

Suicide and mental disorders: A discourse of politics, power, and vested interests

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ABSTRACT



One of the most well-established truths in suicidology is that mental disorders play a significant role in at least 90% of suicides, and a causal relationship between the two is often implied. In this article, the authors argue that the evidence base for this truth is weak and that there is much research questioning the 90% statistic. Based on numerous examples, they also argue that ideology, politics, power, and vested interests among influential professionals in the field obstruct argument-based discussion of this issue. The authors also discuss unfortunate consequences of the constant reiteration of the 90% statistic.

One of the most well-established truths in suicidology is that mental disorders play a significant role in almost all suicides. This is often referred to as the 90% statistic. Therein lies an assumption about a causal relationship between the two (Cavanagh, Carson, Sharpe, & Lawrie, 2003; Isacson & Rich, 2003). If not always stated explicitly, causality is implicated by emphasizing that nearly all suicides are “a consequence of a mental disorder” (e.g., Insel & Cuthbert, 2015, p. 499).¹ The main evidence base for this 90% statistic is a series of psychological autopsies (PA studies), in which psychiatric diagnoses have been assigned to the deceased by means of interviewing a few of the bereaved, often many years after the suicide (Hjelmeland, Dieserud, Dyregrov, Knizek, & Leenaars, 2012). Based on numerous replications, this statistic is now widely accepted as a fact (Berman, 2006), which is constantly repeated in academic literature, in suicide prevention strategies, and in the media.

Numerous (mostly disregarded) methodological problems with the “evidence base”

Several authors have outlined numerous methodological problems with PA studies (for a comprehensive review, see Pouliot & De Leo, 2006). Still, when findings from

such studies are used, all the methodological problems seem to be disregarded and the 90% statistic prevails. Several problems with the diagnostic instruments used in PA studies have been highlighted (e.g., Pouliot & De Leo, 2006), but the first study to actually scrutinize *the diagnostic process* in PA studies in detail was “Psychological autopsy studies as diagnostic tools: Are they methodologically flawed?” (Hjelmeland et al., 2012). We argued that the question in the title definitely has to be answered affirmatively; it is indeed impossible to assign a valid psychiatric diagnosis to someone by interviewing someone else. We reached that conclusion after scrutinizing the diagnostic questions asked in PA studies by means of standardized diagnostic instruments such as Schedule for Affective Disorders and Schizophrenia (Endicott & Spitzer, 1978), Structured Clinical Interview for DSM Disorders I and II (First, Spitzer, Gibbon, & Williams, 1995; First, Spitzer, Gibbon, Williams, & Benjamin, 1994), and the Mini International Neuropsychiatric Interview (Sheehan et al., 1992). So, when Isacson and Rich (2003) claimed that the connection between depression and suicide has been found so many times it is “proven” (p. 457), we maintain that it doesn’t really help to find the same thing over and over, if the research method used is unfit to answer the research question (Hjelmeland et al., 2012). Let’s briefly recapitulate some of our main

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¹Insel and Cuthbert actually refer to the World Health Organization (WHO) report, *Preventing Suicide—A Global Imperative*, for this claim. However, the WHO in this report states that whereas mental disorders are present in up to 90% of the suicides in high-income countries, this proportion is smaller (around 60%) in some Asian countries such as China and India (WHO, 2014). And, when we know that almost half (47%) of the world’s suicides actually occur in these two countries (WHO, 2014), Insel and Cuthbert’s statement appear somewhat tendentious.

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arguments in the above-mentioned article and look at some examples of diagnostic questions that cannot possibly be answered reliably by someone other than the person to be diagnosed.

In the Structured Clinical Interview I for the *DSM-IV*, one of the two main questions on depression is “In the last month, did you lose interest or pleasure in things you usually enjoyed?” If yes: “Was it nearly every day? How long did it last?” If it lasted 2 weeks or more, follow-up questions are asked, for instance (in relation to a major depressive episode):

- “How did you feel about yourself?”
- “Did you have troubles thinking or concentrating?”
- “Were things so bad that you were thinking a lot about death or that you would be better off dead?”

Examples of other questions asked to assess affective disorders, and that would be difficult or impossible to answer reliably by proxies are:

- “Is your feeling of (own equivalent for depressed mood) different from the kind of feeling you would get if someone close to you died?”
- “Do your arms and legs often feel heavy (as though they are full of lead)?”
- “Are you especially sensitive to how others treat you?”
- “What happens to you when someone rejects, criticizes, or slights you?”
- “Have you avoided doing things or being with people because you are afraid of being criticized or rejected?”
- “Have you been feeling guilty about things you have done or not done?”

Many of these questions contain the words *feel* or *think*. How can anyone else know for certain how the deceased had felt, or what they had been thinking?

Substance use disorder has often been found in addition to affective disorders in PA studies (e.g., Gustafsson & Jacobsson, 2001). Here are some examples of questions asked from the Mini International Neuropsychiatric Interview to establish alcohol abuse/dependence:

- “In the past 12 months: Did you need to drink more in order to get the same effect that you got when you first started drinking?”
- “During the times when you drank alcohol, did you end up drinking more than you had planned when you started?”
- “Have you tried to reduce or stop drinking alcohol but failed?”

How could anyone other than the one to be diagnosed know anything for certain about questions like these? Such PA studies are indeed only exploring the participants’ subjective speculations, feelings, and

experiences with regard to these questions and cannot possibly be considered reliable descriptions of feelings or thoughts the deceased might have possessed. And, if the responses to diagnostic questions, however standardized they may be, are not reliable, the diagnoses assigned simply cannot be valid (Hjelmeland et al., 2012). Besides, we know from suicide research with different foci and where the individuals are alive and can answer for themselves that there are discrepancies between how they themselves feel or think and what, for instance, their parents believe to be the case (e.g., Thompson et al., 2006). Why should this be any different with regard to diagnostic questions?

In addition to affective and substance use disorders, personality disorders are often reported in PA studies. These are especially difficult to assess reliably by means of proxies. First, low agreement has been found between self- and informant reports on symptoms for personality disorder (e.g., Klonsky, Oltmanns, & Turheimer, 2002). Second, responding affirmatively to diagnostic questions regarding personality disorders would entail talking negatively about the deceased. Whether this will result in under- or overestimation of personality disorders is difficult to know. Some bereaved might be reluctant to talk negatively about the deceased, whereas others might perhaps want to blame the deceased, or some mental disorder, for the suicide (Hjelmeland et al., 2012). Because of these problems, some researchers have decided not to assess personality disorders in PA studies (Apter et al., 1993), whereas others have no such reservations. Indeed, in a policy paper outlining (and titled) “The next generation of psychological autopsy studies,” Conner et al. (2011) recommend “increased study of personality disorders” (p. 597).

It should be clear from the above that there are many diagnostic questions that cannot possibly be answered reliably by proxies and hence the diagnoses cannot be valid. In our PA study critique article, we also discuss a number of other problems, for example, the importance of who the informants in PA studies are (Hjelmeland et al., 2012). In most PA studies interviews are made with a few (often one or two) of the closest next-of-kin, for instance, parents when the deceased was a young person, and spouses or children when the deceased were adults. It is not necessarily the closest in kin who is the closest one in terms of confidence or intimacy. In a large qualitative PA study in Norway, five to nine participants around each of 20 suicides were interviewed and we found that the descriptions of the same deceased/suicide varied considerably from one participant to the next (Hjelmeland et al., 2012; Rasmussen, 2013). In addition to all this, a closer look

at some of the “classic” studies constituting the main “evidence base” for the 90% statistic revealed that they in several ways were remarkably weak methodologically (Hjelmeland et al., 2012).

There are a number of reasons to believe that mental disorders have been overestimated. One example is difficulties in separating between sadness and depression (e.g., Zonda, 2005). Another is the fact that the 90% statistic is “common knowledge.” For decades, it has been widely cited not only in the academic literature, but also in the media, as well as in suicide prevention plans/strategies. And, “if you hold to a belief that one has to be mentally disordered to die by suicide, I am more likely to see and report symptoms that fit my belief” (Berman, 2006, p. 3). This might therefore influence not only participants in PA studies, but also raters (interviewers/researchers) because they are required to use clinical judgment in the coding of responses. This is emphasized in the instruction in some of the diagnostic manuals, as well as by influential professionals and experienced researchers in the field, including conductors of some of the “classic” PA studies (e.g., Hawton et al., 1998). A clinical judgement is bound to be subjective. And, if the rater holds the common belief in the 90% statistic, s/he is likely to tip toward the affirmative when in doubt.

In spite of all the methodological problems, Conner et al. (2011) maintained that “it is important to acknowledge that PA research has made the seminal contribution to the understanding of the role of mental disorders as proximal risk factors for suicide” (p. 599). They recommend continued use of this method, although with a case-control design. In addition to the main problem of such a method’s inability to provide reliable diagnoses, a case-control design does not solve the problem of overdiagnoses in the suicide group. Interviewers and interviewees will have expectations about mental disorders being connected to, or even a requirement for suicide. Hence, this will blow up the proportions (Berman, 2006; Pouliot & De Leo, 2006). In discussing how such a bias could be remedied, Conner et al. (2011) admitted that masking interviewers will be “impractical” and that whether blinding raters would be successful, is “unclear” (p. 597). In other words, there is no such remedy. Moreover, some psychiatric diagnoses have suicidality as one of the criteria, which makes it easier for suicides to reach the number of symptoms necessary for a diagnosis (Hjelmeland et al., 2012).

Although PA studies constitute the main evidence base for the 90% statistic, other types of research are also used to promote the view of a strong relationship between mental disorders and suicide. One example is

research demonstrating a higher risk of suicide in many of the mental disorders compared to the general population (e.g., Chesney, Goodwin, & Fazel, 2014). Haw and Hawton (2015) referred to Chesney et al.’s meta-review and stated, “It is therefore undeniable that there is a strong association between suicide and psychiatric disorders” (p. 13). That may be so, but association is not cause. Such research does not look at how mental disorders and suicide are associated. In fact, quantitative risk factor research cannot demonstrate that mental disorder (or any other risk factor) causes suicide. Personal processes “are influenced by an indefinitely high number of factors, ... sensitive to outcomes and, hence, always changeable” (Smedslund, 2009, p. 778). Such research can by nature only provide “local and unstable fragments of knowledge” (Smedslund, 2009, p. 778), completely disconnected from the complex context in which suicide occurs (Hjelmeland, 2016).

Something has also caused the mental disorder, if such indeed is present. Perhaps similar problems underlie both mental disorder and suicidality without the two being connected (third variable problem)? Perhaps some people with a mental disorder take their lives because they do not get the help they need or are treated badly (not respected) in a psychiatric hospital? You cannot then say that it was because of the mental disorder they took their lives. There can be many different explanations. The point here is that even if the suicide risk is elevated in people with a mental disorder, we actually do not know whether the mental disorder causes suicide. Many people have lived with a mental disorder for a long time before they take their lives, and, the fact remains that the vast majority of people with a mental disorder do not take their lives. It is obvious then, that suicide is about something more, or even something else, than mental disorders (Hjelmeland et al., 2012).

Research questioning the strong relationship between mental disorder and suicide

There is extensive research, both quantitative and qualitative in nature, that questions the well-established belief about a strong relationship between mental disorders and suicide. We discuss some examples in the following.

Quantitative research

Depression is the mental disorder claimed to have the strongest relationship to suicide (e.g., Isacsson & Rich, 2003). It is curious, then, that although the suicide rate is commonly found to be higher in men than in women (WHO, 2014), the rate of depression is consistently

found to be higher in women than in men (Van de Velde, Bracke, & Levecque, 2010).

Research from outside “the West” has found lower proportions of mental disorder in suicides compared to what is commonly found in “the West”. A study from India found mental disorder in only 23% of the suicide cases (Rao et al., 1989). Studies in China have found mental disorder in 48% (Zhang, Xiao, & Zhou, 2010) and 63% (Yang et al., 2005) of suicides. Yang et al. (2005) found mental disorder among only 39% of young rural women. Chan, Hung, and Yip (2001) emphasized that a high suicide rate, combined with a low prevalence of psychiatric disorders in China, challenges the conventional view of a strong relationship between the two, as found in the West. Phillips (2010) asked whether it was time to rethink the role of mental disorder in suicide. Seen in light of the fact that almost half (47%) of the global number of suicides occurs in China and India, only (WHO, 2014), this is in itself an argument against the generally claimed 90% statistic. Studies in African countries have also found low proportions of mental health problems in suicides (Mars, Burrows, Hjelmeland, & Gunnell, 2014).

There may be a number of explanations of why this proportion is lower outside “the West”. It is beyond our scope to discuss them all, but one explanation relevant here might be that researchers outside “the West” are more open to understand suicide from a nonbiomedical perspective, and more ready to see the contextual issues involved. Could the 90% statistic perhaps be a less commonly known “fact” outside “the West”? However, a register-based study from Australia also found that less than half of those who had died by suicide had a diagnosis of mental disorder (Judd, Jackson, Komiti, Bell, & Fraser, 2012). Evidence for the 90% statistic, is therefore, not at all consistent.

Qualitative research

In research methodology courses, we learn that the way you ask your questions dictates the responses you receive. From this, it follows that the bereaved are likely to respond affirmatively to questions they know are asked to diagnose the deceased. If the bereaved and/or the interviewer or the interpreter of results at the same time hold the common belief that you have to be mentally ill to take your life, there is a relatively strong possibility of ending up with a psychiatric diagnosis for the deceased. In qualitative PA studies, the bereaved are not asked specific questions, but are allowed to speak freely about what they think was central to the suicide. Then, the picture turns out to be entirely different.

This was clearly demonstrated in a PA study from England. In the first part of this study, the participants

answered diagnostic questions. Then, 68% of the deceased were found to qualify for a psychiatric diagnosis (Owens, Booth, Briscoe, Lawrence, & Lloyd, 2003). When the narrative part of the interviews with the same participants was analyzed qualitatively, it turned out that very few spoke of psychiatric disorders as being central to the suicide (Owens & Lambert, 2012). Two qualitative PA studies from Norway, one on suicide among the elderly (Kjølseth, 2010) and one on suicide among young men (Rasmussen, 2013), found that the participants placed little emphasis on mental disorders in their narratives about what was central to the deceased’s suicide. Few had seen signs of serious mental illness (Rasmussen, 2013), and many explicitly stated that the deceased had *not* been depressed (Kjølseth, Ekeberg, & Steihaug, 2010; Rasmussen, 2013). In a similar study from Uganda, mental disorder was mentioned for only one of the 20 suicides included in the study (Kizza, 2012). These findings, therefore, challenge the established notion that suicide is mainly a consequence of a mental disorder (Hjelmeland, 2016; Hjelmeland & Knizek, 2016).

Politics, power, and vested interests in suicidology

Open debates are obstructed

We wrote our PA study critique article (Hjelmeland et al., 2012) to initiate what we believed (and still believe) to be a much-needed debate. Because it actually questioned the so-called evidence base for one of the most well established “truths” in the field, we anticipated some resistance in getting it published. Below, we describe what happened.

Surprisingly, we received a positive review and an invitation to revise and resubmit from the first journal we submitted the article to (in 2008). We revised the article in accordance with the reviewer comments and resubmitted within a week. Unfortunately, this coincided with a change of editor. He rejected the article with the following argument: “The findings are of interest but are not sufficiently incremental beyond current knowledge and are not sufficiently persuasive to back up its significant claims” (e-mail from the editor, July 2009).

It is an editor’s prerogative to decide what to publish, but in our experience it is uncommon for editors to disregard plain positive reviews. Here are some of the reviewer statements: “This is a very important paper ...”; “This is a provocative paper that is long overdue in the suicidology literature”; “[This] is a fairly withering critique of the psychological autopsy

technique”; and “The authors rightly argue that the field of suicidology for too long has accepted as a given that suicide = mental disorder” (anonymous reviewer statements received by e-mail February 7, 2009). In our opinion, editors do have an obligation to contribute to the development of the journal’s field, and if not to initiate, so at least *allow* important discussions. This editor did not seem interested in having a discussion about the evidence base for the 90% statistic in his journal. From his own publications, we knew that he was an advocate for this statistic (actually 95%: Joiner, 2005).²

That was the start of a long and winding road of submissions, rejections, and discussions with editors. Along this road, we collected a number of statements from editors and reviewers from several journals, and an interesting pattern emerged. Reviewers who concurred with the article’s main message, or who explicitly said they welcomed articles questioning established truths, provided rather brief reviews. These included such statements as: “Bravo! One more well-aimed shot across the bow of the *DSM* and its infinite potential for misuse ... You do such a thorough job of discrediting the studies you review and showing that it simply is not possible to diagnose via proxy that I share your hope that the practice will shrivel and die” (anonymous reviewer, received by e-mail July 21, 2010).

Reviewers clearly disagreeing with the article’s main message, or who admitted to having conducted PA studies themselves, provided statements like: “It is difficult to follow the authors’ opinion that it should be clear that proxies cannot answer many of the questions in the standardized diagnostic instruments reliably”; “There is no scientific evidence for the authors’ conclusions”; “... the authors are extremely naïve ...”; “Why do they not present a more balanced view ...”; “The authors are taking an extreme stance ...”; “The authors are on the back foot from the start ...” (anonymous reviewer statements received by e-mail November 13, 2009, and May 11, 2010). They also tended to give more comprehensive reviews where they argued against a lot of our points. It would have been interesting to have those arguments published in an open debate. Indeed, one of the reviewers in *Death Studies*, where the article was published, proposed that the article could “be considered as a position statement worthy of invited rebuttal” (anonymous reviewer, received by e-mail, July 21, 2010). The editor agreed and did invite someone to write a rebuttal (L. Range, personal communication, November 16, 2010). No rebuttal appeared.

As suicide researchers for some 25 years, we have received our fair share of negative or indeed quite mixed reviews. It was quite astonishing to see how the reviews of this article differed from reviews of, for instance, mainstream empirical articles (of which we have also written several). Many of the arguments, whether negative or positive, could best be described as tendentious, political, or ideological, and, sometimes quite emotional. It is perhaps understandable that if you have built a career on PA studies, you may take criticism of the method rather personally (as emphasized by an editor). However, taking things personally does not promote open and fair scientific discussions.

Eventually, 4 years after we wrote it, the article was published. Has it created the intended and much-needed debate? Not really. Of course, it is indeed possible to have a debate on the validity of the evidence base for the 90% statistic without any mention of our article. Nevertheless, we think that the arguments provided are important and should be considered. We have looked at whether and how this article has been referred to since its publication. A Google Scholar search in July 2016 resulted in 54 citations (10 of which were self-citations). In general, authors refer mainly to our article as an example of an article having outlined methodological problems with PA studies and leave it at that.

Others have also tried to initiate a debate on the 90% statistic. Here are two examples of what then tends to happen. Pridmore (2015) started a debate in the *Australian & New Zealand Journal of Psychiatry* in the Viewpoint-paper “Mental disorder and suicide: A faulty connection.” He listed a number of arguments as to why mental disorder cannot be “the cause” of suicide. He agreed with us that because of all the flaws, PA studies cannot constitute any valid evidence base for the 90% statistic. In his response article, Goldney (2015) started with a quotation from Alexander Pope (1688–1740): “A little learning is a dangerous thing; Drink deep, or taste not the Pierian spring.” Subsequently, he accused Pridmore, as well as some of the authors Pridmore referred to (including us), of polemical argumentation by use of unsubstantiated opinions. He simply dismissed our article by stating that it “originates from a Department of Social Work, with none of the five authors being psychiatrically trained” (Goldney, 2015, p. 22).

Pridmore (2015) also quoted Shahtahmasebi (2013). Goldney dismissed his work as “polemical” and then gave a detailed description of what he claimed to be evidence for Shahtahmasebi’s lack of competence in the area, that is, he has the wrong academic background. Fifteen years earlier, when Tatz (2001) in his

²Recently, he has even argued for a 100% statistic, that is, he now believes that all those who take their lives are mentally ill and describes suicide as “an exemplar of psychopathology” (Joiner, Hom, Hagan, & Silva, 2016).

comprehensive study of suicide among Australian Aborigines found that “indigenous youth suicide has no basis in ‘mental ill-health’” (p. vi), Goldney (2002) first outlined that “Tatz bases his analysis on his political science, public administration and legal training, as well as his profession of sociology” (p. 258), and then concluded, “I find that Tatz’s view is polemical and lacks scientific objectivity” (p. 259). In the other response to Pridmore’s article, Haw and Hawton (2015) were far more sober in their argumentation. They did, however, maintain, “it is an established fact that in the majority of cases there is an underlying mental disorder” (p. 15). They neither discuss nor mention any of the methodological problems with the evidence base for this “fact”.

In May 2016, a debate of the 90% statistic flared up in the AAS Listserv: *Suicidology—The Electronic Discussion List of the American Association of Suicidology* (<http://listserve.apa.org/archives/suicidology.html>). The debate was lively with more than 50 postings. It was soon clear that those who advocated for the 90% (or even 100%) statistic strongly believed they had all the evidence on their side, whereas those who questioned it were considered by the first group as providing only unsubstantiated opinions (even compared to climate change deniers), for example:

[A]nyone can question the notion that the large majority (if not all, as Thomas Joiner suggests) of people who die by suicide had at least one diagnosable mental disorder at the time of their deaths (just as anyone can question anything). The problem with doing so, however, is that one should have actual evidence (as opposed to opinions) to support that perspective. There is a fairly substantial evidence base supporting the notion that mental disorders underlie suicide. It’s not a matter, in other words, of simply “disagreeing with” or “disputing” that evidence, unless individuals who do can provide their own (counter) evidence which supports an alternative viewpoint. The problem, I think, is that although differing perspectives on a given issue should be respected, that does not necessarily mean that all perspectives on a given issue should be given equal weight (what is known as “false equivalency”). There are some cases where there is clear and compelling evidence for one perspective rather than another (an example would be climate change; many people who have the “perspective” that climate change is a hoax despite overwhelming scientific evidence to the contrary). As the late senator Daniel Patrick Moynihan said, “everyone is entitled to his own opinions, but not to his own facts.” (AAS Listserv posting by D. Miller, May 10, 2016)

Miller is not just anybody, but the current President of the *American Association of Suicidology*, and signed

his posting as such. Goldney has been an influential figure in the suicide research field for decades and is Past President of the *International Association of Suicide Prevention* as well as of the *International Academy of Suicide Research*. When influential professionals like these argue the way they do, it is difficult to have a professional, fair, and meaningful discussion.

Several reacted to Miller’s post, for instance:

When particular views are held up to be the only way we should look at things (e.g., “all suicides are mentally ill”), that the “facts” somehow speak for themselves and that alternative perspectives are just “opinions” akin to those held by “climate change deniers” then I think there will be a reaction to that (and quite rightly). Lots of people have become unhappy with how suicide has come to be framed solely as an issue of mental illness. The people unhappy aren’t climate change deniers without facts on their side, but are people who bring a variety of experiences, knowledges and well thought out perspectives to the issue. (AAS Listserv posting by I. Marsh, May 13, 2016)

Heidi Hjelmeland also participated in this debate and provided a list of research evidence supporting our stance, including our PA critique article (which was also mentioned by a few others). She encouraged Miller and others to go through the evidence and debate the actual arguments. No responses came and the debate died down soon after.

In such a climate, quite a few may not only be discouraged, but also frightened away from important debates (as we indeed have heard from many). Marsh pointed to “a worrying trend of people being shut down quite quickly in discussions if they don’t conform to the assumptions of the powerful majority. To divide the world into those who have the facts on their side (i.e., that 90–100% of suicides are mentally ill) and those who are in denial of that fact, is unhelpful to say the least” (AAS Listserv posting by I. Marsh, May 13, 2016). Such a climate actually hinders the development of suicidology.

This discussion is interesting to look at in the light of Harrè and van Langenhove’s (2003) positioning theory, as they describe a position as a:

complex cluster of generic personal attributes, structured in various ways, which impinges on the possibilities of interpersonal, intergroup and even intrapersonal action through some assignments of such rights, duties and obligations to an individual as are sustained by the cluster. For example, if someone is positioned as incompetent in a certain field of endeavour they will not be accorded the right to contribute to discussions in that field. (p. 1)

It is actually widely acknowledged, and frequently repeated, that suicide is a complex and multifactorial

phenomenon and that multidisciplinary approaches are required in suicide prevention (e.g., De Leo, 2002). Still, when push comes to shove, the biomedical approach seems to position itself as superior to all others.

Tendentious interpretations of research findings

If you hold the belief that depression causes suicide, you will be inclined to believe that treatment of depression is suicide preventive. This is indeed claimed in studies of the effect of antidepressants on the suicide rate. The results from such studies are mixed, and here we have another glimpse of some of the politics, power, and vested interests involved in suicidology.

Isacsson (2000), for example, found that in Sweden increased use of antidepressants was one of the contributing factors to a decreasing suicide rate and described this as a medical breakthrough for suicide prevention. Indeed, he claimed that the increased use of antidepressants had saved 2,500 Swedish lives in 10 years (Isacsson, 2003). In Norway, Bramness, Walby, and Tverdal (2007) claimed that a fall in the suicide rate was related to increased sales of antidepressants. And, in a following newspaper article, two of the authors pointed out that in the years after the new antidepressants were introduced, the number of suicides in Norway decreased by up to 150 each year, thereby implying a causal relationship (Bramness & Walby, 2007). Based on similar ecological studies, researchers elsewhere have made similar claims (e.g., Grunebaum, Ellis, Li, Oquendo, & Mann, 2004).

To imply a causal relationship based on research with an ecological design may be an indication of ideology having influenced the interpretation of findings. Using data for a period of 31 years (1975 to 2006) from four Nordic countries (Denmark, Finland, Norway, and Sweden), Zahl, De Leo, Ekeberg, Hjelmeland, and Dieserud (2010) demonstrated that there was no consistency in the relationship between sales of antidepressants and suicide rates. They also pointed out that the decline in the suicide rate in Sweden (as well as in Denmark) preceded the introduction of selective serotonin reuptake inhibitors (SSRIs) by 10 years or more. In addition, the association found by Bramness et al. (2007) in Norway was only present in the first 3 years after the introduction of SSRIs. There was no major change in the suicide rate during the period when the major increase in sales of SSRIs occurred (Zahl et al., 2010). Zahl et al.'s findings thus demonstrate that Isacsson (2000) and Bramness et al.'s (2007) suggestion of a causal relationship between increased sales of SSRIs and a decrease in the suicide rate is unwarranted. Interestingly, Zahl et al.'s article was difficult to publish.

It was rejected by several journals, most often without review because the editors did not find it of interest.

Several studies using a similar design (ecological) and by comparing data from 76 to 191 countries have found that the more developed the mental health care system is, the higher the suicide rate. In the words of Burgess, Pirkis, Jolley, Whiteford, and Saxena (2004): "after introducing mental health initiatives ... countries' suicide rates rose" and "It is of concern that most mental health initiatives are associated with an increase in suicide rates" (p. 933). Shah, Bhandarkar, and Bhatia (2010) found that, "suicide rates in both genders were higher in countries with greater provision of mental health services, including the number of psychiatric beds, psychiatrists and psychiatric nurses, and the availability of training in mental health for primary care professionals" (p. 448). Moreover, Rajkumar, Brinda, Duba, Thangadurai, and Jacob (2013) found that, "Countries with better psychiatric services experience higher suicide rates" (p. 339). In other words, the more psychiatry, the more suicides.

The authors emphasize that ecological comparative studies like these cannot say anything about causal relationships, and that the findings should be interpreted with caution. That is, of course, true; correlation is not cause. It is interesting that researchers seem more cautious when their findings contradict what they expected, or go against what the ruling paradigm has established as truth, whereas the reservations are weaker when the findings are in line with the paradigmatic dogma. This indicates that researchers sometimes make tendentious or ideological interpretations of their data, regardless of how scientific and objective their research is claimed to be. Thereby, the social construction of scientific evidence in suicidology is apparent.

Is there room for critical voices in suicidology?

From the above, this does not always seem to be the case. Some might point out that our examples are anecdotal. They are. But we have many more, and several others have also had similar experiences of difficulties in getting critical perspectives "out there" (e.g., Marsh, 2015; White, 2015; Widger, 2015). White (2015), for example, described how she recently had a conference paper rejected from a suicidology conference, because the scientific committee judged her paper to be more of a "political speech" (p. 1), than a conference paper. She criticized mainstream suicidology, which the scientific committee apparently did not find relevant or appropriate at a suicidology conference. Moreover, Fitzpatrick, Hooker, and Kerridge (2015a) have extensively outlined how, even though suicide research is

diverse and multidisciplinary, suicidology must be regarded as a social practice with “an internal authority structure that governs particular ways of seeing and doing” (p. 307); some data are regarded as “evidence,” whereas other data are regarded as less important. This is exactly what we have exemplified by means of actual experiences above. Fitzpatrick et al. (2015a) pointed out that to give primacy to biomedical approaches to suicide “is both myopic, for it gives insufficient weight to the complexity of suicide or to the degree to which it is embodied and socially felt, and misguided, for it misses opportunities for developing coherent social responses to suicide” (p. 319). It is also a question of values Fitzpatrick et al. (2015a).

Quite a few of the suicide researchers and preventionists around the globe who are unhappy with the way things have developed in mainstream suicidology, have formed a group on critical suicidology. Some of us have contributed to the recently published book *Critical Suicidology: Transforming Suicide Research and Prevention for the 21st Century* (edited by White, Kral, Marsh, & Morris, 2016). This book critiques the contemporary “regime of truth” (Marsh, 2010, p. 12) within which suicidology has “become too narrowly focused on questions of individual pathology and deficit, as well as too wedded to positivist research methodologies” (White et al., 2016, p. 2) and “takes as its starting point the idea that suicide is characterized by multiplicity, instability, social context, complexity, and historical contingency” (White et al., 2016, p. 4).

The critical suicidology group argues for more qualitative suicide research. Qualitative research has not only contributed to a deeper, more contextualized understanding of suicide, but also to a different one compared to the dominant discourse, that is, one demonstrating less importance of mental disorders (Hjelmeland & Knizek, 2016). The editor-in-chief of the most comprehensive of the international suicide research journals, *Suicide and Life-Threatening Behavior* (SLTB), has stated in an editorial that he does not want to publish qualitative research (Joiner, 2011), that is, research with the greatest potential to study the complexity always involved in a suicide. This editor’s stance has consequences far beyond SLTB not publishing qualitative research, because here he executes his editorial power to tell the world that qualitative research is not worth publishing. His arguments are ideological rather than scientific. One of the most basic tenets in philosophy of science is that you first choose the research question, and then the appropriate method by which to study it. This editor does it the other way around (chooses the method(s) first, that is, only quantitative) and thus prevents certain research questions

from being studied (Hjelmeland, 2016). Joiner’s stance appears particularly reactionary in light of the recent open letters in *The British Medical Journal* (Greenhalgh et al., 2016) as well as in the *International Journal for Equity in Health* (Daniels et al., 2016), where 76 and 170 cosignatories, respectively, call for acceptance of qualitative research on equal terms as quantitative. Fitzpatrick, Hooker, and Kerridge (2015b) pointed out that the political rationales in operation to determine how suicide is researched are symptoms of a “paradigm crisis in contemporary suicide research” (p. 44).

Unfortunate consequences of the constant emphasis on the 90% statistic

Above, we have argued that the evidence base for the 90% statistic is somewhat shaky and that there actually is considerable research evidence questioning this statistic. We do not claim that there is no relationship between mental disorders and suicide, but we do say that the evidence available does not support the claim that suicide almost always is a consequence of mental disorder. It is, of course, important to treat mental disorders also with regard to suicide prevention, but an exaggerated focus on the 90% statistic can have a number of unfortunate consequences (Hjelmeland, Dieserud, Dyregrov, Knizek, & Rasmussen, 2014).

Dyregrov (2008) has described the reiteration of the 90% statistic as “a dangerous discourse,” because one unfortunate consequence is the possible propagation of the notion that there is no danger afoot, as long as there are no signs of mental disorder (Dyregrov, 2008). This may be disastrous. In the qualitative PA study by Rasmussen (2013), for instance, few of the bereaved had seen any signs of serious mental disorder. That is perhaps why, even though there had been a number of signs of imminent risk of suicide, it was only in hindsight, when these signs were interpreted in light of the actual suicide that they could be recognized as warning signs (Rasmussen, Dieserud, Dyregrov, & Haavind, 2014).

According to Shahtahmasebi (2015), “Linking suicide to mental illness automatically attaches the label ‘mentally ill’ to the suicide ideation. It is highly plausible that someone with suicidal tendencies may not seek help in order to avoid being labelled as mentally ill.” That is exactly what Rasmussen et al. (2014) found in their study of suicide among young men.

When the focus is on mental disorders as “the main cause” of suicide, implicit in this is that the most important thing to do to prevent suicide is to diagnose and treat mental disorders. This is often also stated explicitly (e.g., Cavanagh et al., 2003). From the

National Centre for Suicide Research and Prevention in Norway, it is claimed that mental health care is “our most important tool for suicide prevention” (Mehlum, Ness, & Walby, 2014, our translation). The spotlight is thereby directed at the individual, since suicidality is regarded as something that lies inside the individual, while the importance of relationships and context receives less attention (Knizek & Hjelmeland, 2007). This, in turn, can lead to a perception that one needs to be a psychiatrist or psychologist to be able to prevent suicide. What, then, about all those who are not in contact with the mental health services prior to a suicide, which, in fact, is the majority (Judd et al., 2012). The slogan chosen by the International Association for Suicide Prevention for the World Suicide Prevention Day in 2005 was, “Prevention of suicide is everybody’s business” (www.iasp.info). Everyone can contribute to suicide prevention. This is an important message to get across to the public, and the constant reiteration of the 90% statistic by influential professionals hinders this communication (Hjelmeland et al., 2014).

A large proportion of suicides actually occur while the persons are under treatment in mental health care. In Norway, this amounts to more than 20% of the suicides every year (Saastad & Flesland, 2015). Moreover, the dominant discourse of suicide as a consequence of mental disorder may also lead to an overemphasis on identification and treatment of mental disorders to prevent suicide, also where no mental disorder exists, or where it exists but has little or nothing to do with an individual’s suicide (Webb, 2010).

Concluding remarks

We have presented several examples showing that the discourse on the relationship between mental disorders and suicide is permeated with ideology, politics, and power positioning suicide as a predominately medical/psychiatric issue. Critical voices/arguments are often dismissed as ideological, political, polemical, or as just unsubstantiated opinions. There is, however, no indisputable evidence for the claim that suicide always, or almost always is a consequence of mental disorder. Moreover, there is quite some research evidence questioning the 90% statistic. It is interesting to observe that arguments only seem to be considered political, ideological, polemical, or unsubstantiated when well-established “truths” are questioned, and not when poorly founded “truths” are maintained. It is time to acknowledge that today’s suicidology is highly politicized.

Marsh (2010) has extensively described how suicide came to be a medical issue in the first place; how “a

compulsory ontology of pathology in relation to suicide” (p. 4) has been constructed. It is perhaps time to “de-medicalize” suicidology. Psychiatry does have a role to play in suicide prevention, but its importance should be weighed alongside other perspectives and approaches. Qualitative research has, for instance, found that existential issues seem a lot more important to suicidality than mental disorders (e.g., Hjelmeland & Knizek, 2016). It is time to discuss whether mental disorders not only play a significantly lesser role in suicidality than hitherto assumed, but also that too much focus on mental disorders in suicide prevention may well be counterproductive.

In suicide prevention it is time to focus more on the complexity that always lies behind a suicide. The biomedical model falls short when it comes to preventing suicide. We need to incorporate the contextual and relational in a life course perspective if we wish to understand the nature of suicide. Contextualized suicide research has contributed to other understandings of suicide than what the traditional, decontextual quantitative risk factor research has been able to (Hjelmeland, 2016; Hjelmeland & Knizek, 2016). For instance, Kral (2012) has found that suicide among Inuit in Arctic Canada is related to the colonial social changes induced in Inuit communities by the Canadian government in the 1950s and 1960s. Tatz (2001) has reported similar findings among Australian Aborigines. In a comprehensive review contextualizing suicide among Muslim women across the globe, Canetto (2015) maintains that Muslim women’s suicidality should be viewed through a human rights lens, rather than as connected to mental disorder. There are numerous other examples from many different sociocultural contexts. Elsewhere we have argued that it would be fruitful to understand suicidal behavior as communicative acts, best interpreted within the framework of communication theory (Knizek & Hjelmeland, 2007).

Another consequence of the pathologization of suicide is that lived experiences are absent or silenced in the suicide discourse. Among others, Webb (2010) has pointed out the almost complete absence of first-person voices in current suicidology; such data are regarded as unscientific. He emphasized that this is a “consequence of ideological assumptions at the very foundations of suicidology” (p. 24). He rightly called for inclusion of “the lived experience of suicidality and what it means to those who live it” (p. 25). He maintained that “what is often most significant for the actual suicidal person is overlooked, ignored or (even worse) deliberately denied and dismissed as either irrelevant or (even worse still) as symptoms of some supposed illness” (p. 41). There is no doubt that the

exclusion of the first-person perspectives as unscientific is ideologically, and not scientifically, or even rationally grounded (Webb, 2010). In the words of Kral (2015), “Mainstream suicidology is firmly entrenched in its positivistic scientism” (p. 10). It is a myth that suicidality, or what lies behind suicidality, is something measurable that can be observed and counted. Suicidality is something that needs to be understood (e.g., Hjelmeland & Knizek, 2016). Only when we gain a contextual understanding of suicidality, can we prevent suicide.

References

- Apter, A., Bleich, A., King, R. A., Kron, S., Fluch, A., Kotler, M., & Cohen, D. J. (1993). Death without warning? A clinical post-mortem study of suicide in 43 Israeli adolescent males. *Archives of General Psychiatry*, 50(2), 138–142. doi:10.1001/archpsyc.1993.01820140064007
- Berman, A. (2006). The other 10 percent. *Newslink*, 33(3), 3.
- Bramness, J. G., & Walby, F. A. (2007, February 2). Selvmord kan forebygges [Suicide can be prevented]. *Aftenposten*.
- Bramness, J. G., Walby, F. A., & Tverdal, A. (2007). The sales of antidepressants and suicide rates in Norway and its counties 1980–2004. *Journal of Affective Disorders*, 102, 1–9. doi:10.1016/j.jad.2006.12.002
- Burgess, P., Pirkis, J., Jolley, D., Whiteford, H., & Saxena, S. (2004). Do nations’ mental health policies, programs and legislation influence their suicide rates? An ecological study of 100 countries. *Australian and New Zealand Journal of Psychiatry*, 38(11–12), 933–939. doi:10.1111/j.1440-1614.2004.01484.x
- Canetto, S. S. (2015). Suicidal behaviors among Muslim women. Patterns, pathways, meanings, and prevention. *Crisis*, 36(6), 447–458. doi:10.1027/0227-5910/a000347
- Cavanagh, J. T. O., Carson, A. J., Sharpe, M., & Lawrie, S. M. (2003). Psychological autopsy studies of suicide: A systematic review. *Psychological Medicine*, 33(3), 395–405. doi:10.1017/s0033291702006943
- Chan, K. P. M., Hung, S. F., & Yip, P. S. F. (2001). Suicide in response to changing societies. *Child and Adolescent Psychiatric Clinics of North America*, 10(4), 777–795.
- Chesney, E., Goodwin, G. M., & Fazel, S. (2014). Risks of all-cause and suicide mortality in mental disorders: A meta-review. *World Psychiatry*, 13(2), 153–160. doi:10.1002/wps.20128
- Conner, K. R., Beautrais, A. L., Brent, D. A., Conwell, Y., Phillips, M. R., & Schneider, B. (2011). The next generation of psychological autopsy studies. Part I. Interview content. *Suicide and Life-Threatening Behavior*, 41(6), 594–613. doi:10.1111/j.1943-278x.2011.00057.x
- Daniels, K., Loewenson, R., George, A., Howard, N., Koleva, G., Lewin, S., ... Zwi, A. B. (2016). Fair publication of qualitative research in health systems: A call by health policy and systems researchers. *International Journal for Equity in Health*, 15(1), 98. doi:10.1186/s12939-016-0368-y
- De Leo, D. (2002). Stuggling against suicide: The need for an integrative approach. *Crisis*, 23(1), 23–31. doi:10.1027//0227-5910.23.1.23
- Dyregrov, K. (2008). En farlig diskurs ved forståelse av selvmord [A dangerous discourse in understanding suicide]. *Tidsskrift for norsk psykologforening*, 45, 2–3.
- Endicott, J., & Spitzer, R. L. (1978). A diagnostic interview: The schedule for affective disorders and schizophrenia. *Archives of General Psychiatry*, 35(7), 837–844. doi:10.1001/archpsyc.1978.01770310043002
- First, M. B., Spitzer, R. L., Gibbon, M., & Williams, J. B. W. (1995). *Structured clinical interview for DSM-IV axis I disorders*. New York, NY: Biometrics Research Department.
- First, M. B., Spitzer, R. L., Gibbon, M., Williams, J. B. W., & Benjamin, L. (1994). *Structured clinical interview for DSM-IV axis II personality disorders*. New York, NY: Biometrics Research Department.
- Fitzpatrick, S. J., Hooker, C., & Kerridge, I. (2015a). Suicidology as social practice. *Social Epistemology*, 29(3), 303–322. doi:10.1080/02691728.2014.895448
- Fitzpatrick, S., Hooker, C., & Kerridge, I. (2015b). ‘Suicidology as a social practice’: A reply to Tom Widger. *Social Epistemology Review and Reply Collective*, 4, 44–48.
- Goldney, R. D. (2002). Is aboriginal suicide different? A commentary on the work of Colin Tatz. *Psychiatry, Psychology and Law*, 9(2), 257–259. doi:10.1375/13218710260612118
- Goldney, R. D. (2015). The importance of mental disorders in suicide. *Australian and New Zealand Journal of Psychiatry*, 49(1), 21–23. doi:10.1177/0004867414549200
- Greenhalgh, T., Annandale, E., Ashcroft, R., Barlow, J., Black, N., Boaden, R., ... Ziebland, S. (2016). An open letter to The BMJ editors on qualitative research. *BMJ*, 352, i563. doi:10.1136/bmj.i563
- Grunebaum, M. F., Ellis, S. P., Li, S., Oquendo, M. A., & Mann, J. J. (2004). Antidepressants and suicide risk in the United States, 1985–1999. *Journal of Clinical Psychiatry*, 65(11), 1456–1462. doi:10.4088/jcp.v65n1103
- Gustafsson, L., & Jacobsson, L. (2001). On mental disorder and somatic disease in suicide: A psychological autopsy study of 100 suicides in northern Sweden. *Nordic Journal of Psychiatry*, 54(6), 383–395. doi:10.1080/080394800750061360
- Harré, R., & van Langenhove, L. (2003). The dynamics of social episodes. In R. Harré & L. van Langenhove (Eds.), *Positioning theory* (pp. 1–13). Malden, MA: Blackwell Publishers Ltd.
- Haw, C., & Hawton, K. (2015). Suicide is a complex behavior in which mental disorder usually plays a central role. *Australian and New Zealand Journal of Psychiatry*, 49(1), 13–15. doi:10.1177/0004867414555419
- Hawton, K., Appleby, L., Platt, S., Foster, T., Cooper, J., Malmberg, A., & Simkin, S. (1998). The psychological autopsy approach to studying suicide: A review of methodological issues. *Journal of Affective Disorder*, 50(2–3), 269–276.
- Hjelmeland, H. (2016). A critical look at current suicide research. In J. White, I. Marsh, M. J. Kral, & J. Morris (Eds.), *Critical suicidology. Transforming suicide research and prevention for the 21st century* (pp. 31–55). Vancouver, Canada: University of British Columbia Press.
- Hjelmeland, H., Dieserud, G., Dyregrov, K., Knizek, B. L., & Leenaars, A. A. (2012). Psychological autopsy studies as diagnostic tools: Are they methodologically flawed? *Death Studies*, 36(7), 605–626. doi:10.1080/07481187.2011.584015

- Hjelmeland, H., Dieserud, G., Dyregrov, K., Knizek, B. L., & Rasmussen, M. L. (2014). Suicide and mental disorders. *Tidsskrift for den norske legeforening*, 134(14), 1369–1370.
- Hjelmeland, H., & Knizek, B. L. (2016). Qualitative evidence in suicide: Findings from qualitative psychological autopsy studies. In K. Olson, R. A. Young, & I. Z. Schultz (Eds.), *Handbook of qualitative health research for evidence-based practice* (pp. 355–371). New York, NY: Springer Science+Business Media.
- Insel, T. R., & Cuthbert, B. N. (2015). Brain disorders? Precisely. *Science*, 348(6234), 499–500. doi:10.1126/science.aab2358
- Isacsson, G. (2000). Suicide prevention—a medical breakthrough? *Acta Psychiatrica Scandinavica*, 102, 113–117. doi:10.1034/j.1600-0447.2000.102002113.x
- Isacsson, G. (2003). Prevention av självmord har räddat 2 500 liv på tio år [Prevention of suicide has saved 2,500 lives in 10 years]. *Läkartidningen*, 100(13), 1160–1161.
- Isacsson, G., & Rich, C. L. (2003). Getting closer to suicide prevention. *British Journal of Psychiatry*, 182(5), 455–459.
- Joiner, T. (2005). *Why people die by suicide*. Cambridge, MA: Harvard University Press.
- Joiner, T. (2011). Editorial: Scientific rigor as the guiding heuristic for SLTB's editorial stance. *Suicide and Life-Threatening Behavior*, 41(5), 471–473. doi:10.1111/j.1943-278x.2011.00056.x
- Joiner, T. E., Hom, M. A., Hagan, C. R., & Silva, C. (2016). Suicide as a derangement of the self-sacrificial aspect of eusociality. *Psychological Review*, 123(3), 235–254. doi:10.1037/rev0000020
- Judd, F., Jackson, H., Komiti, A., Bell, R., & Fraser, C. (2012). The profile of suicide: Changing or changeable? *Social Psychiatry and Psychiatric Epidemiology*, 47(1), 1–9.
- Kizza, D. (2012). *Suicide in post-conflict Northern Uganda. A qualitative psychological autopsy study* (Doctoral dissertation). Norwegian University of Science and Technology, Trondheim, Norway.
- Kjølseth, I. (2010). *Control in life—and in death. An understanding of suicide among the elderly* (Doctoral dissertation). University of Oslo, Oslo, Norway.
- Kjølseth, I., Ekeberg, Ø., & Steihaug, S. (2010). Why suicide? Elderly people who committed suicide and their experience of life in the period before their death. *International Psychogeriatrics*, 22(2), 209–218. doi:10.1017/s1041610209990949
- Klonsky, E. D., Oltmanns, T. F., & Turheimer, E. (2002). Informant-reports of personality disorder: Relation to self-reports and future research directions. *Clinical Psychology: Science and Practice*, 9(3), 300–311. doi:10.1093/clipsy/9.3.300
- Knizek, B. L., & Hjelmeland, H. (2007). A theoretical model for interpreting suicidal behaviour as communication. *Theory & Psychology*, 17(5), 697–720. doi:10.1177/0959354307081625
- Kral, M. (2012). Postcolonial suicide among Inuit in Arctic Canada. *Culture, Medicine, and Psychiatry*, 36(2), 306–325. doi:10.1007/s11013-012-9253-3
- Kral, M. (2015). Critical suicidology as an alternative to mainstream revolving-door suicidology. *Social Epistemology Review and Reply Collective*, 4(6), 10–11.
- Mars, B., Burrows, S., Hjelmeland, H., & Gunnell, D. (2014). Suicidal behaviour across the African continent: A review of the literature. *BMC Public Health*, 14, 606. doi:10.1186/1471-2458-14-606
- Marsh, I. (2010). *Suicide: Foucault, history and truth*. Cambridge, England: Cambridge University Press
- Marsh, I. (2015). 'Critical suicidology': Toward an inclusive, inventive and collaborative (post) suicidology. *Social Epistemology Review and Reply Collective*, 4(6), 5–9.
- Mehlum, L., Ness, E., & Walby, F. A. (2014). Re: Overdrevet tro på selvmordsrisikovurderinger? [Re: Exaggerated faith in assessment of suicide risk?]. *Tidsskrift for den norske legeforening*, 134, 593.
- Owens, C., Booth, N., Briscoe, M., Lawrence, C., & Lloyd, K. (2003). Suicide outside the care of mental health services: a case-control psychological autopsy study. *Crisis*, 24(3), 113–121.
- Owens, C., & Lambert, H. (2012). Mad, bad or heroic? Gender, identity and accountability in lay portrayals of suicide in late twentieth-century England. *Culture, Medicine and Psychiatry*, 36(2), 348–371. doi:10.1007/s11013-012-9259-x
- Phillips, M. R. (2010). Rethinking the role of mental illness in suicide (Editorial). *American Journal of Psychiatry*, 167(7), 731–733. doi:10.1176/appi.ajp.2010.10040589
- Pouliot, L., & De Leo, D. (2006). Critical issues in psychological autopsy studies. *Suicide and Life-Threatening Behavior*, 36(5), 491–510. doi:10.1521/suli.2006.36.5.491
- Pridmore, S. (2015). Mental disorder and suicide: A faulty connection. *Australian and New Zealand Journal of Psychiatry*, 49(1), 18–20. doi:10.1177/0004867414548904
- Rajkumar, A. P., Brinda, E. M., Duba, A. S., Thangadurai, P., & Jacob, K. S. (2013). National suicide rates and mental health system indicators: An ecological study of 191 countries. *International Journal of Law and Psychiatry*, 36(5–6), 339–342. doi:10.1016/j.ijlp.2013.06.004
- Rao, A. V., Mahendran, N., Gopalakrishnan, C., Reddy, T. K., Prabhakar, E. R., Swaminatan, R., ... Catherine, I. (1989). One hundred female burn cases: a study in suicidology. *Indian Journal of Psychiatry*, 7, 330–333.
- Rasmussen, M. L. (2013). *Suicide among young men: Self-esteem regulation in transition to adult life* (Doctoral dissertation). University of Oslo, Oslo, Norway.
- Rasmussen, M. L., Dieserud, G., Dyregrov, K., & Haavind, H. (2014). Warning signs of suicide among young men. *Nordic Psychology*, 66(3), 153–167. doi:10.1080/19012276.2014.921576
- Saastad, E., & Flesland, Ø. (2015). *Årsrapport 2014 for meldeordningen for uønskede hendelser i spesialisthelsetjenesten [Annual report 2014 for adverse events in specialized health services]*. Oslo, Norway: Norwegian Knowledge Center for the Health Services.
- Shah, A., Bhandarkar, R., & Bhatia, G. (2010). The relationship between general population suicide rates and mental health funding, service provision and national policy: A cross-national study. *International Journal of Social Psychiatry*, 56(4), 448–453.
- Shahtahmasebi, S. (2013). Examining the claim that 80–90% of suicide cases had depression. *Frontiers in Public Health*, 1, 62. doi:10.3389/fpubh.2013.00062
- Shahtahmasebi, S. (2015). Editorial: What is suicide prevention? *Dynamics of Human Health*, 2(2). Retrieved from http://journalofhealth.co.nz/?page_id=830
- Sheehan, D. V., Lecrubier, Y., Sheehan, K. H., Amorim, P., Janavs, J., Weiller, E., ... Dunbar, G. C. (1992). The mini

- international neuropsychiatric interview (M.I.N.I.): the development and validation of a structured diagnostic interview for DSM-IV and ICD-10. *Journal of Clinical Psychiatry*, 20, 34–57.
- Smedslund, J. (2009). The mismatch between current research methods and the nature of psychological phenomena. *What researchers must learn from practitioners. Theory & Psychology*, 19(6), 778–794. doi:10.1177/0959354309345648
- Tatz, C. (2001). *Aboriginal suicide is different*. Canberra, Australia: Aboriginal Studies Press.
- Thompson, R., Dubowitz, H., English, D. J., Nooner, K. B., Wike, T., Bangdiwala, S. I., ... Briggs, E. C. (2006). Parents' and teachers' concordance with children's self-ratings of suicidality: Findings from a high-risk sample. *Suicide and Life-Threatening Behavior*, 36(2), 167–181. doi:10.1521/suli.2006.36.2.167
- Van de Velde, S., Bracke, P., & Levecque, K. (2010). Gender differences in depression in 3 European countries. *Cross-national variation in the gender gap in depression. Social Science and Medicine*, 71(2), 305–313. doi:10.1016/j.socscimed.2010.03.035
- Webb, D. (2010). *Thinking about suicide. Contemplating and comprehending the urge to die*. Ross-on-Wye, England: PCCS Books.
- White, J. (2015). Shaking up suicidology. *Social Epistemology Review and Reply Collective*, 4(6), 1–4.
- White, J., Kral, M., Marsh, I., & Morris, J. (2016). Introduction: Rethinking suicide. In J. White, M. Kral, I. Marsh, & J. Morris (Eds.), *Critical suicidology. Transforming suicide research and prevention for the 21st century* (pp. 1–11). Vancouver, Canada: University of British Columbia Press.
- Widger, T. (2015). "Suicidology as a social practice": A reply. *Social Epistemology Review and Reply Collective*, 4(3), 1–4.
- World Health Organization. (2014). *Preventing suicide: A global imperative*. Luxembourg: WHO Press.
- Yang, G.-H., Phillips, M. R., Zhou, M. G., Wang, L.-J., Zhang, Y.-P., & Xu, D. (2005). Understanding the unique characteristics of suicide in China: National psychological autopsy study. *Biomedical and Environmental Sciences*, 18(6), 379–389.
- Zahl, P.-H., De Leo, D., Ekeberg, Ø., Hjelmeland, H., & Dieserud, G. (2010). The relationship between sales of SSRIs, TCAs and suicide rates in the Nordic countries. *BMC Psychiatry* 10, 62. Retrieved from <http://www.biomedcentral.com/1471-244X/10/62>
- Zhang, J., Xiao, S., & Zhou, L. (2010). Mental disorders and suicide among young rural Chinese: A case-control psychological autopsy study. *American Journal of Psychiatry*, 167(7), 773–781. doi:10.1176/appi.ajp.2010.09101476
- Zonda, T. (2005). Depression and suicidal behaviour. *Crisis*, 26(1), 34–35. doi:10.1027/0227-5910.26.1.34