

## Suicide Research: Problems with Interpreting Results

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### Author's contribution

The sole author designed, analyzed and interpreted and prepared the manuscript.

### Article Information

DOI: 10.9734/BJMMR/2015/12802

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Complete Peer review History: <http://www.sciencedomain.org/review-history.php?iid=716&id=12&aid=6710>

Commentary

Received 18<sup>th</sup> July 2014  
Accepted 11<sup>th</sup> October 2014  
Published 29<sup>th</sup> October 2014

### ABSTRACT

There is a great deal of misinformation about suicide and the causes of suicide which has helped to establish mindsets and myths about suicide and how to prevent it. Within the suicide literature including policy documents both prevention and intervention have become confused and often used interchangeably. In this paper, the evidence for two of the most common mindsets, namely depression and suicide, and media reporting and suicide, are examined. The uncritical assessment of evidence and misinformation are responsible for the politicisation of suicide prevention policy development. Politicisation of suicide prevention, in turn, has made all the actors involved part of the problem, rather than the solution.

*Keywords: Subway suicide; media; grassroots; depression; suicide prevention.*

### 1. INTRODUCTION

Suicide is one of the most researched topics. A large proportion of the literature, however, is

focussed on a single perspective: mental illness, and specifically depression. For example, a quick search of Google Scholar using the term 'suicide' yielded 1,770,000, since 2010 there were

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209,000 hits. The top pages of the search result suggest a mental illness or psychiatric presumption for the studies e.g. [1]. A systematic review of the suicide literature is beyond the scope of this discussion paper. However, using the search term 'systematic review suicide' from 2010 in Google Scholar yielded 26,600 hits. The top pages of the search results suggest that these reviews are mainly mental illness perspectives/reviews of suicide e.g. [1-4]. Even if suicide studies appear to have a non-medical focus the link with suicide is often conceived through a possible relationship between the study parameters/focus with depression, e.g. [5-9]. Furthermore, a quick scan of the latest issue of *Suicide and Life Threatening Behaviour* (August 2014, Volume 44, Issue 4, Pages 353–472) suggests that almost all published articles are based on a mental illness presumption (mental disorders, depression, psychiatric samples and risk assessment, as well as risk factors). The American Foundation for Suicide Prevention [10] cites suicide risk factors as being mental disorders, serious medical conditions, and a family history of suicide and previous attempts! Therefore, the parameters for suicide research are, on average, fixed with mental illness from the outset.

The main informants are no longer alive to provide insight into their process of decision making which led to suicide. It is unwise and far too simplistic to view suicide within a single perspective, and develop prevention policies purely based on a single focus.

The literature associates a large number of health, social, economic and environmental factors with suicide, e.g. trauma, mental illness, physical illness, poor nutrition, employment/unemployment, bereavement, divorce and break ups, etc [5-9]. Such a list of risk factors would mean that the whole population is at risk of suicide. The suicide population is very diverse and no one factor is statistically significant as a leading factor, the only common factor between suicide cases in each group is the outcome of suicide. Despite the large suicide literature, there are more myths and speculations about suicide than facts. Unfortunately, a lack of critical thinking and critical assessment of the evidence means that various governments' suicide prevention policies are often based on speculations and the mindset of ministers and advisors than actual facts. Studies that fail to address the methodological issues related to design, data collection and

analysis will lead to erroneous results, misleading conclusions and confusion. For example, Beautrais [11-13] claimed that mental illness causes suicide, Khan et al. [14] claimed that the use of anti-depressants do not reduce suicide and indeed may increase the risk of suicide, while Hall et al. [15] claimed that the use of antidepressants reduces suicide rates.

In this discussion paper, the evidence for two main official policies is critiqued and re-examined, namely, tackling depression to prevent suicide, and the policy of silence. Also discussed will be the main issues that are crucially important to developing a sustainable and sensitive suicide prevention policy and present a working example of a suicide prevention strategy.

## 2. BACKGROUND

It is globally agreed that suicide is preventable. Suicide is often referred to as a public health concern but for prevention purposes it is classified under mental health. Despite a large volume of research, it is only in recent years that there has been an official acknowledgement of the complexity of suicide (e.g. see [16,17]) and yet, the whole issue of suicide including research, intervention and prevention remains firmly under the control of the Mental Health Act in New Zealand and in most Western countries.

Certainly, suicide mortality data provide strong evidence that a mental illness approach to suicide prevention does not work, and a mental health service approach as an intervention is also doubtful. There are two main features to suicide trends especially when plotted over a long period. The first is that suicide rates usually go up as well as down (seasonality). The second feature is the cyclic effects in suicide trends, i.e. a pattern based on suicide trends following a series of ups as well as downs over a number of years. This pattern suggests that the time series for suicide rates has a memory. In other words, the cycles of ups and downs may well be the results of changes and variations in individuals' as well as society's parameters due to health, social, environment and economic policies including mental health intervention plans. The fact that cycles in suicide trends repeat themselves suggests that not only a mental illness approach does not work as a prevention and intervention method but it also indicates that we do not understand suicide *per se*.

In addition to mortality and morbidity data there is also qualitative evidence from suicide survivors (e.g. parents who have lost a loved one to suicide), or people who have been through a crisis. But due to an embargo on suicide reporting and debate, brought about by advocates of mental illness (again without any solid evidence to support it), such information is hardly ever aired. Stories from suicide survivors and those who have suffered suicidal behaviour suggest that psychiatric services are not equipped to tackle suicide [18]. If the authorities strongly believe that mental illness causes suicide then one would expect that individuals at crisis point should have immediate access to a psychiatrist. It must be disturbing for the care services to come across a comment such as “the only way to see a psychiatrist quickly is to attempt suicide” from those who have been through a crisis [18]. However, it must be noted that current estimates suggests that between two-thirds and three-quarters of all completed suicides do not come into contact with psychiatric services, the remainder who do receive psychiatric help then go on to complete suicide. So why do authorities, researchers and service providers continue to insist on funding a suicide intervention based on mental illness and psychiatric services as the main suicide prevention strategy?

It is plausible that political influence carries more weight than the available supporting “evidence”. For example, is there any evidence to support the claim by proponent of a medical model that 80-90% of suicide cases had depression, or is this claim merely a speculation or a mindset?

## **2.1 Examining the Claim that 80-90% of Suicide Cases had Depression**

The claim that 80-90% of suicides had depression is often quoted by medical professionals as strong evidence to support the belief that depression causes suicide. The sharp increase in anti-depressant prescriptions is a direct consequence of this belief. For example, in New Zealand, prescriptions for antidepressants has quadrupled over the last 12 years [19,20]. Over the same period suicide rates have maintained an upward trend [21].

The logical scientific reaction would be to question first our approach to suicide prevention by critiquing the supporting evidence: where has the estimate of 80-90% suicide cases having depression come from and what is it based on?

Let’s consider for example, a situation where a teacher may advise children and adolescents to play basketball in order to grow tall! This is known as ‘selection bias’ where it is not the game that causes children to grow tall, rather, it is the nature of the game that seeks out the selection of tall people. Within behavioural sciences this effect is referred to as ‘cognitive biases’ (confirmation bias, congruence bias, conjunction fallacy, etc), e.g. the tendency to search for, interpret, focus on and remember information in a way that confirms one’s preconceptions [22].

Unfortunately, this kind of bias, plus measurement error and other statistical bias are frequently allowed into studies of topics related to human behaviour including suicide but most studies fail to account for selection bias. Issues arising from studies of human behaviour are discussed elsewhere in more detail [23] such as misconceptions that a confident adolescent is more likely to smoke cigarettes, or, entry into a residential home causes loneliness in old people.

It is estimated that depression is common in the general population. In New Zealand it is estimated that roughly 1 in 6 people will suffer from serious depression at some time in their life [24]. In other words, at any one point in time in New Zealand we can expect over half a million people to be suffering from depression. If the 80-90% probability is applied to the population of those with depression in New Zealand then we should expect thousands and thousands of suicides every year. Even if we apply the inverse of 90% (i.e. 0.01) to the population of those suffering from depression we could expect over 5500 cases per year. Yet, on average the number of suicides in New Zealand is 540 per year which is 540 too many. However, this suggests a crude suicide risk of 0.00014 (or roughly 14 per 100,000 based on a total population of 4 million). The main depression website [24] which is also part of the New Zealand Government’s suicide prevention strategy states that depression increases the risk of suicide 20 fold. Again a crude calculation suggests  $(0.00014 \times 20 \times 500,000 =)$  1400 expected suicides per year. Tackling depression has been central to the New Zealand Government’s suicide prevention strategy that led to the launch of a depression awareness web page [24] in 2006 and the quadrupling of antidepressant prescriptions [19,20]. Over the same period suicide rates have maintained an upward trend [21].

Similarly, in Australia, national surveys show that 20% of the general population experience significant mental problems each year and the overall suicide rate is about 10 per 100,000. Thus the likelihood of a person with a mental illness taking their own life is low. It is higher for some mental disorders such as bipolar disorder and schizophrenia than others but it also high for those with alcohol and drug problems and addiction, chronic pain, debilitating conditions and so on [25].

So where does the figure of 80-90% of suicide cases having depression come from?

Some argue that this figure is based on reviewing suicide cases using medical records. The problem with this argument is that if 90% of suicide cases' medical records show that these cases had been diagnosed with depression, then they must have received treatment for it, so the question arises why then did they go on to complete suicide? If depression is the cause of suicide then treating the root of suicide should have prevented the 80-90% of cases from committing suicide.

Current estimates suggest that between two-thirds and three-quarters of all suicides do not come into contact with psychiatric services [26,27]. Of the remainder who do have a psychiatric record not all were diagnosed with depression. For example, in the UK, following a confidential inquiry into homicides and suicides by mentally ill people - data from medical and hospital records were collected on all suicide cases who had been through a community and mental health Trust in the UK [27]. The findings from the confidential inquiry revealed that 33% had no diagnosis, 17% had depression either as a diagnosis or mentioned in their hospital notes, followed by 12.5% with schizophrenia, 8% and 6% alcoholism and personality disorder respectively. Furthermore, the cases from the hospital formed only about one-third of all completed suicides, i.e. two-thirds of all suicides had had no contact with psychiatric services and were successful in their first attempt. Interestingly, for 46% of cases the reason for coming into contact with psychiatric services was due to previous attempts - yet the individuals still completed suicide.

The problem with suicide research is that death only happens once and we have no access to the person who can provide information about their process of decision making: why they chose death instead of life. So we don't know anything

about the two-thirds of suicide cases with no records.

Thus we are still none the wiser as to where the figure that 80-90% of all suicides had depression has come from?

The notion that suicide is caused by depression is so strongly established in the mindset that even educated health professionals refuse to question the evidence and try to fit every suicide into this model.

For example, a GP giving evidence at a coroner's inquest in New Zealand in 2005 stated: "I am desperately sad we had no insight into his mental health problem and so were not able to prevent this tragedy." Throughout the inquest it had been reported that the adolescent was a happy and popular person, was successful both at sport and academically, with no sign of any health problems. It is therefore, puzzling as to why the GP should make an assertion of mental illness about the adolescent. In the GP's mind, selection bias dictated that the young individual must have had mental problems and depression to committed suicide, i.e. we force suicide to fit into our model where there is no evidentiary support.

Another example is the case of an Australian celebrity who committed suicide [28]. In this case the celebrity had received treatment for depression and was reportedly happy and was making future plans before she committed suicide. After the event (suicide) occurred, the psychiatrist's explanation was that cases with deep depression are good at hiding their feelings and intentions. Once again, in the psychiatrist's mind, selection bias dictated that nothing other than depression, in this case deep depression (because the case had earlier been treated for depression), could have caused her suicide. An alternative explanation could be that this person and others like her received treatment for depression, rightly or wrongly, but not for suicide.

Therefore, the influence from selection bias is automatic. In other words, the public and health professionals' mind-set automatically assumes depression and mental illness as the cause of suicide. Clearly, there will be serious implications for policy and care service provision.

There is no doubt that some suicide victims may have had depression, but these cases form a very small proportion of the population with depression, and not every depressed person kill

themselves; some people who experience failure in their lives may kill themselves, but so do successful people; some unemployed people may kill themselves, but so do employed people; etc.

It is surprising that governments are happy to fund researchers to seek biased information about the mental status of suicide cases from third parties (i.e. family and friends) after the event of suicide, e.g. the Canterbury Suicide Project [13]. This type of suicide research (psychological autopsies) is flawed theoretically, methodologically, and analytically leading to erroneous results and mis-conclusions, and therefore poor and inappropriate decision policies.

Therefore, it is of no surprise that psychological autopsies have concluded mental illness and depression as the main cause of suicide and 80-90% of suicide cases had had depression, e.g. see [29].

Clearly, not much reliance can be placed on the results from psychological autopsies, yet, as mentioned earlier, tackling depression is central to the NZ Government's suicide prevention strategy.

For this strategy to work there has to be a real link between depression and suicide. If there was a link between depression and suicide a big drop in suicide rates would have followed the Government's suicide prevention strategy.

Because there has not been a reduction in the suicide rate, any future change in suicide rates will be the artefact of the cyclic pattern in suicide rates over time. No doubt, the authorities, as they have done in the past, will claim any negative change (i.e. cycle downturns) as the result of their strategies and continue to provide more of the same but at a much higher cost in terms of lives lost.

## **2.2 Talking about suicide leads to more suicide**

Another misinterpretation of data is the belief that talking about suicide will lead to more copy-cat style suicides. Governments worldwide have blindly accepted this mindset as part of their suicide prevention strategy. For example, there is a moratorium on media reporting of suicide in New Zealand which has led to secrecy and silence around suicide. The Government has not

provided any credible evidence to support this policy of secrecy nor have the proponents of this policy. In the meantime suicide survivors suffer in isolation and their needs go unmet [30]. In 2011, following successful workshops on suicide prevention at grassroots [21,31], the New Zealand's Chief Coroner issued a statement [32]. The Chief Coroner was criticised in an article by the proponents of a medical model [33] for making the statement "a gentle opening up of the restrictions on media reporting of suicide".

In an article on suicide reporting rules [34] the author refers to the Vienna subway built in the late seventies which subsequently became a preferred method of committing suicide. It reports that after a group of researchers and the media got together and stopped detailed reporting of each suicide the use of the subway for committing suicide dropped by 75%. The literature (e.g. see [35]) on this topic use the terms suicide, suicide attempts, suicide using subway and total suicide interchangeably. The literature suggests that beginning early 1984 suicide cases using the subway method increased until June 1987 when the media stopped detailed reporting of suicide, and directly linked the drop in suicides with this method of media reporting. These conclusions are misleading and a mis-representation of the data, see Fig. 1 below. It should be noted that by drop in suicide numbers the authors of the research and the Press article are referring "the use of the subway method to commit suicide", but is there any evidence to link this to methods of reporting and a decline in suicide rates?

We are none the wiser. For example, data on total suicides in Vienna from 1970 to 2012 (see Fig. 1) suggests the suicide trend had turned upward well before the subway suicide became fashionable and continued to go up until 1985 when the downturn occurred, at least two years before the change in method of media reporting in June 1987. Furthermore, the reported massive percentage drop (of 75%) does not appear to have translated into a commensurate reduction in total suicides in Vienna.

The 75% reduction in the use of the subway as a preferred method to commit suicide was wrongly interpreted as a drop in suicide rates due to a change in reporting of suicide by the researchers. Unfortunately, Hollings [34] failed to pick up on this point and unwisely called it the

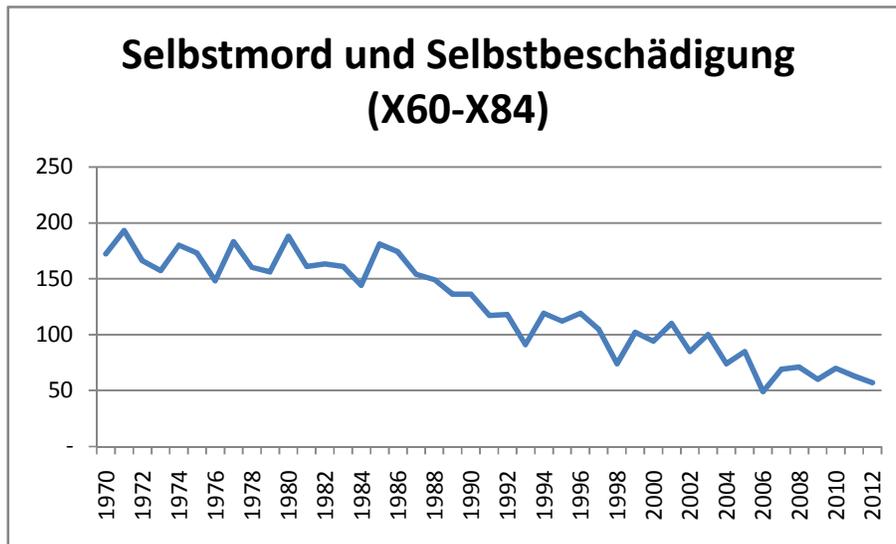


Fig. 1. Number of deaths by suicide and self-harm in Vienna (source: [36])

most conclusive study to date. On the other hand, the suicide literature reports that subway suicide is a continuing problem.

Therefore, the biggest problem in informing the process of policy development is *uncritical* research, the *uncritical* use of the literature, and *uncritical* reporting. The article [34] quotes the Canterbury suicide project [13] and its authors as one of the main points of supporting evidence for New Zealand's policy of silence. As mentioned above, this project is flawed and poorly conceived and not only does it not address bias but it introduces additional bias without discussing or controlling for them.

### 3. DISCUSSION

As mentioned above, the main informant cannot provide insight into their process of decision making which has led to a great deal of misinformation (e.g. see [21]). Unlike death, other health and social outcomes, e.g. loneliness in old age and teenage smoking, can be measured over time. It is possible to statistically relate changes in explanatory variables (potential contributory factors) to changes in the outcome being studied. If changes in an explanatory variable do not coincide with a commensurate change in the outcome then clearly there is no correlation between the explanatory variable and the outcome. Poorly designed studies often fail to account for bias and report strong correlations and cause and effect when there is none.

On the other hand, historical suicide rates suggest a cyclic effect. One of the complications of the data is that suicide trends (age groups, male and female) do not change direction all at the same time, i.e. there is a lagging effect, so when it appears that men's suicide rates are going down it is going up for women. Only looking at suicide rates over a short period of few years is not informative and could well be misleading. For example, at the end of a cycle when overall suicide rates change to a downward direction the authorities and researchers in New Zealand congratulate themselves that their policies are working and that they should be given more resources to apply more of the same to other groups whose rates are going up. And, at the beginning of the cycle when suicide rates change direction to an upward trend, the authorities and researchers proclaim that suicide is a complex public health issue involving lots of social, economic and mental health factors and that they should be given more funds for further research!

#### 3.1 Politics and Policy

Suicide prevention is highly politicised and frequently the public are led to believe that the only solution is a medical model intervention [21]. With the secrecy around suicide basically silencing suicide survivors the public very rarely gets exposure to suicide data. For example, anecdotal information suggests that:

- Not many people are aware that suicide is one of the biggest causes of death in New Zealand,
- Many believe depression is the cause,
- Very few might be aware that out of all completed suicides only between one-quarter and one-third have had contact with psychiatric services, and,
- In spite of medical intervention they managed to complete suicide.

Suicide survivors' stories often paint a top-down approach to an intervention which does not appear to work. So, current experience and evidence suggests that the official suicide prevention strategies are nothing more than an intervention technique that at best is inappropriate with a low uptake, and at worst adversely contributes to the suicide rates. In other words, the strategy often gives the public 'more of the same' each year but at much higher costs both in lives lost and in monetary terms.

Despite a change in the political language to describe suicide as a complex socio-economic and environmental phenomena, from a policy development stand point, suicide prevention has been firmly placed with mental health services, e.g. see [16,17]. Clearly there are complex issues with mental health services around the world for the World Health Organisation (WHO) to appeal to countries to increase their support for mental health services ([37], also see [38]) which helped push mental health to the top of the political agenda. For example, the UK's policy strategy was entitled "no health without mental health" [17]. While, in New Zealand, the Commission for Mental Health tendered a literature review [39] and the Mental Health Foundation of New Zealand based their strategy vision for 2009-15 entirely on the premise that 'flourishing' people do better in life [40]. These strategies refer to complex human behaviour processes with inter-relating patterns and influences. However, action plan documents commonly tend to present a simplistic but deterministic view of cause and effect [41].

Of course, under mental health strategies suicide prevention is simplistically based on mental illness. This approach has been limiting and has led to more of the same. For example, the New Zealand Government launched its suicide strategy document 2006-2016 [16] followed by a suicide prevention action plan 2008-2012 [42] two years later. Acknowledging upward trends in suicide rates, in 2013 the suicide prevention

action plan 2013-2016 was launched (see [43]). This action plan basically proposes "more of the same" as offered in previous action plan documents [44], i.e. more funding for more access to mental health services.

### 3.2 Better the Devil We Know

Whether or not staff in governments' policy units and ministries have sufficient understanding of, and skills in a critical assessment of evidence the biggest problem appears to be the top-down approach to decision making. In other words, decisions are made at the top to suit political parameters and evidentiary support is sought after policy implementation [45]. Lack of information on morbidity and mortality, from hospital admission and discharge to diagnosis and outcomes, has exacerbated policy development. As a result, a historical assessment of policy development for suicide prevention suggests that decision makers continue with the philosophy "better the devil we know", i.e. the theory that mental illness causes suicide rather than a new approach. The net result is therefore, more of the same policies albeit in a slightly different syntax, which is extremely disheartening and disconcerting for the frontline health and social workers.

The reasons for these are several. First, in Western countries, governments change every few years, and therefore, government priorities also change. Second, trend analysis is often kept to a short time frame, e.g. suicide rates since the start of the new government, or, since the last action plan. Third, the short-term trend may be part of the cycle that is on its way down in which case the authorities would claim this downward trend as success of mental health services, and/or when the trend is part of the cycle that is on its way up then more funding is demanded to deliver more mental health services to the public.

As argued elsewhere [46,47], accurate and appropriate information is crucial in supporting policy formulation. It is the uncritical acceptance of evidence that has led to policies that produce "more of the same" - a notion that is widely observed in other aspects of policy development. For example, in economics, policies that are based on outdated theories producing "more of the same" are referred to as zombie economics [48]. Zombie theories thrive on falsehoods that are firmly established in the public mindset to such an extent that people are inclined to the mental illness model despite contrary evidence.

In other words, the reasons for the existence of zombie policies, at least in part, are that there are no alternatives allowed. Zombie theories can only be eradicated with quality information based on quality research. For example, in 2011 the New Zealand Chief Coroner issued a statement recommending new approaches to suicide prevention and more debate [32]. However, the subsequent government policy action 2013-16 [43] is firmly based on a mental illness approach providing nothing new.

In 2009/10 a project to de-politicise suicide prevention was initiated at the grassroots. A number of communities in New Zealand with a high rate of youth suicide decided that they could no longer wait for the politicians to act in their interest and joined this initiative. The suicide prevention at grassroots was also supported by the Stop Youth Suicide Campaign in Kentucky, USA [49]. Since its start, communities have proactively owned the suicide problem and implemented actions that suited their communities. As a result, at the time of writing youth suicide had decreased in these communities. Of note is the case of one community that was experiencing one youth suicide per month (prior to the initiative), in this community the number of suicides has gone down to two since the community initiative. However, the first was a youth suicide which occurred post initiative but before the implementation of local suicide prevention actions, and the second one was an adult who was under psychiatric care. In 2013 the grassroots initiative was presented across New Zealand over the space of eight days through a series of training workshops. Attendees included members of the public, coroners, suicide survivors, frontline health and social workers, etc.

### 3.3 Suicide Research

The problem with suicide research is that death is not a recurrent event and happens only once. Therefore, the suicide case that can ultimately provide answers and information about their process of decision making cannot do so. This makes suicide research open to a great deal of bias. In addition, study design, research methodology and method of data collection also introduce additional bias. For example, psychological autopsy type investigations are often biased because they attempt to assess the mental state of the suicide case through the family and friends' assessment of the case. The nature of bias becomes even more complex

because 'mental illness causing suicide' is well established in the public mindset. It is often difficult to account for such bias in data due to poor study designs.

In an era of evidence-based decision making, it would seem that no one has actually questioned the evidence: what is the basis for assuming that mental illness causes suicide and where is the evidence? Several problems arise from presuming cause and effect that is not supported by evidence. The stalemate in suicide research and policy development is a problem with serious implications for developing action plans to prevent suicide, i.e. leads to more of the same. That is, a lack of insight into suicide continues to confuse research and keep it at the periphery of suicide, i.e. mental health. For example, a trawl of the literature would indicate suicide studies in different subgroups in relation to their mental status, from suicide in people with mental disorders e.g. depression, bipolar disorder, to students, suicide in the military, the elderly, patients with various diagnosis such as skin disorders and cancers, suicide during pregnancy, suicide in people with alcohol and drug abuse, suicide and internet, suicide and diet, and so on [50]. Most studies assume mental illness from the outset and conclude that depression and mental illness brought about by these conditions are the leading cause of suicide in these groups. Therefore, no insight is gained other than a reaffirmation that suicide can occur in any group.

On the other hand, prevention policies based on relationships that do not exist can lead to more complex and unwanted relationships and exacerbate the problem which has made researchers, politicians and care professionals' part of the suicide problem. In other words, sustained misinformation has ultimately made the suicide problem unsolvable. The policy makers' and researchers' persistence on looking for mental illness symptoms as a way of identifying suicidal behaviour in order to prevent suicide is a fallacy of control. For one thing, if symptoms are detected then an event has occurred, thus, it is time for intervention because prevention has not worked. On the other hand, as a society we cannot afford to wait for symptoms to appear. Prevention starts at family and community level supported by family services as well as education, social, primary and public health services.

#### 4. CONCLUDING COMMENTS

Zombie policies in suicide prevention have far reaching effects. Not only do they stall research progress but also they lead to ineffective policies that at best offer “more of the same”, and poor practices, e.g. prescribing antidepressants to children and babies [51]. Such behaviour will also lead to manipulation of the parameters so that a case or a suicide event will fit into the mental illness model, as opposed to investigating why the mental illness model cannot explain the event. For example, a GP's statement to the coroner's inquest asserting presence of mental illness in the case of an adolescent's suicide where there were none reported, serves to demonstrate how parameters can be modified to fit conveniently within the practising model.

There are powerful advocates (usually psychiatrists) who use suicide rates as a lever for more investment in mental health services. Communities do need an effective and appropriate mental health service but this will have little impact on population suicide rate [25].

The reasons why no prevention plan has worked or can bring total suicide numbers down is related to a lack of understanding of suicide and too much mis-information [21].

Government policies based on poor research and inappropriate information has created a vicious circle that provides ‘more of the same’ intervention each year at a much higher cost in terms of lives lost and resources. As a result we do not know anything about suicide and hence we cannot prevent it. In the meantime, at least a proportion of suicide cases will die needlessly because of our obsession with mental illness and our refusal to address and understand suicide. Mental illness as a justification of suicide is of little comfort to suicide survivors (those who have lost a loved one to suicide), in particular, after decades of advocating that suicide is a preventable and unnecessary death. As long as we allow zombie politics to govern suicide prevention the cost of suicide will increase year upon year and cycles in suicide trends will continue their pattern.

Prevention needs to start at home, in school and in the community at the earliest age possible.

#### CONSENT

Not applicable.

#### ETHICAL APPROVAL

Not applicable.

#### ACKNOWLEDGEMENTS

“only the two sections on depression and suicide (<http://journal.frontiersin.org/Journal/10.3389/fpu.bh.2013.00062/full>), and subway suicide (<http://www.internetandpsychiatry.com>) have been published separately as opinion pieces. “

#### COMPETING INTERESTS

Author has declared that no competing interests exist.

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