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Title: Suicide is not exclusively a medical problem.

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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. Should this belief be inaccurate, our response to suicide (medical treatment) will need to be reconsidered.

Aim: To argue the case that metal disorder is not always, or almost always, the cause of suicide, and that suicide may occur in the absence of mental disorder.

Method: The opinion of non-medical experts were explored, including philosophers, historians, sociologists, economists and ethicists, among others. The scientific basis of psychological autopsies was explored. Epidemiology of rates in different countries and gender differences were explored.

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. Suicide occurs in the absence of mental disorders. 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 dealing with the issue.

1. Suicide is not exclusively a medical problem

Many leading psychiatrists state that suicide is always [1-4], or almost always [5-8], the result of mental disorder. Another view (argued below) is that while suicide is more common in people with a psychiatric disorder than in people without a mental disorder, suicide frequently occurs in the absence of mental disorder. A single driver for suicide is no more plausible than a single driver for homicide.

The 'mental disorder is the cause of all suicide' view gives rise to many problems. While it provides great authority and funding for psychiatry, this view leaves responsibility for suicide at its door. A wide range of socioeconomic, political and personal factors can trigger suicide, and while psychiatry has expertise in the management of mental disorders, it has no influence whatsoever over most of the other suicide triggering factors. Dealing most effectively with suicide will require changes and contributions from various fields of expertise, and the community as a whole.

Also, the 'mental disorder is the cause of all suicide' statement leads coroners, complaints receptors of every kind, disciplinary bodies and others (including families) to conclude, that, as mental disorder is treatable, the suicide of an individual anywhere, means there is a negligent doctor somewhere. Clinics and Prisons are frequently unfairly criticised, with damage to well-meaning professional people.

A change in our understanding would suggest a need to reconsider suicide prevention funding.[9]

2. What do other experts think?

<u>Philosophers</u>

Philosophers have examined suicide from Classical Greek to current times. Plato (424-328, BC) objected to suicide on moral grounds, but gave as exceptions, 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 400 BC, and flourished during the Roman Empire, endorsed suicide as a means of avoiding suffering. 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 [10] (1711-1776) found no fault with suicide and observed 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 [11] (1788-1860) agreed that some "are driven to suicide by some purely morbid and exaggerated ill-humor" possibly suggesting illness/disorder. However, 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 [12] (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 [13] (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, [14] a contemporary philosopher, is 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.

Van Hooff [15] studied almost a thousand suicides of the Graeco-Roman world. In Classical Greece, suicide was characterized as being the result of ostentation, shame, unbearable suffering and tiredness of life. However, "furor" (psychosis) was noted in about 2% of cases. Van Hooff concedes it is difficult to apply current diagnoses to most cases, more may have suffered mental disorders. However, it is clear that many of those who died by suicide in antiquity suffered no mental disorder.

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

Fortunately, Minois [16] also gave some attention to the subsequent historical period. He reports 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 argues the contrary, pointing out that a glance at his text would reveal this interpretation to be an exaggeration. He goes on to make the observation that 'mental disorder is the cause of all suicide' believers contradict themselves is stating elsewhere in their documents, 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, [17] a Canadian historian, studied reports of half of all the suicides which occured in New Zealand during the 20th Century. He states, "Suicide is partly situational and history is devoted to situations in time". He found that triggers of suicide were many and diverse and 'mental disorder is the cause of all suicide' to be manifestly inaccurate.

Sociologists

Durkheim, [18] (1858-1917) described as the first sociologist, wrote a monumental work on suicide, which continues to dominate sociological thinking on the subject. He considered suicide to be a predominantly 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, he 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. However, he argued that the majority of those people with mild mood and personality disorder do not suicide, and that those with these difficulties 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.[19]

Economists

Economists ignore the 'mental disorder is the cause of all suicide' theory, and are predominantly concerned with the effects of poverty and unemployment on suicide.

Hamermesh and Soss [20] published "An Economic Theory of Suicide". This overstates their findings, which were predominantly that decreases in economic activity are associated with increases in suicide.

Rachiotis et al [21] found an 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 [22] 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 [23] 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.

Other risk-factors

A huge amount of research has discovered various risk-factors for suicide (in addition to the poverty and unemployment mentioned above). Male gender, being single [24], substance abuse, low levels of education, aged, living alone, suffering a chronic painful disorder, childlessness and the number of visits to the emergency medicine department [25] are among those commonly cited.

The observation that the presence of certain risk-factors is associated increased risk of suicide is universally accepted. However, 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.

Other experts

Fitzpatrick and Kerridge, [26] ethicists from Sydney University wrote, "For 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).

Joiner, [27] a prominent psychologist and author places importance not on mental disorder, but on the sense of being a burden to others.

Marsh, [28] Occupational Therapist, academic and philosopher 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, [29] an historian, supports the sociology of Durkheim. Hecht, [30] an historian and poet, constructs a moral 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 argument.

Other doctors

There is a group of doctors who receive little publication, but believe the 'mental disorder is the cause of all suicide' view to be a gross exaggeration. In general they ignore the topic.

In a letter to the British Medical Journal, Braithwaite [31] stated, "In reality, a small minority of people who commit suicide are mentally ill".

Retterstol [32] author of a famous Scandinavian book on suicide, which has been translated into English, wrote, "Most sources suggest that around a third of those who commit suicide have a verifiable illness" (p 113).

Coroners' reports

Each death is examined by a coroner, or similar authority, who makes conclusions about the cause of death, based on information obtained from family and friends, past and recent doctors, hospital and police records. One means of studying suicide is to examine these reports.

Stengel [33] wrote that according to coroners' reports in North London, 46% of those who died by suicide had no evidence of mental of personality disorder. Later, Chambers and Harvey [34] also studied reports from North London and concluded that 44% of another set of decedents had no evidence of mental disorder.

Ali et al, [35] used the National Suicide Registry of Malaysia, and found >60% of those who died by suicide had no evidence of mental disorder or substance abuse.

3. The Psychological Autopsy

The psychological autopsy has provided the 'scientific justification' for the 'mental disorder is the cause of all suicide' view. This method can only be attempted by sophisticated, well-funded research teams. The funding usually comes from research grants.

Extensive information is collected regarding usually at least 100 individuals who have completed suicide, and possibly, depending on the design, a similar number of control individuals. As with the coroner's reports, information is collected from friends and relatives of the deceased, past and recent doctors, hospital and police records. The psychological autopsy has additional features such as structured interviews. Depending on the design a proxy for the deceased may be interviewed. The attempt is to reconstruct the thoughts and emotions of the suicide completer. This information is then examined by a research team whose main purpose is to find means of preventing suicide. This team is well schooled in diagnostic procedures, and addresses the question of whether the individual was suffering a mental disorder at the time of death. It usually also collects demographic information and evidence of recent stressors.

The term psychological autopsy has been used to describe a range of different processes. When the focus is directed predominantly to social factors, psychosocial or sociological autopsy [36] is the appropriate, but rarely applied, designation.

Scientific flaws of psychological autopsies

In spite of the best efforts of researchers, psychological autopsies must remain retrospective studies, a form of investigation which is has little scientific value in any field.

Selkin and Laya [37] pointed to the challenge of remaining objective and unbiased in such studies. Ogloff and Otto [38] and Snider et al [39] have raised issues concerning validity and reliability.

Pouliot and De Leo [40] found that the vast majority of psychological autopsies used unstandardized instruments, which greatly reduced their scientific value. Abondo et al [41] complained that the methodology has not been standardized and as a consequence one study should not be compared with another. Conner et al [42] acknowledged "the methodological challenges which need to be addressed" and have taken rehabilitative steps, but it is not clear that these will be effective and widely embraced.

Shahtahmasebi [43] recently stated that psychological autopsies "are flawed theoretically, methodologically and analytically". And, Hjelmeland et al [44] following a comprehensive

study, concluded that because of the 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

Recently, psychological autopsies in China [45] have identified mental disorder in <50% of completers, while those in India [46] have identified mental disorder in <40% of suicide completers.

The enormous difference in the results of autopsy studies in the West and East means one of the following, either 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 either case, the 'mental disorder is the cause of all suicide' is untenable.

Zhang et al [47] concluded that importance of social and cultural factors in Eastern suicide provides "a challenge to the psychiatric model popular in the West".

4. Other evidence

Two pieces of factual information make the 'mental disorder is the cause of all suicide' notion impossible.

Different rates in different regions

For as long as records have been kept, [18] the rates of suicide in different regions have remained different. That is, the relative positions of nations have remained much the same. For example, [48] 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). If mental disorder was responsible for all or almost all 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.

Hair splitting is attempted when the explanation is offered that the different suicide rates of different nations may simply represent different recording strategies. While local collecting strategies doubtless play some role, the evidence indicates that real differences exist. First, 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 – these are well-resourced populations with comparable data collection systems and a common language and historical roots.

Second, immigrants take the suicide rate of their homeland to new domiciles, as demonstrated by French settling in Quebec, Indians settling in the UK and northern Europeans settling in Australia.[49]

These rate differences depend not on mental disorder but on cultural [50] and socioeconomic factors.

Gender ratio

Globally, three time more males kill themselves than females. A male predominance in suicide 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, 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.

5. Ignoring the statement

Many authors appear to simply ignore the megalithic statement. Retterstol, [32] for example, was an experienced clinical psychiatrist who believed "that around a third of those who commit suicide have a verifiable illness" (p 113). But, in his authoritative textbook he does not challenge the notion of the central importance of mental disorder in suicide.

Psychologists, O'Connor and Nock, [51] have made a scholarly and most comprehensive contribution to the field. They acknowledge the claim of 90% of suicide being a result of mental disorder, but rather than debate the issue directly, they state that most people with mental disorder do not die by suicide, and that the mental disorders "do not account for why people try to kill themselves" (p.2).

World Health Organization [52] recently published "Preventing suicide: a global imperative" - their first offering on the topic. They state "there is no single cause of suicide". They mention that mental disorders have been identified in 90% of those who die by suicide, then quickly add discrediting statements, 1) "While the link between suicide and mental disorders is well established, broad generalizations of risk factors are counterproductive" (page 11), 2) "This risk factor should be approached with caution" (page 40), and 3) "not all people who take their own lives have a mental disorder" (page 53).

The primary importance of mental disorder in suicide has been supposedly "demonstrated" by research. However, it is clear that other scholars and the WHO have major reservations, and are attempting to distance themselves from this incorrect notion by ignoring rather than combating it.

6. Discussion

The belief that suicide is predominantly a medical matter first emerged early in the 19th Century [53]. This belief became "accepted fact" when the psychological autopsy emerged in the mid-20th Century, and became a common research tool.

The exaggeration of the importance of mental disorders in suicide is consistent with the "Medicalization of Society" in general, as described by Conrad [54], and the transformation of "normal sorrow into depressive disorder", as described by Horwitz and Wakefield [55]. Zonda [55] confirms that the classification of the experience of negative emotions as depressive disorder has permeated the psychological autopsy setting. The overreaching of psychiatry and the medicalization of normal human experience receives frequent criticism [57,58].

There is no evidence in the medical literature that the opinions of experts from other fields, philosophers, historians, sociologists, economists, ethicists and others, have received any consideration. To study a topic on which Plato, Pliny, Hume, Schopenhauer, Nietzsche and Camus have expressed an opinion, and take no account of those opinions, would seem unwise.

Nevertheless, the opinions of philosophers, historians, sociologists, economists and a range of others strongly indicate that mental disorder is not essential to the performance of suicide.

We have seen that coroners' reports indicate that about 50% of those who complete suicide have a mental disorder. Psychological autopsies, however, find around 100% of those who have completed suicide suffer such a disorder. To explain this difference some claim that because coroners are not clinically trained, they miss 50% of mental disorders. The alternative explanation is that those who conduct psychological autopsies over diagnose mental disorder.

The ancients believed psychosis ("furor") [15] was responsible for a small proportion of suicides. Durkheim [18] also believed that psychosis ("insanity") was responsible for a small

proportion of suicides. However, taught that suicide occurred when people were not properly integrated into society, that is, poorly integrated individuals are more vulnerable when impacted by life events. He also taught that people with mild depression and personality disorder are vulnerable to suicide - again, because they tended to be less will integrated. For Durkheim, negative events were unavoidable, but suicide was avoidable via good social integration.

It is reasonable to expect that all those who complete suicide are distressed prior to their terminal act. Suicidologist, Shneidman [59] coined the term 'psychache' for this unpleasant state of mind. As mentioned, there is a tendency to reclassify unpleasant states of mind as mental disorders; major depression, in particular is over diagnosed [60].

Many risk factors have been associated with suicide. The recently divorced and unemployed, aging male who takes excessive alcohol and suffers arthritis is likely to be experiencing psychache and is at risk of suicide. It is not necessary for this individual to have major depressive disorder for him to take his life. Schopenhauer [11] is appropriate here: "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". Credible psychological models which do not require the presence of mental disorder include (among many others) the 'Cry of pain /Entrapment' model from Scotland, [61] the 'Strain Theory of Suicide' from China, [62] and the 'perceived burdensomeness and thwarted belongingness' model from the USA [27].

Rather than dispute this belief directly, influential scholars and organizations have largely ignored it, and unobtrusively presented dissenting material, such as the importance of other risk factors,

If the notion that all or almost all suicide is the result of mental disorder is incorrect, as the above evidence indicates, there is a pressing need to reorganize the thinking of governments, regional health authorities and medical schools. Suicide is not simply the domain of the medical profession but the responsibility of experts from many fields (look at the risk factors) and the broader community.

7. 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. The case has been made that psychological autopsies suffer scientific shortcomings. 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 the broader community, can be mounted.

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