

Editorial: When is a fact not a fact

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A major problem in research which is intended to inform the process of policy formation is the uncritical use of analytical methodology and resulting information.

An associated issue which exacerbates the problem is the lack of self-critiquing, in order to separate personal opinions of researchers from the evidence arising from research. The consequences of such behaviour are erroneous results, misinterpretation and mis-conclusions. For example, the discovery that a proportion of a sample, taken from those who had attempted suicide, had a mental illness diagnosis and had made more than one suicide attempt is not evidence of mental illness causing suicide. Firstly, by law every suicide attempt case who receives a medical intervention must undergo a psychiatric evaluation. Secondly, attempted suicide is the main sample selection criterion. Therefore such claims are unwise, ridiculous and are misleading. On the other hand, when faced with such a study focusing on the proportion of the sample that were not allocated a mental illness category may be more informative.

A common problem is the assumption that a published paper must be accurate because it has been peer-reviewed. However, reviewers themselves suffer from the same issues and problems.

For example, for decades, the literature on suicide has been littered with the claim that suicide is the result of a mental illness without any solid evidence.

Although, this claim has been dismissed (CDC, 2018; Hjelmeland, et al., 2012; Pridmore, 2011; Shahtahmasebi, 2014; WHO, 2014), yet, psychologists/psychiatrists still continue to promote a causal relationship. In other words, the presence of mental illness causing suicide is often concluded even when the evidence shows there is no relationship between mental illness and suicide.

The rationale seems to be that if the mental illness-suicide mantra is repeated enough times then it becomes a fact. Indeed, mental illness is automatically assumed by health professionals and the public whenever a suicide occurs. Knowledge of suicide does not appear to go beyond mental illness, even when there is none present. For example, the case of a general practitioner (GP) who, at a coroner's inquest into an adolescent suicide where the case was reported to be happy, popular with his peers and excelling academically and in sport, claimed:

“I am desperately sad we had no insight into his mental health problem and so were not able to prevent this tragedy.” (Shahtahmasebi, 2005)

In this sentence the GP admits that there were no mental illnesses present and that the death could not be prevented. Due to this admission the GP shows his ignorance by claiming there was an unknown mental illness. In other words, a presumption of mental illness is made due to suicide *not* due to any evidence.

However, this example further supports the rationale of repeating the mental illness-suicide mantra to establish it as a fact.

It is on this ridiculous “fact” that most suicide prevention strategies are based, which is betrayal of public trust.

Such behaviour is against the ethos of academic research and a collaborative approach.

As a result, suicide literature often reads as the authors’ own opinion rather than being research based.

A second example deals with an adopted analytical technique. The nature of data is only one factor guiding the choice of an appropriate analytical technique, substantive theory is the other. For example, in (discredited) psychological autopsies, cases of suicide are matched with a number of controls. When dealing with data from a matched case-control study the appropriate technique to apply is the conditional logistic model. But such a model cannot deal with the biases in such studies. For example, given the cause and effect which is well established in the public mind-set, it is highly likely that the participants’ views and responses will be greatly biased towards the belief that mental illness causes suicide. So, in addition to technique and bias due to public perceptions of suicide, there will be measurement errors in observed variable due to mental illness-suicide mantra. In other words, studies of suicide are subjective and subjectivity is the cause of erroneous results and mis-conclusions (Shahtahmasebi & Berridge, 2010).

One solution is to increase the complexity in methodology – which in turn requires more complex study design and data.

The question that arises is what be gained from an increased complexity in methodology. An example of dealing with complexity using substantive theory and gained insight was reported in earlier issues of DHH concentrating on teenage smoking, e.g. see (Shahtahmasebi, 2018)

In the issue (Volume 6, Issue 4) I presented an analysis of survival in old age based on whether the sample was alive or dead after eight years in the study. At face value, uncritically viewed, we should be confident about the results because the technique for analysing binary response (dead/alive) was correct. Critically viewed, the results may be substantively questionable. For example, this dichotomy lumps all survivors into one category and all non-survivors into another. However, in the sample of elderly observed over eight years, someone who survived and lived independently in the community is very different to another survivor who lived in residential care requiring looking after.

In a second paper in this issue we look at additional insights gained from increasing complexity by expanding the binary outcome of alive/dead to alive in community, alive in residential care, and deceased.

In conclusion, part of a critical approach includes the application of an appropriate and relevant methodology. For the results to be informative the critiquing must also be based on substantive theory guiding the choice of methods and interpretation of results (Shahtahmasebi & Berridge, 2010).

The earliest evidence is merely a statement that Suicide is the result of a mental illness (Wade, 1879). This medical statement without accompanying evidence has formed the *uncritical* basis of suicide prevention for over a century.

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