevalence, risk factors and psychological links. *Psychological Medicine*, 36(5), 575-586.
- Tarrier N, Taylor K, Gooding P. Cognitive-behavioral interventions to reduce suicide behavior: a systematic review and meta-analysis. *Behav Modif.* 2008 Jan;32(1):77-108. doi: 10.1177/0145445507304728. PMID: 18096973.
- Tatum PT, Canetto SS, Slater MD. Suicide coverage in U.S. newspapers following the publication of the media guidelines. *Suicide Life Threat Behav.* 2010;40:525-35.

- Taylor PJ, Gooding P, Wood AM, Tarrrier N. The role of defeat and entrapment in depression, anxiety, and suicide. *Psychol Bull.* 2011 May;137(3):391-420. doi: 10.1037/a0022935. PMID: 21443319.
- Till B, Strauss M, Sonneck G, Niederkrotenthaler T. Determining the effects of films with suicidal content: a laboratory experiment. *Br J Psychiatry.* 2015;207(1):72-8. doi: 10.1192/bjp.bp.114.152827.
- Till B, Tran U, Voracek M, Niederkrotenthaler T. Papageno vs. Werther Effect online: randomised controlled trial of beneficial and harmful impacts of educational suicide prevention websites. *Br J Psychiatry.* 2017.
- United Nations (2015). Sustainable development goals report 2030. <https://www.refworld.org/docid/57b6e3e44.html>.
- van Heeringen K. The neurobiology of suicide and suicidality. *Can J Psychiatry.* 2003 Jun;48(5):292-300. doi: 10.1177/070674370304800504. PMID: 12866334.
- Van Orden KA, Witte TK, Cukrowicz KC, Braithwaite SR, Selby EA, Joiner TE Jr. The interpersonal theory of suicide. *Psychol Rev.* 2010 Apr;117(2):575-600. doi: 10.1037/a0018697. PMID: 20438238; PMCID: PMC3130348.
- Van Praag H. (2009). The role of religion in suicide prevention. In Wasserman D. & Wasserman C. (eds.). *Oxford textbook of suicidology and suicide prevention: a global perspective*, pp. 7-12, Oxford: Oxford University Press.
- Värnik P, Sisask M, Värnik A, Yur'Yev A, Kõlves K, Leppik L et al. Massive increase in injury deaths of undetermined intent in ex-USSR Baltic and Slavic countries: Hidden suicides? *Scand J Public Health.* 2010;38(4):395-403.
- Värnik P, Sisask M, Värnik A, Arensman E, Van Audenhove C, van der Feltz-Cornelis CM et al. Validity of suicide statistics in Europe in relation to undetermined deaths: developing the 2-20 benchmark. *Inj Prev.* 2012;18(5):321-5.
- Veysey MJ, Kamanyire R, Volans GN. Antifreeze poisonings give more insight into copycat behaviour. *BMJ.* 1999;319(7217):1131.
- Wang C.W., Chan C.L.W. & Yip P.S.F. (2014). Suicide rates in China from 2002 to 2011: an update. *Social Psychiatry and Psychiatric Epidemiology*, 49, 929-941.

- Wasserman IM. Imitation and suicide: a re-examination of the Werther effect. *Am Sociol Rev.* 1984;49(3):427-36.
- Wenzel A., Beck A. T. (2008). A cognitive model of suicidal behaviour: theory and treatment. *Appl. Prev. Psychol.* 12 189-201. 10.1016/j.appsy.2008.05.001
- Wenzel, A., Brown, G. K., & Beck, A. T. (2009). *Cognitive therapy for suicidal patients: Scientific and clinical applications.* American Psychological Association.
<https://doi.org/10.1037/11862-000>
- Williams, J.M.G. *Cry of Pain: Understanding Suicide and Self-Harm;* Penguin Group USA: London, UK, 1997
- WHO (1998). *Primary prevention of mental, neurological and psycho-social disorders. Suicide.* Geneva: World Health Organization.
- WHO (2008). *Clinical management of acute pesticide intoxication: prevention of suicidal behaviour.* Geneva: World Health Organization; 2008
(http://whqlibdoc.who.int/publications/2008/9789241597456_eng.pdf)
- WHO (2010). *Global strategy to reduce the harmful use of alcohol.* Geneva: World Health Organization.
- WHO (2011). *Preventing suicide: a resource for suicide case registration.* Geneva: World Health Organization; 2011
(http://whqlibdoc.who.int/publications/2011/9789241502665_eng.pdf?ua=1).
- WHO (2013). *Mental health action plan 2013-2020.* Geneva: World Health Organization.
- WHO (2014a). *Preventing suicide: a global imperative.* Geneva: World Health Organization.
- WHO (2014b). *Preventing suicide: a resource for non-fatal suicidal behaviour case registration.* Geneva: World Health Organization.
- WHO (2014c). *Global status report on alcohol and health 2014,* Geneva: World Health Organization.

- WHO (2014d), methods and data sources for global causes of death 2000-2012. Global Health Estimates Technical Paper WHO/HIS/HSI/GHE/2014.7. Geneva: World Health Organization; 2014.
- WHO (2014e) methods and data sources for global causes of death 2000-2012. Global Health Estimates Technical Paper
- WHO (2014f) STEPS optional module: mental health/suicide. Geneva: World Health Organization; 2014 (<http://www.who.int/chp/steps/riskfactor/modules/en/>)
- WHO (2017) Preventing suicide: a resource for media professionals, update 2017. Geneva: World Health Organization; 2017
- WHO (2018). National suicide prevention strategies: Progress, examples and indicators. Geneva: World Health Organization.
- WHO (2023) Preventing suicide: a resource for media professionals, update 2023. Geneva: World Health Organization; 2023. Licence: CC BY-NC-SA 3.0 IGO
- Wittouck C, De Munck S, Portzky G, Van Rijsselberghe L, Van Autreve S, van Heeringen K. A comparative follow-up study of aftercare and compliance of suicide attempters following standardised psychosocial assessment. *Arch Suicide Res.* 2010;14(2):135-45.
- Wu KCC, Chen YY, Yip PSF. Suicide methods in Asia: implications in suicide prevention. *Int J Environ Res Public Health.* 2012;9(4):1135-58.
- Yip PSF, Fu KW, Yang KCT, Ip BYT, Chan CLW, Chen EYH et al. The effects of a celebrity suicide on suicide rates in Hong Kong. *J Affect Disord.* 2006;93(1-3):245-52.
- Yip P.S., Caine E., Yousuf S., Chang S.S., Wu K.C. & Chen Y.Y. (2012). Means restriction for suicide prevention. *Lancet*, 379(9834), 2393-2399.
- Yoshimasu K., Kiyohara C. & Miyashita K. (2008). Suicidal risk factors and completed suicide: meta-analyses based on psychological autopsy studies. *Environmental Health and Preventive Medicine*, 13(5), 243-256.
- Zalsman G, Hawton K, Wasserman D, van Heeringen K, Arensman E, Sarchiapone M, Carli V, Höschl C, Barzilay R, Balazs J, Purebl G, Kahn JP, Sáiz PA, Lipsicas CB, Bobes J, Cozman D, Hegerl U, Zohar J. Suicide prevention strategies revisited: 10-year systematic

review. *Lancet Psychiatry*. 2016 Jul;3(7):646-59. doi: 10.1016/S2215-0366(16)30030-X.
Epub 2016 Jun 8. PMID: 27289303.