# SUICIDE IS NOT THE EXCLUSIVE DOMAIN OF MEDICINE

**WILLIAM PRIDMORE**
The Australian National University
**SAXBY PRIDMORE**
s.pridmore@utas.edu.au
School of Medicine,
University of Tasmania

ABSTRACT. *Background.* In the West, beginning in the early 19th century, the belief was published that suicide was always, or almost always, the result of a mental disorder (a medical problem). This belief became established wisdom when psychological autopsies commenced in mid-20th century. However, should this belief be inaccurate, our suicide prevention strategies, which are currently medically orientated, need to change. *Aim.* To argue the case that metal disorder is not always, or almost always, the cause of suicide, and that suicide may be triggered by a host of other factors. *Method.* The scientific basis of psychological autopsies and the practice of medicalization were explored. The opinions of non-medical experts were explored, including philosophers, historians, sociologists, economists and ethicists, among others. Epidemiology of rates in different countries and gender differences were examined for evidence. *Conclusion.* Suicide is not exclusively a medical problem. While suicide is more common in people who have a mental disorder than people without a mental disorder, mental disorder is not a necessary condition. Thus, open discussions about the nature and causes of suicide are required, with a view to involving experts from a range of fields, and the general community, in developing and funding suitable prevention strategies.

Keywords: suicide; suicide prevention; major depressive disorder; medical ethics; medical sociology

## Introduction

Over the last century medical authorities frequently stated that all, or almost all, suicide is triggered by mental disorder[1–6] and this notion became widely accepted by the public.

It will be argued this is a mistaken view. It has numerous unfortunate consequences. It results in medicine owning responsible for suicide prevention – this is an impossible situation as many important triggers such as financial crises, unemployment and cultural issues are matters which lay outside the realm of medicine and beyond the influence of medical practitioners. Accordingly, this unwise use of the medical model means that politicians, non-medical experts and the general community are excluded for the solution. Another unfortunate consequence is that even in cases where mental disorder is absent, the families of people who have completed suicide feel guilty for not recognizing that the deceased family member was "sick." Finally, the "mental disorder is the sole trigger of suicide" statement leads coroners, complaints officers, disciplinary bodies and others to conclude that the suicide of an individual anywhere, means there is a negligent doctor somewhere. Clinics and Prisons are frequently unfairly criticized, with damage to well-meaning professional people. It is with a view to reducing these unnecessary consequences that we argue that while mental disorder may be responsible for some suicides, other factors are the primary triggers in other cases.

In 2014, the World Health Organization published "Preventing Suicide: A Global Imperative"[7] – their first offering on the topic. They strongly discounted the "mental disorder is the sole trigger of suicide" theory. Instead, they dismissed this notion as a "myth," and state, "Suicidal behaviour indicates deep unhappiness but not necessarily mental illness" (p. 53).

Given a series of experts[8–12] was already on record as stating that mental disorder was present in less than half those who died by suicide, it was expected that this WHO statement[7] would put an end to the "myth."

This did not happen and the belief that mental disorder is the cause of almost all suicide cases[13,14] and suicide attempts[15] continues to appear in the scientific literature. There are frequent calls to address suicide prevention by increasing the competency of health professionals,[16,17] without any suggestion that non-medical professionals have a part to play. One paper correlates suicide rates with the density of psychiatrists in the region.[13] There has been a recent economic crisis in Spain, which has been followed (as is usually the case) by an increase in suicide rate.[18] Rather than focus on the prevention of economic crises (which are the cause of the increased suicides) medical commentary points to the delay between the economic change and the appearance of the increase in suicide cases, claiming this period provides the opportunity for mental health services to increase their activities.[19] The dis-

tortion introduced by using the medical model on the issue of suicide is clear when authors write about the "treatment of suicidal risk."[20] Neither suicide nor risk are disorders, and neither can be "treated," using the standard medical context meaning of this word.

Thus, it is important to continue to argue that mental disorder is not the cause of almost all suicide cases. A more balanced view is that 1) mental disorder is the sole trigger in a proportion of suicide events, but that 2) non-mental disorder factors may be the dominant trigger in another proportion, and that 3) a combination of mental disorder and non-mental disorder factors may trigger yet another proportion. The exact size of these proportions is unknown.

We will present our argument under a series of headings.

## Medicalization and Medical Model

Medicalization refers to the practice of reclassifying a non-medical problem as a medical problem. Medical model refers to a set of assumptions that views behavioral abnormalities in the same framework as physical disease or abnormalities.

Medicalization is a common feature in society at the present time, as argued in the sociological monograph *The Medicalization of Society*.[21] Of particular importance is the current fashion of classifying unpleasant emotions as medical problems. The subtitle of the sociological monograph *The Loss of Sadness*[22] is, "How Psychiatry Transformed Normal Sorrow into Depressive Disorder." The reclassification of normal sadness into depressive disorder[23] has been central to the notion that most suicide is the result of mental disorder.

We have described the medicalization of suicide in a range of circumstances.[24]

## The Psychological Autopsy

The Psychological Autopsy is the scientific method used to establish the claim that mental disorder is the cause of most suicide. However, it has serious limitations. Psychological autopsy can only be attempted by well-funded (usually from research grants) research teams. All available information is collected regarding a group of individuals who have completed suicide (depending on the design, a control group may be included). This information comes from friends and relatives of the deceased, as well as past and recent doctors, hospital and police records. It is hoped to reconstruct the thoughts and feelings of the suicide completer. A team then examines the collected material and forms an opinion as to whether or not the suicide was the result of a mental disorder.

This method is retrospective, a style which is not considered to provide high quality results in any branch of science. Among other problems are the challenge of remaining objective and unbiased[25] and issues regarding validity and reliability.[26, 27]

Others[28] have reported the vast majority of psychological autopsies used unstandardized instruments, which greatly reduced their scientific value. Psychological autopsy methodology has not been standardized[29] which means that study should not be compared to another.

Recently, Shahtahmasebi[30] stated that psychological autopsies "are flawed theoretically, methodologically and analytically," and Hjelmeland et al.[31] concluded that due to the numerous scientific difficulties, psychological autopsies "should now be abandoned." Thus, there are very strong grounds to reject any notion born of psychological autopsy studies.

## Psychological Autopsies in the East

Recent psychological autopsies in China[32] have identified mental disorder in <50% of completers, while those in India[33] have identified mental disorder in <40% of suicide completers.

This enormous difference in the findings of autopsy studies between the West and East can only be explained by one or both of the following: 1) the psychological autopsy method is flawed and results cannot be accepted, or 2) the triggers for suicide are different between the East and West. In any case, the belief that mental disorder is the primary cause of all suicide is untenable.

Zhang et al.[34] asserted that the importance of social and cultural factors in suicide in the East provides "a challenge to the psychiatric model popular in the West."

## National Suicide Rates

Ever since records have been kept, the suicide rates in different regions have been different.[35] The relative positions of the nations have remained much the same. For example, Lithuania (around 40/100,000) usually has a suicide rate about three times higher than Australia (around 10/100,000), which usually has a rate about three times higher than Greece (around 3/100,000).[36] If mental disorder was the cause of the vast majority of suicide, the people of Lithuania would have three times the psychopathology of the people of Australia, who in turn would have three times the psychopathology of the people of Greece. Clearly this is incorrect, so the initial premise is incorrect.

The attempted is sometimes made to explain the different rates of different nations as a difference in recording strategies. Doubtless, different collecting strategies may play some role, but evidence indicates that real

differences do exist. For example, the suicide rate in New Zealand is greater than that of Australia, which, in turn, is greater than that of the UK, and this relative positioning has remained constant over decades. Importantly, these are well-resourced populations with comparable data collection systems and a common language and historical roots.

Further, immigrants take the suicide rate of their homeland to their new domiciles, this has been demonstrated by French settling in Quebec, Indians settling in the UK and northern Europeans settling in Australia.[37] These rate differences depend not on mental disorder but on cultural[38] and socioeconomic factors.

## Gender Ratio

Globally, three time more males kill than females' complete suicide.[36] A male predominance exists in every country, with the possible exception of China, and this has been the case since records began to be collected. There is no significant difference in the overall rate of mental disorder between the genders. Some evidence indicates mood disorder may be more common among females than males,[39] which if correct, should push the female rate above the male.

This gender difference is a durable feature which steadfastly denies that mental disorder is the paramount cause of suicide.

## Opinions of Non-medical Experts

We are dispelling the belief that mental disorder is overwhelmingly the cause of suicide. Non-medial scholars and experts have important contributions to make to our understanding of human behavior in general and suicide in particular. Some are listed under the following headings.

## Philosophers

Philosophers have examined suicide from Classical Greek to current times. Plato (424–328 BC) objected to suicide on moral grounds, but listed a number of circumstances in which it was excusable/acceptable. These included, 1) extreme and unavoidable misfortune, and 2) in the setting of shame, when one had participated in unjust acts (Laws IX 873c–d).

The Stoic school which commenced in Greece around 300 BCE, and flourished during the Roman Empire, endorsed suicide as a means of avoiding suffering. Marcus Aurelius, Roman Emperor (161–180 CE) published a currently available text.[40] They listed poverty, chronic disease and mental disorder as appropriate triggers. Zenon, the founder and Seneca, a prominent

member, both died by suicide, neither were believed to be suffering mental disorder. Pliny the Elder (23–79 AD) another prominent member of the Stoic school believed the presence of poisonous herbs was divine proof that man could allow himself to die without pain.

Hume[41] (1711–1776) wrote of suicide that men may be "reduced by the calamities of life to the necessity of employing this fatal remedy." He believed that if one was involved in a conspiracy and may give up collaborators under torture, or if one was already under sentence of death, suicide would benefit both the individual and society.

Schopenhauer[42] (1788–1860) agreed that some "are driven to suicide by some purely morbid and exaggerated ill-humor" (possibly suggesting illness/disorder). He was also clear that "as soon as the terrors of life reach the point at which they outweigh the terrors of death, a man will put an end to his life," indicating suicide in the absence of illness/disorder.

Nietzsche[43] (1814–1900) wrote, "The thought of suicide is a great consolation: by means of it one gets through many a dark night" – a statement allowing suicide in response to difficult times.

Camus[44] (1913–1960) wrote, "There is but one truly serious philosophical problem, and that is suicide." He recommended a philosophical attitude which he found beneficial in dealing with the world, however, if this recommendation failed to give satisfaction, he considered suicide was a sensible solution.

Battin[45] is a contemporary philosopher, one of many who reject the "uniform assumption that suicide is the causal product of mental illness".


**Historians**

Historians have also examined suicide from Classical Greek to current times. They report that in Classical Greece, suicide was characterized as being the result of ostentation, shame, unbearable suffering and tiredness of life.

Van Hooff[46] examined a thousand suicides of the Graeco-Roman world. He found that "furor" (psychosis) was noted in about 2% of cases. He concedes it is difficult to apply current diagnoses to most cases. However, it is clear that many of those who died by suicide in antiquity suffered no mental disorder.

Minois[47] focused on the 16th to 18th centuries, and produced a magnificent work on European cultural attitudes to suicide, and dealing with the religious and moral arguments against this action. He found that "the immense majority of suicides were the result of excessive physical, moral, or emotional suffering."

He[47] also gave some space to the subsequent historical period. He reported that in 1987 a French law against the incitement to suicide was passed.

Supporters of this legislation stated that, it was "medically demonstrated that candidates for suicide are pathological cases" (p. 324). Thus, the "mental disorder is the cause of all suicide" view made it into French law.

Minois,[47] however, argues the contrary, pointing out that a glance at his text would reveal this interpretation to be an exaggeration. He observes that "mental disorder is the cause of all suicide" believers contradict themselves by also claiming that socioeconomic conditions are a cause of suicide. He states that "suicide is an accusation brought against the organization of society when society becomes incapable of guaranteeing the happiness of its members" (p. 326).

Weaver,[48] a Canadian historian, studied half of all the suicides which occurred in New Zealand during the 20th century. He states, "Suicide is partly situational." He found that triggers of suicide were many and diverse and the statement, "mental disorder is the cause of all suicide" to be manifestly inaccurate.

## Sociologists

Durkheim,[49] (1858–1917) the first sociologist, wrote a monumental work, which continues to dominate thinking on suicide. He considered suicide to be a social phenomenon. He theorized that individuals who are insufficiently "integrated" into society are at greater risk of suicide, as they are less resistant to the impact of negative events.

Durkheim's view on the role of mental disorder is generally misunderstood. He did not completely reject mental disorder a "cause" of suicide, and conceded a causal role for "insanity" (psychosis) in a small number of suicides. He also stated that people with mild mood and personality disorder (using today's terminology) were more predisposed to suicide, because they are less well "integrated" into society, and are thus less unable to withstand "aggravation."

Durkheim's remains the dominant sociological view of suicide, and is consistently supported and referenced.[50]

## Economists

Economists ignore the "mental disorder is the cause of all suicide" belief, and are predominantly concerned with the effects of poverty and unemployment on suicide. Hamermesh and Soss[51] published a paper, "An Economic Theory of Suicide." Their title is an overstatement of their findings; they reported that decreases in economic activity are associated with increases in suicide.

Rachiotis et al.[52] found increases in suicide in Greece during the recent austerity period. But this is a nuanced field. Poverty, loss of income and the

psychological impact of loss of employment are separate issues. Neumayer[53] has demonstrated that while recession is associated with an increase in suicide, it is also associated with a decline in mortality from a range of other disorders. And, Jalles and Andersen[54] have demonstrated that within one country (Canada) particular regions may experience different socioeconomic conditions, such that a national suicide prevention policy may not have the expected effects.

**Ethicists and Associates**

Fitzpatrick and Kerridge,[55] ethicists from Sydney University wrote, "suicide is not simply a medical 'problem', or even a public health 'problem' – it is a complex cultural and moral concern that is deeply embedded in social and historical narratives and is unlikely to be greatly altered by any form of health intervention" (p. 470).

Marsh,[56] a clinical academic, philosopher and ethicist, uses the teachings of Foucault to challenge the notion that suicide is "caused primarily by pathological processes" (p. 4).

There is a large amount crossover between fields. Healy,[57] an historian, supports the sociology of Durkheim. Hecht,[58] an historian and poet, has constructed a moral and ethical argument which she hopes will dissuade people from suicide. She observes that after the religious conception of suicide, came the "melancholia" conception – "and melancholia was the purview of doctors." She does not directly challenge the medical explanation, instead, she ignores it, contending that distressed people can be saved by moral and ethical argument.

**Psychologists**

Many psychologists support the medical line. Others do not. O'Connor and Nock,[59] have provided a valuable contribution. They make the observation that most people with mental disorder do not die by suicide, and that claiming that people have mental disorders does "not account for why people try to kill themselves" (p. 2).

A number of psychologists have developed theories distinct from the medical mode. Joiner,[60] an academic psychologist is prominent among these. He is the author of *Why People Die by Suicide*, which rests on his Interpersonal Theory of Suicide. He describes a sense of disconnection from others (which suggests the observations of the sociologist, Durkheim[49]) and the distress of feeling a burden as others as important components, along with less credible components.

## Other Risk Factors

A huge amount of research has been directed to discovering the "risk-factors" for suicide, in the hope that this knowledge will provide a prevention strategy. With respect to a path to prevention, we find this approach has had limited success, but that is a debate for another time. However, valuable information has been determined.

Much of this has already been touched upon under earlier headings, including the increased risk of males, poverty and unemployment. Others include being single,[61] substance abuse, low levels of education, being older, being childless, living alone, and suffering a chronic painful disorder.[62]

That certain factors are associated increased risk of suicide is universally accepted. However, as mentioned above, Minois[16] states, it is illogical for those who believe "mental disorder is the cause of all suicide" to also believe in the importance of other risk factors.

As we have pointed out that psychological autopsy studies in the East have found mental disorder less often than the earlier studies in the West. This may be explained by increasing quality of this type of investigation over time. Those reluctant to cast dispersions on the earlier studies suggest that the influence of risk factors on suicide may vary with geographical region.[63]

## Discussion

A single driver for suicide is no more plausible than a single driver for homicide.

The belief that suicide is predominantly a medical matter first emerged early in the 19th century[64] and became generally accepted. The World Health Organization[7] has discredited this belief, but it persists.[13–20]

This paper is an effort to adjust thinking. We have demonstrated that mental disorder is by no means the only trigger for suicide. Suicide occurs more commonly in a group of people with a mental disorder than in a similar size group without mental disorder, thus mental disorder is an important trigger. However, other triggers include negative life events and other risk factors. Of course, combinations of trigger factors are likely to be more lethal than one.

We have drawn attention to the scientific shortcomings of the psychological autopsy[30,31] and the medicalization of negative emotions into mental disorders.[22]

Modern Western medicine, on the point of the triggers of suicide has either been ignorant of, or dismissed out of hand, the wisdom of other times and other experts. Here we have noted the ideas of ancient philosophers, who did discount the role of mental disorder ("furor")[46] but added the avoidance

of suffering from many other causes.[40] Particular philosophers up to the present day have maintained this position.[45]

The sociological genius Durkheim[49] also held that suicide was sometimes the result of mental disorder ("insanity"). However, he emphasized that poor integration into society placed the individual at greater risk – which is consistent with the Interpersonal Theory of Suicide.[60]

We have detailed above, credible psychological models which do not require the presence of mental disorder for the occurrence of suicide. Other contributions from this field include the concept/term, "psychache" coined by Shneidman[65] which refers to the unpleasant state of mind (which may or may not involve mental disorder) which precedes the completion of suicide. Other predominantly psychological (as opposed to psychiatric) contributions include the "Cry of pain /Entrapment" model from Scotland,[66] and the "Strain Theory of Suicide" from China.[67]

We have established that while mental disorders may be involved in a certain proportion of suicide, there are many other triggers. Current suicide prevention strategies are medically focused, and have no clear benefit.[68] However, this paper indicates that prevention strategies need to expand to include the activities of non-medical people and the community in general. Exactly what shape it would take is unclear, however, it will include political and changes to prevention funding arrangements.[69] It is time to move from the psychological to the sociological autopsy.[70]

## Conclusions

Suicide is not exclusively a medical problem. This argument is supported by the views of experts from philosophy, history, sociology, economics and ethics. The notion that mental disorder is a necessary condition for suicide is based on psychological autopsies medicalization and the medical model. The case has been made that psychological autopsies suffer scientific short-comings. Examination of national suicide rates and gender ratio data support that mental disorder is not a necessary feature. To this point the claim here examined has been largely ignored by powerful scholars. A broader discussion is needed so that more appropriate responses, involving non-medical experts, the broader community and a redistribution of the prevention funds.

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