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IT TAKES A VILLAGE

The case for adopting a social approach to suicide prevention

Maria Bradshaw CASPER 2017

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Introduction

Across the western world, suicide prevention strategies are based on the notion that depression and other mental illnesses cause suicide and that suicide is most effectively prevented by detecting and treating mental illness. Treatment is generally pharmacological and centres on the prescribing of antidepressants.

This approach firmly focuses on the need to 'fix' pathological or defective individuals to prevent suicide and contrasts with sociological approaches which identify changes to social, cultural and political environments as the key to suicide prevention.

A large and accumulating body of evidence shows that the medicalisation of suicide has not only failed to reduce suicide rates but has in fact increased them.

This paper examines the lack of evidence for the medical model of suicide prevention and important new pieces of international and New Zealand evidence which point to the need for the adoption of a completely new conceptualisation and approach to suicide prevention.

As the Ministry of Health presents New Zealanders with a draft suicide prevention strategy and politicians and the public call for more funding and greater access to mental health services, our paper seeks to contribute to informed debate and challenge ill-informed rhetoric about what the evidence tells us we must do to prevent suicide in this country.

Depression & Suicide

New Zealand Government Discourse on Depression and Suicide

The New Zealand government's message that suicide is caused by depression and that depression is a result of a chemical imbalance is widely promoted. Through its website, advertising, public relations and numerous publications, the Ministry of Health advises that depression is a disease which can lead to suicide.¹ The New Zealand Suicide Prevention Strategy claims that

mental health disorders (including, in particular, mood disorders, substance use disorders, psychotic disorders and antisocial disorders) account for up to 70 percent of suicides and suicide attempts²

and that

Almost 90 percent of young people who attempt suicide have some kind of pre-existing mental health problem.³

¹ http://www.who.int/mediacentre/factsheets/fs369/en/

 $^{^{2}\} https://www.health.govt.nz/system/files/documents/publications/suicide-prevention-strategy-2006-2016.pdf$

³ <u>http://www.moh.govt.nz/moh.nsf/Files/Chapter12/\$file/Chapter12.pdf</u>

On its website for young people, the Lowdown, the government advises that -

your body has chemicals in it that control your mood. Sometimes these chemicals get out of balance⁴

Medsafe advise that the risk of suicide is inherent in depression with its adviser on antidepressants, Professor Peter Ellis claiming

although there is not yet a common view on what the biological mechanism is for depression, it is clear there is a change in brain metabolism or brain chemicals.

Government funded organisations Te Pou and the Mental Health Foundation tell us respectively that "At its worst, depression can lead to suicide" and "People with mental illness are at higher risk of suicide, particularly people with depressive/mood disorders."

None of these claims have any reliable evidence to support them and some, such as the claim that depression is caused by a chemical imbalance, are simply untrue. These claims are repeated however because, as the government states in a recent paper on communicating risk

A reliable way to make people believe in falsehoods is frequent repetition, because familiarity is not easily distinguished from truth.⁶

What follows is a critical examination of the evidence cited by the New Zealand Government to support its assertions that depression is a brain disease which causes suicide.

Government Evidence that Depression Causes Suicide

In January 2017, we submitted an Official Information Act (OIA) request for the evidence on which the New Zealand government relies to support its statements that psychiatric disorders are associated with suicide. We were interested to see on what evidence the government based its belief that depression causes suicide and justified its focus on the treatment of mental disorder as the key plank of its suicide prevention strategy.

We assumed because of the seriousness of the issue and the amount of money invested in mental health treatment as a suicide prevention strategy, that a large body of evidence produced by a wide range of highly credible sources would have been gathered and evaluated by the Ministry.

In fact, the Ministry of Health told us it relied on only two studies, both authored by the same people – psychiatrist Sunny Collings and suicidologist Annette Beautrais and commissioned by the Ministry 12 years ago.

⁴ <u>https://thelowdown.co.nz/categories/depression/depression</u>

⁵ Ruth Laugesen 22 October, 2011 What good are antidepressants? <u>http://www.noted.co.nz/archive/listener-nz-2011/what-good-are-antidepressants/</u>

⁶ Medsafe 21 March 2017 Risk Communication http://www.medsafe.govt.nz/publications/OIA/23March17RiskCommunication.pdf

The first study claims that mental illness is the primary risk factor for suicide⁷ and the second that mental illness is a necessary precursor to lethal suicide attempts and that the primary routes to suicide prevention are improved identification, treatment and management of mental disorders.⁸

There are serious issues with the methodologies of both studies. First they rely heavily on findings from psychological autopsy studies – a research methodology which is widely held to have no scientific validity. Second, in studies not using the psychological autopsy method, the data presented rarely involves those who die by suicide, primarily arising from studies of those with suicidal thinking or who have made suicide attempts. Third, they rely on data from hospitalised patients which cannot be generalised to the wider population.

Many studies have shown significant differences between those who think about suicide, those who attempt it and those who die from suicide and that risk factors for suicidal thinking are very different from risk factors for completed suicide.⁹

Similarly studies show the differences between hospitalised and outpatient or untreated populations is significant with a recent study finding using only inpatient data overestimated the risk of suicide from depression by up to 57%.¹⁰.

The greatest methodological flaw in these studies however is the reliance on psychological autopsy studies to support its claims that mental illness is the major contributor to suicide.

Psychological Autopsies (PA) are studies in which a psychiatric evaluation is carried out on a person after their death with a diagnosis being made by questioning 'proxy informants' – friends and family of the deceased. Characteristic of these studies is the use of interview instruments designed to identify psychiatric disorders rather than instruments using sociological or other interview frameworks. Consequently, the process has a narrow focus on diagnosing dead people with mental disorders rather than gathering information on the individual and social factors that were impacting the person before they died.

The lack of scientific validity of psychological autopsy as a diagnostic tool has been established in many assessments of the technique.^{11 12 13 14}

⁷ Beautrais AL, Collings SCD, Ehrhardt P, et al. 2005. Suicide Prevention: A review of evidence of risk and protective factors, and points of effective intervention. Wellington: Ministry of Health.

⁸ Collings S and Beautrais A. 2005. Suicide Prevention in New Zealand: A contemporary perspective. Wellington: Ministry of Health.

⁹ E. David Klonsky; Tianyou Qiu; Boaz Y. Saffer Recent Advances in Differentiating Suicide Attempters From Suicide Ideators Curr Opin Psychiatry. 2017;30(1):15-20.

¹⁰ Crump, C., Ioannidis, J. P. A., Sundquist, K., Winkleby, M. A., & Sundquist, J. (2013). Mortality In Persons With Mental Disorders Is Substantially Overestimated Using Inpatient Psychiatric Diagnoses. *Journal of Psychiatric Research*, 47(10), 1298–1303. <u>http://doi.org/10.1016/j.jpsychires.2013.05.034</u>

¹¹ 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.

In a particularly thorough Norwegian study, the authors state

Previous studies investigating the reliability and validity of PA studies may have missed one of the most fundamental issues in research, namely the importance of choosing a method that is appropriate to answer the research questions. The relevant and very important question here is: Is it really possible to assign psychiatric diagnoses to someone who is dead by interviewing someone else?³⁵

And after reviewing the evidence conclude

as a tool to assign psychiatric diagnoses to dead people by interviewing proxies, PA studies are methodologically flawed. It is simply impossible to assign a reliable diagnosis of mental disorder to someone by interviewing someone else. PA studies can therefore not serve as an evidence base for the claim that most people who die by suicide are mentally ill.¹⁶

And advise that psychological autopsy studies

demonstrate that they cannot constitute a valid evidence base for a strong relationship between mental disorders and suicide. We show that most questions asked to assign a diagnosis are impossible to answer reliably by proxies, and thus, one cannot validly make conclusions. Thus, as a diagnostic tool psychological autopsies should now be abandoned.¹⁷

In layperson's terms, the studies on which Collings and Beautrais and the New Zealand government rely do no more than say that after a person dies from suicide, their friends and family report that at some point during their lives for a period of two weeks they were sad, had changes in their eating or sleeping patterns, lost interest in things they had previously enjoyed, felt guilty or worthless or thought of suicide.

¹⁴ Owens, C. & Lambert, H. (2012) Mad, Bad or Heroic? Gender, Identity and Accountability in Lay Portrayals of Suicide in Late Twentieth-Century England. Cult Med Psychiatry 36:348-371

¹⁵ Psychological Autopsy Studies as Diagnostic Tools: Are They Methodologically Flawed? Heidi Hjelmeland, Gudrun Dieserud, Kari Dyregrov, Birthe L. Knizek, and Antoon A. Leenaars Death Studies_Vol. 36, Iss. 7,2012

¹⁶ Psychological Autopsy Studies as Diagnostic Tools: Are They Methodologically Flawed? Heidi Hjelmeland, Gudrun Dieserud, Kari Dyregrov, Birthe L. Knizek, and Antoon A. Leenaars Death Studies_Vol. 36, Iss. 7,2012

¹² Pouliot, L., & De Leo, D. (2006). Critical issues in psychological autopsy studies. *Suicide and Life-Threatening Behavior*, *36*(5), 491-510.

¹³ Snider, J. E., Hane, S., & Berman, A. L. (2006). Standardizing the psychological autopsy: addressing the Daubert standard. Suicide and Life-Threatening Behavior, 36(5), 511-518.

¹⁷Heidi Hjelmeland, Gudrun Dieserud, Kari Dyregrov, Birthe L. Knizek, and Antoon A. Leenaars <u>Psychological</u> <u>Autopsy Studies as Diagnostic Tools: Are They Methodologically Flawed?</u> Death Studies_Vol. 36, Iss. 7,2012

There is no evidence that these feelings and behaviours caused their suicide, or that they were anything other than a normal human response to stressful life events or trauma. This data certainly does not provide any evidence that the person who died had a brain disease or illness which caused their death.

Given the heavy reliance on psychological autopsy studies to justify claims that mental illness causes suicide, our OIA asked for "copies of any evidence relied on the by the Ministry showing the reliability or validity of psychological autopsy studies and the use of proxy informants in screening for mental disorders post-mortem." We were advised that the Ministry identified no such documents.

This failure to critically assess the methodology underpinning the data on which it bases its suicide prevention strategy is of concern. The method used to conduct a study tells us whether its conclusions can be justified. Where a study is used to inform ideas about the cause of a public health issue, a thorough assessment of whether the study was conducted using a reliable methodology is critical given that beliefs about causation inform not only prevention but diagnosis and treatment and have been shown to influence Coroner's findings.¹⁸

Beautrais herself is critical of the psychological autopsy method. Her own study of suicide completers in 2003 used the psychological autopsy method and found a rate of current mood disorder in those who died by suicide of only 30%.¹⁹ She explains away this finding however by suggesting that the psychological autopsy method is flawed in that it would not have been possible for significant others to have confirmed the presence of a mood disorder in suicide completers. In her advice to government however, she raises no concerns about the validity of the methodology when presenting findings from psychological autopsy studies that 90% of those who die from suicide are mentally ill.

In the reports provided to government, Beautrais and Collings rely on the views of others to promote the medical model of suicide. In particular, they present the opinion of Goran Isacsson who states

There is no argument against suicide representing a complex set of variables...A fundamental discovery was made in the 1950s (Robins et al 1959): the majority of suicides were committed by people with clinical depression, This finding has been replicated over and over again and we believe that many, like us, have concluded that this connection has been replicated enough to be proven, We have also presented evidence that suicides occur infrequently in people with depression taking antidepressant medication (Isaacsson et al 1994). Thus in spite of the 'extreme complexity' of the phenomenon of suicide, a simple and testable hypothesis can be stated: depression is a necessary cause of most suicides. Based on this proposition, it has been suggested that effective suicide prevention must focus on improving identification and treatment of depression in the population (Isacsson 2000). When we look at the declining suicide rates over the past decade or so, we see a great deal of support for that theory.

¹⁸Jobes, D. A., Berman, A. L., & Josselson, A. R. (1986). The impact of psychological autopsies on medical examiners' determination of manner of death. Journal of Forensic Science, 31(1), 177-189.

¹⁹ Annette L. Beautrais Suicide and Serious Suicide Attempts in Youth: A Multiple-Group Comparison Study American Journal of Psychiatry 2003 160:6, 1093-1099

What the review doesn't explain is that Goran Isacsson is a paid speaker for four large pharmaceutical companies²⁰ but fails to disclose this in the majority of the papers in which he relentlessly promotes antidepressant use. It doesn't explain that in 2012, his zeal for antidepressant promotion overcame his scruples and after a 5 month court battle, he was forced to admit he had falsified data in a widely quoted study purporting to show antidepressants protect against suicide.²¹

Many would consider Isacsson's dishonestly makes him a n unreliable commentator and that his opinions are a poor basis for understanding and preventing suicide.

The Ministry of Health recently published the data on which it bases its new draft suicide prevention strategy. Amongst the reports used to develop the plan was a literature review which the Ministry advised had been contracted to an outside consultant without naming that consultant. Following our enquiries as to who conducted the review, we were advised that Annette Beautrais was the author. We note that Beautrais is currently an employee of the Ministry of Health rather than being an outside consultant and that her employment relies on continuation of a medical approach to suicide prevention. We are concerned that the Ministry has granted a contract to provide a review of suicide prevention research for the new strategy to the same researcher who provided the evidence on which the current failed suicide prevention strategy is based.

Neither of the studies provided to us by the government provide any evidence to support their claims that mental disorders cause suicide, that 70% of those who die by suicide are mentally ill and that risk of suicide attempt is inherent in depression and other psychiatric disorder.

Evidence of Depression in New Zealand Suicides

There is of course an easy way of testing the assertion that up to 70% of those who die from suicide have a mental disorder and that depression is the disorder most strongly associated with suicide. An analysis of the diagnoses of suicide victims who have been screened by specialist mental health professionals for mental disorders would show whether in fact the majority of those who die from suicide are mentally ill.

We submitted an OIA requesting data on the diagnosis of New Zealanders who die from suicide and asked why this information has not been published since 2007.

We were advised that the publication of this data ceased as a result of known data quality issues. The Ministry of Health advise that

Mental Health Services report a large number of non-specific diagnoses such as 'diagnosis deferred' or 'no specific diagnosis'...approximately 38% of diagnoses reported...in 2013/2014 were non-specific. These codes are used too often to be considered credible.

There are some issues with this statement from the Ministry of Health.

²⁰ Isaacsson, G., Holmgren, A., Osby, U. & Ahler, J. 2009. Decrease in suicide among the individuals treated with antidepressants: a controlled study of antidepressants in suicide. Sweden 1995. Acta Psychiatristica Scandinavica, 120:37-44

²¹ http:/jannel.se/Isacsson.Destroy.Antidepressants.pdf

First, they present no evidence that the data is not in fact correct - that almost four in ten mental health service users who die from suicide have no diagnosis of any mental disorder. Studies have shown it is not uncommon for a significant percentage of those prescribed antidepressants to have no diagnosis of a mental disorder ²² ²³ ²⁴ and the World Health Organisation states a significant minority of those who make serious suicide attempts have no mental disorder.

A study published in the New Zealand Medical Journal in 2014 extracted data from the Ministry of Health database and found that in their sample of 266,093 mental health services users, over 50% were recorded as having 'no specific diagnosis', 'diagnosis deferred' or had no diagnosis information.²⁵

The numbers were as follows

Primary Diagnosis	Women	%	Men	%
"no diagnosis" or	38295	29.8	47078	34.2
"diagnosis				
deferred"				
No diagnostic	22197	17.3	22925	16.7
information				

It is difficult to imagine that the recording of "no diagnosis" or "diagnosis deferred" was entered into patient records in error 85,373 times and that for another 45,122 patients someone forgot to enter their diagnosis into their records at all. This argues for the fact that failure to diagnose before treatment is not unique to those who die from suicide as a result of a more complex presentation but that treatment without diagnosis is endemic and accepted within specialist mental health services.

The second issue with the Ministry's response is that it highlights the fact that the reporting of this data was discontinued in 2007 but the data quality issues have not been resolved 10 years later. We suggest this data has not been reported because it does not support the Ministry's contention that mental illness is the cause of suicide.

The Ministry provided us with the unpublished diagnosis data and advised that non-specific diagnoses are recorded in the 'other' category, that some diagnoses date from years before the suicide and that some patients are recorded with more than one diagnosis, inflating the figures. We analysed the data provided and found that for the most recent year provided – 2013, only

²² Bouhassira, M., Allicar, M. P., Blachier, C., Nouveau, A., & Rouillon, F. (1998). Which patients receive antidepressants? Areal world'telephone study. Journal of Affective Disorders, 49(1), 19-26.

²³ Gardarsdottir, H., Heerdink, E. R., Van Dijk, L., & Egberts, A. C. G. (2007). Indications for antidepressant drug prescribing in general practice in the Netherlands. Journal of affective disorders, 98(1), 109-115.

²⁴ Sihvo, S., Isometsä, E., Kiviruusu, O., Hämäläinen, J., Suvisaari, J., Perälä, J., ... & Lönnqvist, J. (2008). Antidepressant utilisation patterns and determinants of short-term and non-psychiatric use in the Finnish general adult population. Journal of affective disorders, 110(1), 94-105.

²⁵ Cunningham, R., Sarfati, D., Peterson, D., Stanley, J. & Collings, S. 2014Premature mortality in adults using New Zealand psychiatric services 23rd May 2014, Volume 127 Number 1394

32% of those who died by suicide had a primary diagnosis of depression and the primary diagnosis for 76% was 'other.'

% of Mental health Service Users Who Died by Suicide by Diagnosis 2004-2013										
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Schizophrenia	15	16	20	18	13	14	12	6	13	8
Bipolar Disorder	15	17	14	7	10	12	10	6	15	14
Depression	29	37	34	35	42	38	40	27	31	32
Personality Disorder	7	11	7	10	10	8	7	4	6	6
Alcohol Dependence	6	12	6	8	8	6	11	8	7	10
Drug Dependence	6	5	11	6	8	7	8	4	8	7
Eating Disorder	2	0	1	1	1	0	0	1	2	0
Anxiety Disorder	7	13	7	10	12	12	7	12	16	13
Dementia	1	1	1	1	0	2	1	0	0	0
Adjustment Disorder	8	8	10	13	13	7	9	9	7	10
Abuse	0	0	0	0	0	0	0	0	0	0
Non Compliance	0	0	0	0	0	0	0	0	0	0
Mental Retardation	1	0	0	0	1	1	0	0	0	0
Other	69	70	69	77	76	84	77	70	75	76

The full results for 2004 to 2013 are shown in the following table.

Clearly this data shows the vast majority of those who die from suicide do not have a current diagnosis or history of depression and that 76% of suicide victims have either no diagnosis or a primary diagnosis the government has not associated with suicide.

This data is supported by a recently released report on United States Veteran suicides which analysed more than 55 million Veteran records from 1979 to 2014. The chart produced by that report showed that for Veterans with a diagnosis of a mental disorder, those who engaged in treatment had a suicide rate of 67.5 while the rate for those who did not engage in treatment was 34.3. It further shows that suicides were lower in those with a mental disorder who did not receive treatment (34.3) than those without a mental disorder who did receive treatment (47.2).²⁶

²⁶ US Department of Veteran's Affairs 2016 Suicide Among Veterans and Other Americans 2001-2014 Office of Suicide Prevention 3 August 2016 <u>https://www.mentalhealth.va.gov/docs/2016suicidedatareport.pdf</u>

	Calendar Year													
Characteristics	CY 01	CY 02	CY 03	CY 04	CY 05	CY 06	CY 07	CY 08	CY 09	CY 10	СҮ 11	CY 12	CY 13	СҮ 14
Total	39.9	38.9	34.9	35.9	34.9	35.9	35.1	38.4	37.0	36.3	38.9	37.9	38.8	39.0
With MH treatment	84.0	81.4	68.9	69.8	65.0	68.1	64.3	70.7	65.1	62.3	66.3	63.3	62.3	65.0
Without MH treatment	27.7	27.6	25.8	26.6	26.3	26.3	25.9	27.2	26.5	26.0	27.4	26.8	28.1	26.7
With MH/SUD diagnosis	77.6	74.1	63.5	62.1	59.4	59.0	57.6	60.4	57.6	55.2	58.2	56.1	55.8	56.5
Without MH/SUD diagnosis	24.7	24.5	22.3	23.3	22.5	23.6	22.5	25.4	24.2	24.1	25.9	25.3	26.7	26.3
With MH/SUD diagnosis and MH treatment	89.8	88.2	74.6	75.2	70.6	72.4	69.1	75.3	68.4	65.5	69.3	65.5	65.5	67.5
With MH/SUD diagnosis, without MH treatment	52.9	49.0	46.0	43.1	43.2	39.4	40.4	36.2	38.9	36.4	37.3	38.2	36.9	34.3
Without MH/SUD diagnosis, with MH treatment	38.7	27.9	23.1	24.6	18.3	30.7	21.7	32.0	36.9	35.4	42.8	46.9	39.8	47.2
Without MH/SUD diagnosis, without MH treatment	24.2	24.3	22.3	23.3	22.7	23.3	22.5	25.1	23.6	23.5	24.9	23.9	25.8	24.7

Table 1. Suicide Rates by Receipt of Mental Health (MH)/Substance Use Disorder (SUD) Diagnosis or Treatment and Calendar Year

Rejection of Depression as a Disease or Disorder

Internationally and in New Zealand, many credible mental health professionals reject the notion that the moods and behaviours labelled depression constitute any form of illness, disease or disorder. These claims are based on the evidence that the constructs of depression and other mental disorders have no scientific validity.

In New Zealand, the Diagnostic and Statistical Manual (DSM) published by the American Psychiatric Association is used to distinguish between normal and pathological behaviours and moods and to diagnose mental disorders including depression.

A new version of this manual – the DSM 5 – was published in 2013 amidst a storm of controversy generated by those who resigned from the taskforce developing the manual and those outside of this process. Their very public concerns focused on the manual's lack of reliable evidence for the disorders it contained, its expansion of the range of human moods and behaviours which were defined as constituting mental illness and the conflict of interest arising from 70% of the development taskforce having direct financial ties to pharmaceutical companies.

On the release of DSM 5, the British Psychological Society's Division of Clinical Psychology (DCP), issued a statement questioning the very nature of disorders identified by psychiatry and calling for the abandonment of psychiatric diagnosis and the development of alternatives "which do not use the language of "illness" or "disorder".²⁷ In their position statement, the DCP claim that

²⁷ http://www.bps.org.uk/system/files/Public%20files/cat-1325.pdf

Many of the issues that arise in relation to psychiatric diagnosis stem from applying physical disease models and medical classification to the realms of thoughts, feelings and behaviours, as implied by terms such as 'symptoms' and 'mental illness' or 'psychiatric disease'.

And that

it should be noted that functional psychiatric diagnoses such as schizophrenia, bipolar disorder, personality disorder, attention deficit hyperactivity disorder, conduct disorders and so on, due to their limited reliability and questionable validity, provide a flawed basis for evidence-based practice, research, intervention guidelines and the various administrative and non-clinical uses of diagnosis.

Another harsh and vocal critic was Allen Francis, chair of the previous edition of the DSM who argued in a British Medical Journal Editorial that the result of DSM V would be

'false positive epidemics' of disorders that would be constituted through inappropriate usage of new diagnostic entities; [and that] DSM-5 would 'expand the territory of mental disorder and thin the ranks of the normal'.²⁸

The National Director of the Institute of Mental Health (NIMH), Thomas Insel announced the NIMH's withdrawal of support for the DSM stating

The weakness of the manual, is its lack of validity. Unlike our definitions of ischemic heart disease, lymphoma, or AIDS, the DSM diagnoses are based on a consensus about clusters of clinical symptoms, not any objective laboratory measure. In the rest of medicine, this would be equivalent to creating diagnostic systems based on the nature of chest pain or the quality of fever. Indeed, symptom-based diagnosis, once common in other areas of medicine, has been largely replaced in the past half century as we have understood that symptoms alone rarely indicate the best choice of treatment.²⁰

Critics of the scientific validity of the mental disorders contained within the DSM, remind us that the manual included homosexuality as a mental illness until 1973 (with the World Health Organisation not removing homosexuality from its mental illness classification until 1992³⁰) and that currently the DSM classifies transgendered people as mentally ill. They point to the harms done as a result of the diagnosis and treatment of the gay community using 'conversion therapy.'

Peter Coleman president of the New Zealand Psychological Society comments

²⁸ Frances A. The first draft of DSM-V if accepted will fan the flames of false positive diagnoses. BMJ 2010;340:492.

²⁹ https://www.nimh.nih.gov/about/directors/thomas-insel/blog/2013/transforming-diagnosis.shtml

³⁰ <u>http://www.aglp.org/gap/1_history/</u>

"Not too many editions ago [until 1973], homosexuality was a mental disorder. A lot of it is about social construction and the norms of the time and what is approved behaviour by the people who are writing these manuals.³¹

With no biological basis for depression having been established, doctors use DSM based checklists of subjective moods, thoughts and behaviours to diagnose depression with research showing the same symptoms are often diagnosed differently by different doctors ³²

A fundamental premise of the scientific method is that research findings should be both reliable and valid. Studies are reliable when they can be repeated and the same results are produced. They are valid when they measure what they are supposed to measure.

When DSM 5 was developed, field trials of 'interrater reliability' – the ability of two psychiatrists to make the same diagnosis given the same clinical data for the same patient – were undertaken. The trials conducted in 2013 showed that for depression, psychiatrists only made the same diagnosis when presented with the same patient between 4% and 15% of the time^{33 34} This lack of reliability is the reason people are often diagnosed with different mental disorders when presenting with the same symptoms to different doctors.

In addition to its lack of reliability, the diagnosis of depression also fails in tests of validity – the ability of an assessment tool to accurately measure what it purports to – in the case of the DSM, a mental illness. Not only do DSM diagnoses involve no biological tests but in completing symptom checklists, no account is taken of any context in which those symptoms occur. The result is that changes in sleeping patterns are symptoms of mental illness whether they result from distress or from being woken by a crying baby or a mobile phone.

In addition, psychiatrists often label patients as depressed even where there is no evidence or insufficient evidence of the symptoms of depression using the DSM diagnosis of 'unspecified depression.'

As one psychiatrist describes it

The criteria essentially count symptoms with little regard for context. The recent increase in the number of psychiatric categories and the lowering of the clinical threshold has resulted in a wide net, which medicalizes a variety of normal human responses to environmental stress³⁵

³¹ http://www.stuff.co.nz/the-press/news/8772440/Psychiatric-label-surge-alarming

³² Aboraya A, Rankin E, France C, El-Missiry A, John C. The Reliability of Psychiatric Diagnosis Revisited: The Clinician's Guide to Improve the Reliability of Psychiatric Diagnosis. *Psychiatry (Edgmont).* 2006;3(1):41-50.

³³ Samuel M. Lieblich, David J. Castle, Christos Pantelis, Malcolm Hopwood, Allan Hunter Young, Ian P. Everall High heterogeneity and low reliability in the diagnosis of major depression will impair the development of new drugs British Journal of Psychiatry Open Oct 2015, 1 (2) e5-e7

³⁴ George F. Parker DSM-5 and Psychotic and Mood Disorders Journal of the American Academy of Psychiatry and the Law Online June 2014, 42 (2) 182-190;

³⁵ Thangadurai P, Jacob KS. Medicalizing Distress, Ignoring Public Health Strategies. *Indian Journal of Psychological Medicine*. 2014;36(4):351-354

The medicalization of everyday problems and symptoms has many detrimental implications including the diversion of scarce medical resources from those who really need them to those for whom treatment may do more harm than good. Diagnosing and treating increasingly large segments of the population implies a lack of tolerance for diversity and medicalization also reduces personal responsibility and sense of control. The World Psychiatric Association states that

The provision of any intervention purporting to "treat" something that is not a disorder is wholly unethical⁸⁶

On 7 April 2017, the United Nations released a statement from their Special Rapporteur and specialist in mental and child health, critiquing biomedical explanations of depression and urging the implementation of psychosocial and political interventions:

Regrettably, recent decades have been marked with excessive medicalization of mental health and the overuse of biomedical interventions, including in the treatment of depression and suicide prevention. The biased and selective use of research outcomes has negatively influenced mental health policies and services. Important stakeholders, including the general public, rights holders using mental health services, policymakers, medical students, and medical doctors have been misinformed. The use of psychotropic medications as the first line treatment for depression and other conditions is, quite simply, unsupported by the evidence. The excessive use of medications and other biomedical interventions, based on a reductive neurobiological paradigm causes more harm than good, undermines the right to health, and must be abandoned (our emphasis)¹⁸⁷

Rejection of the scientific validity of the DSM construct of depression has not been confined to the US and Europe. In New Zealand, psychiatrist Professor Roger Mulder has made calls to "abandon the DSM concept of a categorical mental illness called major depression" on the grounds that it is " neither valid nor especially clinically useful." ³⁸

In support of the statement of the DCP in Britain, the New Zealand Psychological Society issued its own statement on DSM 5 in which it endorsed the concerns of the DCP and added that the adoption of this manual in a New Zealand setting is "*inappropriate and potentially dangerous.*"²⁰

Ignoring these concerns, views and advice, the NZ government continues to promote a biomedical conceptualisation of depression and to encourage increasing number of New Zealanders to label themselves and others as mentally ill and seek treatment.

To this end, the government has hired a sports star to urge New Zealanders to take pharmaceutical company Pfizer's self-test for depression,⁴⁰ has introduced a raft of measures in schools based on a report from the Prime Minister's Chief Science Adviser which takes a

³⁶ <u>http://www.hrc.org/resources/the-lies-and-dangers-of-reparative-therapy</u>

³⁷ http://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=21480&LangID=E

³⁸ http://laduca.co.nz/wp-content/uploads/2017/01/Mulder-2008.pdf

³⁹ http://www.psychology.org.nz/wp-content/uploads/2014/04/NZPsS-Statement-on-the-DSM-FINAL.pdf

⁴⁰ https://depression.org.nz/is-it-depression-anxiety/self-test/depression-test/

strongly biomedical approach to adolescent depression,⁴¹ instituted psychiatric assessments for all 4 year olds and depression and suicide screening for 13 year olds and significantly increased the rates at which people identify themselves and others as being mentally ill and in need of mental health treatment.

Chemical Imbalance Myth

Dr Joanna Moncrieff Senior Lecturer in Psychiatry at University College London, claims

It is high time that it was stated clearly that the serotonin imbalance theory of depression is not supported by the scientific evidence or by expert opinion. Through misleading publicity the pharmaceutical industry has helped to ensure that most of the general public is unaware of this.42

In 2008, two American researchers contacted academics, psychiatrists, journalists and pharmaceutical companies who published claims that depression was caused by a chemical imbalance and assessed the evidence they provided to support their claims. Their finding was that "there is not a single peer-reviewed article that can accurately be cited to directly support claims of serotonin deficiency in any mental disorder.⁴³

In 2012 the Mental Health Foundation advised that

Since SSRIs were introduced in the 1990s, they have been medically promoted and marketed by industry to the public as drugs that have a specific effect on chemical pathways in the brain. Thus, the popularity of antidepressants can be seen to rest on an assumption that the drugs 'work' by having an active biochemical effect on the brain. However, within the clinical sphere, biochemical theories of depression are recognised as unproven⁴⁴

Studies have shown that far from being harmless, telling those who are distressed that they have a chemical imbalance produces poor health outcomes^{-45–46–47–48–49–50} They show that those who

⁴¹ http://www.pmcsa.org.nz/wp-content/uploads/Improving-the-Transition-report.pdf

⁴² Woodman, R. 8 November 2005. Serotonin theory of depression "like masturbation theory of insanity"

⁴³Leo, J. & Lacasse, J.R. The Media and the Chemical Imbalance Theory of Depression 2008 Soc 45: 35.

⁴⁴ Mental Health Foundation of New Zealand 2012 Increasing use of antidepressants in New Zealand Mental Health Foundation of New Zealand Discussion paper January 2012

⁴⁵ Deacon, B. J., & Baird, G. L. (2009). The chemical imbalance explanation of depression: reducing blame at what cost?Journal of Social and Clinical Psychology, 28,415e435.

⁴⁶ Kirsch, I., Mearns, J., & Catanzaro, S. J. (1990). Mood-regulation expectancies as determinants of dysphoria in college students. Journal of Counseling Psychology,37,306

⁴⁷ Cohen, D., & Hughes, S. (2011). How do people taking psychiatric drugs explain their "chemical imbalance?" Ethical Human Psychology and Psychiatry, 13,176e189.

⁴⁸ Deacon, B. J., & Lickel, J. J. (2009). On the brain disease model of mental disorders. The Behavior Therapist, 32,113e118

believe that their depression is caused by a chemical imbalance have a poorer prognosis, have a greater sense of helplessness and hopelessness in relation to their ability to recover and are less likely to have faith and engage in talking therapies. They are also less likely to take personal responsibility for their wellbeing by making lifestyle changes, changes or addressing environmental factors, less likely to engage in developing coping strategies, and are more likely to use medication with its risk of adverse reactions.⁵¹ While those who promote the chemical imbalance theory often claim its benefit is a reduction in self-blame and stigma, studies find no effect on these factors.

The authors of one study comment

Providing individuals with a chemical imbalance causal explanation for their depressive symptoms does not reduce stigma and activates a host of negative beliefs with the potential to worsen the course of depression and attenuate response to treatment, particularly psychotherapy^{§2}

They note that being told ones distress is caused by a chemical imbalance "increases the attractiveness of pharmacotherapy for depression" and that "this reality is well known to the pharmaceutical industry, which promotes the chemical imbalance explanation of depression in order to facilitate sales of medications that purportedly correct chemical imbalances"⁵³

Author Robert Whitaker who has researched and written extensively on the subject makes it clear that there is nothing benign about telling patients that their depression is due to a chemical imbalance, stating:

At its core, telling a patient that he or she has a chemical imbalance in the brain, which can be fixed by a psychiatric drug, is medical fraud. And it does great harm.³⁴

Medical practitioners in New Zealand and around the world promote the chemical imbalance theory of depression for a variety of reasons. Some are aware that studies show patients are more likely to accept and persist with medication where they believe their problem has a

⁵¹ Kemp, J., Lickel, J. & Deacon, B. 2014 Effects of a chemical imbalance causal explanation on individuals' perceptions of their depressive symptoms Behaviour Research and Therapy 56 (2014) 47e52

⁵² Kemp, J., Lickel, J. & Deacon, B. 2014 Effects of a chemical imbalance causal explanation on individuals' perceptions of their depressive symptoms Behaviour Research and Therapy 56 (2014) 47e52

⁵³ Kemp, J., Lickel, J. & Deacon, B. 2014 Effects of a chemical imbalance causal explanation on individuals' perceptions of their depressive symptoms Behaviour Research and Therapy 56 (2014) 47e52

⁴⁹ France, C. M., Lysaker, P. H., & Robinson, R. P. (2007). The "chemical imbalance" explanation for depression: origins, lay endorsement, and clinical implications. Professional Psychology Research and Practice, 38,411e420

⁵⁰ Whitaker, R. (2010). Anatomy of an epidemic: Magic bullets, psychiatric drugs, and the astonishing rise of mental illness in America. New York: Crown

⁵⁴ Personal communication.

biological basis⁵⁵, some are influenced by pharmaceutical company marketing to doctors⁵⁶, some are ignorant of the lack of evidence for the theory and others are reluctant to admit they do not have a medical explanation for the distress their patient is suffering.

In 2010, Dr Daniel Carlat Associate Clinical Professor of Psychiatry at Tufts University School of Medicine and author explained that

...the problem is that we don't have any direct evidence that depression or anxiety or any psychiatric disorder is actually due to a deficiency in serotonin because it's very hard to actually measure serotonin from a living brain. And any efforts that have been made to measure serotonin indirectly, such as measuring it in the spinal fluid or doing postmortem studies, have been inconclusive. They have not shown conclusively that there is either too little or too much serotonin in the fluids. So that's where we are with psychiatry.⁵⁷

What we don't know is we don't know how the medications actually work in the brain. So whereas it's not uncommon – and I still do this, actually, when patients ask me about these medications, I'll often say something like, well, the way Zoloft works is it increases the levels of serotonin in your brain, in your synapses, the neurons, and presumably the reason you're depressed or anxious is that you have some sort of a deficiency. And I say that not because I really believe it, because I know that the evidence isn't really there for us to understand the mechanism. I think I say that because patients want to know something, and they want to know that we as physicians have some basic understanding of what we're doing when we're prescribing medications. And they certainly don't want to hear that a psychiatrist essentially has no idea how these medications work⁵⁸

An evaluation of the impact of the government's media campaign to destignatise mental illness – the National Depression Initiative fronted by John Kirwan - on attitudes to mental illness and mental health found the numbers of those who believe depression is caused by a chemical imbalance in the brain increased by 50% from 1997-2004 and the belief that depression is genetic in origin more than doubled. At the same time, belief that depression is caused by trauma and social factors reduced. The authors of the study report that

In total 35 percent of people say they gain knowledge of mental illness from television advertising and fewer from news sources. It is among the most recognised sources, an indication of the impact the...campaign is having.³⁹

⁵⁵ Bucci, K. K., Possidente, C. J., & Talbot, K. A. (2003). Strategies to improve medication adherence in patients with depression. AMERICAN JOURNAL OF HEALTH SYSTEM PHARMACY, 60(24), 2601-2605.

⁵⁶ Timimi, S. (2008). Child psychiatry and its relationship with the pharmaceutical industry: theoretical and practical issues.

⁵⁷ http://www.npr.org/templates/transcript/transcript.php?storyId=128107547

⁵⁸ http://www.npr.org/templates/transcript/transcript.php?storyId=128107547

⁵⁹ Fearn, A. & Wyllie, A 2005 Public Knowledge Of And Attitudes To Mental Health And Mental Illness Update Of 1997 Benchmark Survey Research Report for Ministry Of Health https://www.mentalhealth.org.nz/assets/ResourceFinder/Public-knowledge-and-attitudes.pdf

A highly influential proponent of the chemical imbalance theory in New Zealand is Professor Peter Ellis Associate Dean for Medical Education, former member of the Government's Medicine Adverse Reactions Committee, member of the Medical Education Committee of the Medical Council of New Zealand, Deputy Chair of the Medical School Accreditation Committee of the Australian Medical Council, chair in a number of depression-related guideline developments with previous involvement in psychiatric registrar training with the Royal Australian and New Zealand College of Psychiatrists (RANZCP) recipient of funding from pharmaceutical company Eli Lilly and shareholder in a number of other pharmaceutical companies. Professor Ellis claims

although there is not yet a common view on what the biological mechanism is for depression, it is clear there is a change in brain metabolism or brain chemicals. "It's still reasonable to say my brain isn't working as well as it should be. I've got the John Kirwans, and these pills seem to work for me. And they're correcting whatever isn't working properly in the top storey."

In 2007 he was awarded the College Medal of Honour from RANZCP who reported he had "joined the ranks of the RANZCP's elite."⁶¹

Depression as A Useful Adaptive Behaviour

There is no question that a large number of New Zealanders suffer distress and that this distress may result in moods and behaviours that undermine their ability to function. Whether sadness, fear, worry, changes in eating and sleeping patterns, feelings of worthlessness or guilt, withdrawal from friends and family, hypervigilance, thoughts of suicide and other problematic moods and behaviours are symptoms of disease or illness is however strongly contested.

Increasingly, depression has been shown to be a normal and helpful response to negative life events and adverse life circumstances. In contrast to medical conceptualisations of what the DSM labels depression, many experts consider that psychiatry is medicalising distress rather than identifying disease. Dr Phil Hickey describes a view of depression held by many other experts:

Depression is a normal state. It is the normal human reaction to significant loss and/or living in sub-optimal conditions/circumstances. It is also an adaptive mechanism, the purpose of which is to encourage us to take action to restore the loss and/or improve the conditions.

All consciously-felt human drives stem from unpleasant feelings. Thirst drives us to seek water; hunger, food; hypothermia, warmth; hyperthermia, coolness; danger, safety, etc. Sadness and despondency are no exceptions. They drive us to seek change, and have been serving the species well since prehistoric times.

But – as is the case with all the above examples – when a drive is not acted upon, for whatever reason, the unpleasant feelings worsen. Just as unrequited hunger and thirst increase in strength, so the depression drive when not requited deepens.

⁶⁰ Ruth Laugesen 22 October, 2011 What good are antidepressants? <u>http://www.noted.co.nz/archive/listener-nz-2011/what-good-are-antidepressants/</u>

⁶¹ http://www.tandfonline.com/doi/abs/10.1080/10398560701469225?journalCode=iapy20

The reality is that most people deal with depression in appropriate, naturalistic, and time-honoured ways. If the source of the depression is the loss of a job, they start jobhunting. If the source is an abusive relationship, they seek ways to exit or remediate the situation. If the source is a shortage of money, they seek ways to budget more sensibly, or increase their earnings; etc.

Depression, either mild or severe, transient or lasting, is not a pathological condition. It is the natural, appropriate, and adaptive response when a feeling-capable organism confronts an adverse event or circumstance. And the only sensible and effective way to ameliorate depression is to deal appropriately and constructively with the depressing situation. Misguided tampering with the person's feeling apparatus is analogous to deliberately damaging a person's hearing because he is upset by the noise pollution in his neighbourhood, or damaging his eyesight because of complaints about litter in the street.⁶²

Evolutionary psychiatrists and psychologists have shown that depression is a useful adaptation of human behaviour which assists with the resolution of complex problems through a narrowing of focus. They argue that a depressed person is usually faced with a difficult social problem, and that depression performs two functions critical to resolution of their problems; it aids problem solving by focussing energy away from normal social and physical activities and exclusively on the task in hand while also communicating the need for more investment from significant others.

From an evolutionary psychiatry perspective, rather than being maladaptive, loss of interest in previously pleasurable activities, psychomotor retardation, social isolation and rumination prevent distraction from a complex problem and therefore promote resolution. Psychologist Paul Andrews and psychiatrist J Anderson Thompson argue that

Painful feelings draw attention to problems and motivate problem-solving behaviour. We suggest that when facing complex problems, organisms must learn to stop trying to quickly resolve their pain with simple solutions, accept a slower, analytical approach to problem-solving, and learn how to endure the pain until the problem is solved. The extended nature of depressive pain is useful. Without it, people would not be motivated to engage in the extended effort required to solve complex problems, and the pain should cease once the problem is solved. Learning may also be facilitated through interaction with close social partners, who demonstrate or encourage the acceptance of depressive pain.⁶³

They cite experimental research showing that depressed people perform better in social dilemmas which they attribute to depression giving rise to "more context-dependent behaviour and greater processing of information on costs and risks."⁶¹

^{ee}Hickey, P. 2017 The Biological Evidence for "Mental Illness" Behaviorism and Mental Health: An alternative perspective on psychiatry's so-called mental disorders <u>http://behaviorismandmentalhealth.com/2017/01/10/the-biological-evidence-for-mental-illness/</u>

⁶³ Andrews, P. W., & Thomson Jr, J. A. (2009). The bright side of being blue: depression as an adaptation for analyzing complex problems. Psychological review, 116(3), 620.

⁶⁴ Ibid

In an interview on how depression might confer some advantage on those who experience it, Paul Andrews explains

I started thinking about how, even if you are depressed for a few months, the depression might be worth it if it helps you better understand social relationships," Andrews says. "Maybe you realize you need to be less rigid or more loving. Those are insights that can come out of depression, and they can be very valuable."⁶⁵ The new research on negative moods...suggests that sadness comes with its own set of benefits and that even our most unpleasant feelings serve an important purpose.⁶⁶

Andrews and Thompson use the analogy of fever to explain the benefits of depression. While fever causes both physical and emotional distress, the body's elevated temperature serves the purpose of assisting cells to fight infection and scientists suspect it endures in an evolutionary sense because despite its discomfort, it has value. Similarly, evolutionary scientists believe that the distress of depression serves an evolutionary purpose related to problem solving. They explain the utility of the symptoms of depression, arguing that

depressed affect activates neurological mechanisms that promote **attentional control**, which gives problem-related information prioritized access to limited processing resources and makes depressive rumination intrusive, persistent, resistant to distraction, and difficult to suppress; induces anhedonia, which reduces the desire to think about and engage in hedonic activities that could disrupt problem-related processing; and promotes psychomotor changes that reduce exposure to stimuli that could disrupt processing (e.g., desire for social isolation, loss of appetite).⁶⁷

Professor of Psychiatry and Psychology and evolutionary Biologist, Randolph Nesse argues that it is important to distinguish between disease and behaviours that are defences against harm. He comments that just as cough, vomiting and fever are defences rather than defects, so are the moods and behaviours that arise from social suffering defensive rather than defective.⁶⁸

In addition to the validity of the conceptualisation of depression as a mental illness, also contested is whether the labelling of moods and behaviours as illness helps or harms those who experience them.

Author and clinical psychologist Lucy Johnstone warns that

Giving someone a Psychiatric diagnosis is an immensely powerful act which has profound implications for their identity, relationships, place in the community, employment, health and future⁶⁹

⁶⁵ http://www.nytimes.com/2010/02/28/magazine/28depression-t.html

⁶⁶ http://www.nytimes.com/2010/02/28/magazine/28depression-t.html

⁶⁷ Andrews, P. W., & Thomson Jr, J. A. (2009). The bright side of being blue: depression as an adaptation for analyzing complex problems. Psychological review, 116(3), 620.

⁶⁸ Nesse R. (1999) What Darwinian Medicine Offers Psychiatry. In Evolutionary Medicine, W. R. Trevathan, E. O. Smith and J. J. McKenna, eds. Oxford University Press. pp.351-373.

⁶⁹ Johnstone, L. 2015 A Straight Talking Introduction to Psychiatric Diagnosis PCCS Books United Kingdom (2015) ISBN 10: 1906254664 ISBN 13: 9781906254667

In discussing a 2014 study conducted by Middlemore Hospital and the University of Auckland which found half of Auckland University students had a sleep or mental disorder, psychiatrist Prof Roger Mulder comments

The mental disorders that were screened for are created categories promoted in a diagnostic manual (the DSM 5) that has become a worldwide standard. There has been increasing concern that the diagnostic criteria for many of the disorders are too vague and encompassing and convert personal or social problems into medical ones. Particular conditions are promoted as widespread, serious, and treatable by specific interventions. Alternative approaches such as emphasising the self-limited or relatively benign natural history of a problem, or the importance of non-medicalised personal coping strategies are played down or ignored.

Professor Mulder goes on to discuss the risks associated with expanding the number of individuals suffering from mental illnesses.

The obvious risks are unnecessary labelling (with potential consequences for such things as medical or income insurance), potential stigma, overtreatment, iatrogenic illness due to drug side-effects as well as resources diverted from treating more serious illness. Less obvious but equally important is that pathologising distress as illness may lead individuals to increasing self-identification as helpless and reliant on the services of health professionals. In conclusion, it appears that students at the University of Auckland often have sleep problems, depressive and anxiety symptoms, and drink too much at times. This is similar to international surveys of university students. Currently our society appears intolerant of what could be considered normal and expectable distress and labels these symptoms as disorders implying that they require professional help.

Natural remission from Depression

The evidence is that for many people, particularly young people, depression is a self-limiting condition which resolves naturally in 10-12 weeks^{70 71 72 73} and that remission rates are higher and faster in untreated depression than in those treated with antidepressants.⁷⁴⁷⁵

⁷⁰ McLeod, J. D., Kessler, R. C. & Landis, K. R. (1992) Speed of recovery from major depressive episodes in a community sample of married men and women. Journal of Abnormal Psychology, 101, 277 -286.

⁷¹ Kendler, K. S., Walters, E. E. & Kessler, R. C. (1997) The prediction of length of major depressive episodes: results from an epidemiological survey of female twins. Psychological Medicine, 27, 107 -117

⁷² Posternak, M. A., Solomon, D. A., Leon, A. C., Mueller, T. I., Shea, M. T., Endicott, J., & Keller, M. B. (2006). The naturalistic course of unipolar major depression in the absence of somatic therapy. The Journal of nervous and mental disease, 194(5), 324-329.

⁷³ Posternak, M. A., Solomon, D. A., Leon, A. C., Mueller, T. I., Shea, M. T., Endicott, J., & Keller, M. B. (2006). The naturalistic course of unipolar major depression in the absence of somatic therapy. The Journal of nervous and mental disease, 194(5), 324-329.

A meta analysis of 19 studies found that without treatment 23% of adult cases of depression will remit within 3 months, 32% within 6 months and 53% within 1 year. A longitudinal study of the duration of depression in the general population of the Netherlands found the median duration of a major depressive episode was 3 months with 50% of participants recovering within 3 months, 63% within 6 months, and 76% within 12 months.⁷⁶ The authors of the first study state that

Spontaneous recovery from depression is high, and attribution of recovery to the effects of treatment is likely to be overestimated.⁷⁷

They suggest that even if provision of treatment to 100% of the depressed population was possible, it would be undesirable given the high rates of natural remission and comment that their findings support the advice of the UK National Institute for Health and Clinical Excellence (NICE) guidelines that a period of 'watchful waiting' should precede the use of antidepressant treatment.⁷⁸

This finding is supported by a WHO study in 2000 of depression in Australia which reported that

There was no evidence from the group who had remitted during the year that for the majority of cases their remission was treatment induced⁹

A 2016 study of individuals diagnosed with depression, anxiety or substance abuse within the past year found those who had never received treatment were significantly more likely than those who received treatment to remit from the disorder they were diagnosed with, to be free of comorbid disorders, and not have attempted suicide during follow-up. They found remission rates of 68.5% for untreated subjects and 32.% for those who received treatment.⁸⁰

⁷⁴ Schulberg, H. C., Block, M. R., Madonia, M. J., Scott, C. P., Lave, J. R., Rodriguez, E., & Coulehan, J. L. (1997). The usual care of major depression in primary care practice. Archives of Family Medicine, 6(4), 334-339

⁷⁷ Whiteford, H. A., Harris, M. G., McKeon, G., Baxter, A., Pennell, C., Barendregt, J. J., & Wang, J. (2013). Estimating remission from untreated major depression: a systematic review and meta-analysis. Psychological medicine, 43(08), 1569-1585.

78 Whiteford, H. A., Harris, M. G., McKeon, G., Baxter, A., Pennell, C., Barendregt, J. J., & Wang, J. (2013). Estimating remission from untreated major depression: a systematic review and meta-analysis. Psychological medicine, 43(08), 1569-1585.

⁷⁹ Andrews, G., Sanderson, K., Slade, T., & Issakidis, C. (2000). Why does the burden of disease persist? Relating the burden of anxiety and depression to effectiveness of treatment. Bulletin of the world Health Organization, 78(4), 446-454

⁷⁵ Schulberg, H. C., Block, M. R., Madonia, M. J., Scott, C. P., Lave, J. R., Rodriguez, E., & Coulehan, J. L. (1997). The usual care of major depression in primary care practice. Archives of Family Medicine, 6(4), 334-339

⁷⁶ Spijker, J., de Graaf, R., Bijl, R. V., Beekman, A. T., Ormel, J., & Nolen, W. A. (2002). Duration of major depressive episodes in the general population: results from The Netherlands Mental Health Survey and Incidence Study (NEMESIS). British Journal of Psychiatry, 181, 208–213.

⁸⁰ Wang, Y., Henriksen, C.A., ten Have, M. et al. Adm Policy Ment Health (2016). <u>http://link.springer.com/article/10.1007/s10488-016-0745-2</u>

University of Otago head of primary health care and general practice Professor Tony Dowell advises that the median length of time for depression is around three months with many cases resolving spontaneously.⁸¹

Studies also show that antidepressant use increases the risk of relapse. A meta-analysis of 46 studies, determined that the relapse rate for those not using antidepressants was 24.7%, compared to 44.6% for those treated with antidepressants.⁸²

Of great concern should be the evidence that antidepressants may cause 'tardive dysphoria' a condition in which the natural course of depression is altered and becomes a chronic, incurable state.⁸³ The Mental Health Foundation in a report on antidepressant prescribing in New Zealand comment that

While repeat, long-term prescribing is used as a strategy to manage the problem of recurrence, evidence is emerging that long-term use may actually have a 'prodepressant' effect in some individuals, causing permanent, treatment-resistant depression This proposed syndrome of drug-induced chronic depression is termed tardive dysphoria or oppositional tolerance. It is thought that irreversible changes to drug receptors in the brain occur after long-term use, causing the brain to make compensatory adaptations to restore normal functioning, resulting in increased biochemical vulnerability to depression thereafter.⁸⁴

Psychiatrisation of Physical Illness

It has long been recognised that medical illnesses can present as psychiatric disorders. According to Clinical Associate Professor, Department of Psychiatry at NYU, Myrl Manley

many medical conditions and their treatments cause psychiatric symptoms that are clinically indistinguishable from primary psychiatric disorders.⁸⁵

An article in the Psychiatric Times noted that

the number of medical diseases that can present with psychotic symptoms (ie, delusions, hallucinations) is legion.⁸⁶

⁸¹ Ruth Laugesen 22 October, 2011 What good are antidepressants? <u>http://www.noted.co.nz/archive/listener-nz-</u>2011/what-good-are-antidepressants/

⁸² Paul W. Andrews, Susan G. Kornstein, Lisa J. Halberstadt, Charles O. Gardner and Michael C. Neale Blue again: perturbational effects of antidepressants suggest monoaminergic homeostasis in major depression Front. Psychol., 07 July 2011

⁸³ Whitaker, R.

⁸⁴ Mental Health Foundation of New Zealand Discussion paper January 2012 Increasing use of antidepressants in New Zealand

⁸⁵ Myrl R. S. Manley, M.D. Chapter 7. Diagnosis And Psychiatry: Examination Of The Psychiatric Patient 7.1 Psychiatric Interview, History, And Mental Status Examination

⁸⁶ <u>http://www.psychiatrictimes.com/forensic-psychiatry/differential-diagnosis-psychotic-symptoms-medical-%E2%80%9Cmimics%E2%80%9D</u>

A 1978 study of 658 consecutive psychiatric outpatients who received medical and biochemical evaluation, found medical disorders which produced psychiatric symptoms in 9.1% of cases.⁸⁷ The illnesses presenting with psychiatric symptoms in order of frequency were infectious, pulmonary, thyroid, diabetic, hematopoietic, hepatic and CNS diseases. The most frequent presentations were of depression, confusion, anxiety, and speech or memory disorders. Forty-six percent of these patients suffered from medical illnesses previously unknown to either them or their physician. As a result of their study, the authors made a plea "for careful medical evaluation of psychiatric patients."⁸⁸

In addition to masquerading as psychiatric illnesses, physical illnesses were found in a 2013 study of over 27,000 suicide deaths to constitute a significant risk factor for suicide, independent of psychiatric and socio-economic factors. The authors found that that approximately 25% of all suicides in the general population are attributable to serious physical illnesses.⁸⁹

These robust findings support a strong link between physical illness and risk of subsequent suicide in the general population. There have been a number of reports of an increased suicide risk associated with several severe diseases, including amongst others cancer and diabetes. The findings of this study extend the existing evidence by demonstrating that a disease of any organ or physical system significantly increases the risk of subsequent suicide, regardless of sex and after controlling for individual psychiatric history and socio-economic status.⁹⁰

Despite these facts and the requirement of the DSM that psychiatrists routinely or systematically rule out general medical conditions as a cause of symptoms,⁹¹ there is no evidence that New Zealand psychiatrists eliminate physical illness as a cause of the problematic moods and behaviours with which their patients present before making a diagnosis of a mental disorder and much evidence that they do not. The evidence is in fact that psychiatrists and GPs neglect the physical health of those diagnosed with mental illnesses and that this makes a significant contribution to the increased morbidity and mortality of mental health service users.⁹²

There is also strong evidence that treatments for both physical and mental illnesses cause suicide. A large range of drugs have been found to cause suicidal thinking including drugs for

- ⁹⁰ Qin, P., Webb, R., Kapur, N., & Sørensen, H. T. (2013). Hospitalization for physical illness and risk of subsequent suicide: a population study. *Journal of internal medicine*, 273(1), 48-58
- ⁹¹ DSM-5® Handbook of Differential Diagnosis. November 2013 Chapter 1. Differential Diagnosis Step by Step http://dsm.psychiatryonline.org/doi/abs/10.1176/appi.books.9781585629992.mf01
- ⁹² Handiside, A 2004 '*Our Physical Health... Who Cares:*?'Occasional Paper No. 5 Mental Health Commission

⁸⁷ Hall, R. C., Popkin, M. K., Devaul, R. A., Faillace, L. A., & Stickney, S. K. (1978). Physical illness presenting as psychiatric disease. Archives of General Psychiatry, 35(11), 1315-1320.

⁸⁸ Hall, R. C., Popkin, M. K., Devaul, R. A., Faillace, L. A., & Stickney, S. K. (1978). Physical illness presenting as psychiatric disease. Archives of General Psychiatry, 35(11), 1315-1320.

⁸⁹ Qin, P., Webb, R., Kapur, N., & Sørensen, H. T. (2013). Hospitalization for physical illness and risk of subsequent suicide: a population study. *Journal of internal medicine*, 273(1), 48-58

AIDS, allergies, cancer, diabetes, heart conditions, anxiety, depression, sleep disorders and anti-inflamatory, anti-obesity and antibiotic drugs.⁹³ The authors of a study examining whether drugs which increase suicidal thinking also increase suicide attempts and completed suicides concluded

drugs that are associated with increased suicidal ideations are also associated with increased suicidal attempts or completions. This association suggests that drug-induced suicidal ideations observed in *RCTs* plausibly represent harbingers that presage the more serious suicide attempts and completions and should be a cause for concern⁹⁴

Lack of Evidence of links between suicide and depression

No study has ever found that depression causes suicide.

In 2009, the World Health Organisation (WHO) undertook a large international study into the links between 16 common mental disorders and nonfatal suicidal behaviours - suicidal thinking, making suicide plans and making both planned and unplanned suicide attempts. Interviews were conducted with 108,664 respondents from 21 countries. New Zealand contributed the largest sample of 12,790 people.

The WHO made a number of notable findings. The first was that the rates of mental disorder in their study—even among suicide attempters—were much lower than those documented in prior studies. They found that the rate of mental disorder was higher among suicidal people in developed than developing countries, despite (or perhaps because) those in developed countries are more likely to have been treated for their disorder.

Most importantly however they found that depression predicts suicidal thinking but not suicide planning or suicide attempts.³⁵ They comment that

A diagnosis of major depression is much less useful in predicting which people with suicide ideation go on to make suicide plans or attempts, and it is non-significantly associated with unplanned attempts in both developed and developing countries.⁹⁶

In fact they found that trauma, poor impulse control and substance abuse were the strongest predictors of which, amongst those with suicidal thoughts, make suicide plans and attempts, and were especially useful in the prediction of unplanned attempts.⁹⁷ A study conducted in

⁹⁴ Robertson HT, Allison DB (2009) Drugs Associated with More Suicidal Ideations Are also Associated with More Suicide Attempts. PLoS ONE 4(10): e7312. https://doi.org/10.1371/journal.pone.0007312

⁹⁵ Nock MK, Hwang I, Sampson N, Kessler RC, Angermeyer M, Beautrais A, et al. (2009) Cross-National Analysis of the Associations among Mental Disorders and Suicidal Behavior: Findings from the WHO World Mental Health Surveys. PLoS Med 6(8): e1000123. doi:10.1371/journal.pmed.1000123

 $^{^{96}}$ Ibid

⁹⁷ Ibid

2000 by Australian researchers found that the only factor that predicted those who progress from thoughts of suicide to suicide attempts was employment status."98

Far from stating that mental disorder is known to cause suicide, the World Health Organisation in this report in discussing the links between mental disorders and suicide make it clear that no causal association between any mental disorder and suicide has been established, prefacing their statements with phrases such as "if there is in fact a causal relation between mental disorders and suicide attempts..."and "Although it is not yet known whether a causal association exists..."

The World Health Organisation further states that their results show

a sizeable minority of respondents report suicidal behaviors in the absence of any mental disorder. Thus, focusing solely on those with mental disorders is likely to miss a fairly large segment of those who engage in suicidal behavior. Identifying this subgroup is likely to be more challenging given that public health programs that screen for the presence of mental disorders will not identify these respondents, highlighting the need for novel methods of identifying those at-risk that do not rely on the presence of mental disorders.⁹⁹

The Social, Political and Economic Drivers of Suicide

A wealth of evidence shows that social, political and economic factors trigger suicide. Poverty, abuse, unemployment, social isolation, conflict, loss and trauma have consistently been shown to be present in the lives of those who die from suicide at far higher rates than mental illness.

A statement published by the World Health Organisation in 2017 criticised

The longstanding biomedical tradition of medicalizing various forms of psychosocial distress and human suffering has cast a long shadow over the importance of addressing the social and underlying determinants of health. This not only undermines the right to health, it also ignores a rapidly growing evidence base.¹⁰⁰

In 2013, CASPER published a review of the literature on the links between negative life events (NLEs) and adverse life circumstances (ALCs) and suicide. We found a much stronger association of these factors than mental illness with suicide and concluded that

The international literature on risk factors for suicide consistently identifies a range of negative life events (NLEs) and adverse life circumstances (ALCs) associated with suicide. Precipitating events have been found in up to 96% of suicides with studies showing social factors, particularly social isolation confer clear suicide risk (Amatai et al, 2012; Duberstein et al 2004; DeLeo, 2004; Lester, 1997). Evaluations of suicide prevention programmes based on sociological/ecological theory have produced significant reductions in suicide rates particularly among youth and indigenous

⁹⁸ Pirkis, J., Burgess, P. & Dunt, D. Suicidal ideation and suicide attempts among Australian adults. Crisis: The Journal of Crisis Intervention and Suicide Prevention, Vol 21(1), 2000, 16-25

⁹⁹ Ibid

¹⁰⁰ http://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=21480&LangID=E

populations (Kral, 2012; Mullaney et al, 2009). A large study of the links between adverse childhood events and suicide attempts found the reduction in suicide attempts that would be observed if the population were entirely unexposed to the adverse events studied was 67%, 64%, and 80% respectively for lifetime, adult, and childhood/adolescent suicide attempts. (Dube et al, 2001).

In her 2003 study of New Zealand suicide completers, Beautrais found that

Risk of suicide was significantly associated with male gender and exposure to recent stressful life events. Other factors (lack of formal educational qualification, mood disorder in the preceding month, and history of care for mental health problems) made smaller contributions to suicide risk.¹⁰¹

In a study of 1683 people prescribed antidepressants recently published in the New Zealand Medical Journal, the authors found that

Sixty-live percent of respondents described experiencing one or more stressful events or circumstances, with 19 % reporting two and 20% reporting three or more. The most frequently reported stressors identified by participants were categorised as: relationship difficulties (19%), life transitions (19%), losses (18%), work related difficulties (15%) and participants' own or others' health issues (15%). Other less frequently reported stressors included isolation, academic difficulties, abuse and violence and financial difficulties.¹⁰²

The doctors they consulted however conceptualised their suffering as an illness rather than a normal response to stress, loss or trauma and prescribed drugs. Their thinking aligns with that the of the Ministry of Health who in response to our query about whether the government accepted social factors contributed to suicide told us they were aware that

there is increasing evidence that social factors play a role in the development of mental health issues.

A pilot Suicide Mortality Review Committee (SuMRC) was established in New Zealand in 2014 and published a report in 2016 on the suicide deaths of three sub-populations of those who had died from suicide - Maori youth, mental health services users and men. This report identified many precipitating factors in those who died by suicide.

We put together a table of the risk factors identified by the SuMRC for the young people in their study. We've also provided data on the prevalence of those factors in the New Zealand population where that data was available. This data is indicative only and may include different age cut off points, definitions and year of collection than the SuMRC population and datasets.

Risk Factor	Total %	Male %	Female %	Population Prevalence
Relationship Break Up /	47.9	50.4	43.5	
Argument with				

¹⁰¹ Annette L. Beautrais Suicide and Serious Suicide Attempts in Youth: A Multiple-Group Comparison Study American Journal of Psychiatry 2003 160:6, 1093-1099

¹⁰² Hartdegen , M., Gibson , K., Cartwright, C. , Read, J. 2017 Stressful Events and Circumstances Reported by Patients Prior to Being Prescribed Antidepressants N Z Med J 130 (1448), 45-53. 2017 Jan 13. less

Partner				
Argument with	6.7			
Family				
Unemployment		29.6% of		
		non-Maori		
		41.7% of		
		Māori		
		men		
Family Violence	21			7% witnessed
5				an adult hitting
				another adult in
				the home, 14%
				witnessed an
				adult hitting a
				child in the
				home. ¹⁰³
Contact with	53.9			1.9 ¹⁰⁴
Mental Health				
Services				
Trouble with	61.3			
Police				
Charged with	40.2	30.4	23.2	17% of those
Offence				who come to
				police
				attention ¹⁰⁵
Involvement	44			17
with CYFS				
No school	66			16
qualification				
Participated in		59	59	24
Tertiary				
Education				
Bereaved	24			
Bereaved by	11.9			
Suicide				
Alcohol Abuse	19.1			33% 18-24 year
				olds. ¹⁰⁶ Binge
				drinking by
				23% secondary
		1		2 070 2000 H dul y

¹⁰³ New Zealand Family Violence Clearinghouse. Children and Youth Affected by Family Violence July 2016 https://nzfvc.org.nz/data-summaries/children-and-youth

¹⁰⁴ Mental Health Commission Child and Youth Mental Health & Addiction August 2011

¹⁰⁵ <u>https://www.youthcourt.govt.nz/youth-justice/youth-justice-principles-and-processes/</u>

¹⁰⁶ http://www.wellplace.nz/facts-and-information/alcohol/drinking-in-new-zealand/

		school students ¹⁰⁷
Cannabis Use	10	13^{108}
Depression	No data	16%
	provided.	of female
		students and
		9% of male
		students ¹⁰⁹
Self harm	20.1	females
		49.4 %, males
		49.4 %, males 48 % ¹¹⁰

The study we published proposed a study of Coroners files to test the strength of the associations between social factors and suicide. We were unaware that a 7 year study of almost 12,000 Coroners files on suicide deaths would be completed and published the following year by eminent historian, John C Weaver.

After a seven year review of the suicides that occurred over one hundred years in New Zealand. Weaver concludes as we did, that suicide is a response to negative life events and adverse life circumstances and the meaning individuals make of them.

While rejecting the possibility of any model of suicide accurately explaining the behaviour, he advances a two step model of suicide causation in which culture, society and the economy give rise to painful events and circumstances which are interpreted through the lens of an individual's beliefs, values, culture, and life experiences and the social and political environment of the era in which they live with this interpretation and ascribing of meaning informing a decision to live or die.

He comments

a lot of suicides were indictments of culture, society and the economy. Culture, society and the economy evolve and spin off new variations on timeless sources of unhappiness and trauma, sorrow and rage.

He charts links between economic and social policy and youth suicide commenting

...we set aside the guesswork of contemporaries who ended up accenting mental illness. Instead, we explain the rise in youth suicides through information found in case files. Now, more thorough than in prior years, the inquests indicate a convergence of unemployment, difficulties at school, family troubles and broken relationships.

¹⁰⁷ https://www.fmhs.auckland.ac.nz/assets/fmhs/faculty/ahrg/docs/2012-overview.pdf

 $^{^{108}}$ Ibid

 $^{^{109}}$ Ibid

¹¹⁰ Garisch, J. & Wilson, M 2015 Prevalence, correlates, and prospective predictors of non-suicidal self-injury among New Zealand adolescents: cross-sectional and longitudinal survey data Child and Adolescent Psychiatry and Mental Health20159:28

He notes that

The country's financial crises in the 1980s and internationally watched neo-liberal policy responses adversely affected the immediate employment prospects of young people and contributed to a soaring youth suicide rate.¹¹¹

A more recent study of the impact of unemployment arising from the 2008 financial crisis on suicide rates across 54 countries found that

After the 2008 economic crisis, rates of suicide increased in the European and American countries studied, particularly in men and in countries with higher levels of job loss.¹¹²

A report on increases in those on the invalid benefits in New Zealand –a benefit granted to those with long-term and severe incapacity - showed that a diagnosis of a mental disorder was responsible for 65% of the increase.¹¹³

A research study published by the Mental Health Foundation found that a consistent barrier to social inclusion "is the negative labelling and stereotyping of people diagnosed with mental illness, and their subsequent experience of overt stigma and discrimination."

Another government commissioned study in discussing the over representation of maori in suicide statistics claims

There are many reasons explored in research studies as to the drivers of this difference. Put simply, Māori are over-represented in the presence of risk factors including social deprivation. They also experience the impact of colonisation and discrimination which contributes to this already greater risk profile. Although suicide rates have decreased in general, they have not decreased for Māori.¹¹³

Most episodes that meet diagnostic criteria for depression are associated with stressors bereavement, marital difficulties, interpersonal conflict, financial difficulties, health issues. For instance, in a longitudinal study of a large community sample of twins of both sexes, 88.1% of diagnosed episodes of MDD were associated with a stressor of some sort. Only 11.9% of episodes appeared to be endogenous (depression in the absence of an environmental trigger).

¹¹¹ Weaver, J.C. 2014 Sorrows of a Century: Interpreting Suicide in New Zealand 1900-2000. McGill Queens University Press / Bridget Williams Books Ltd.

¹¹² Chang SS, Stuckler D, Yip P, Gunnell D 2013 Impact of 2008 global economic crisis on suicide: Time trend study in 54 countries British Medical Journal 347, f5239, 2013

¹¹³ Ministry of Social Development 2006 Understanding the Growth in Invalid's Benefit Receipt in New Zealand <u>Social Policy Journal Of New Zealand Te Puna Whakaaro</u> » <u>Issue 29 November 2006</u> <u>https://www.msd.govt.nz/about-msd-and-our-work/publications-resources/journals-and-magazines/social-policy-journal/spj29/understanding-the-growth-29-pages127-145.html</u>

¹¹⁴ <u>https://www.health.govt.nz/system/files/documents/pages/spof_final.pdf</u>

¹¹⁵ <u>https://www.health.govt.nz/system/files/documents/pages/spof_final.pdf</u>

The authors comment however, that even many of the apparently endogenous episodes could have reflected a reluctance to disclose stressors of a sensitive nature.¹¹⁶

Recent studies which have looked at completed suicide rather than suicidal thinking or behaviour have shown risk values for socio-economic factors to be equal to or greater than those for mental disorders.^{117.118} Particularly high values for example were found in a study examining the links between adverse childhood experiences (witnessing domestic violence, emotional or physical abuse, having a parent incarcerated, mentally ill or abusing substances) and suicide and showed that the elimination of these factors would reduce suicide attempts by 80% for children and adolescents and 64% for adults.¹¹⁹

The evidence is that social stressors give rise to painful feelings and affect an individual's ability to fulfil role functions and that the mental health system is treating a symptom rather than a cause when it attempts to treat depression.

Despite this evidence, the Ministry of Health stubbornly clings to the view that social factors play a role in suicide primarily because they give rise to mental disorders.¹²⁰

Again Andrews and Thompson invoke the analogy of fever to explain the risks of treating symptoms and ignoring causes, saying

A fundamental principle in medicine is that it is more effective to treat the cause of an illness than to treat its symptoms For instance, treating fever with antipyretics does not treat the infection that caused the fever, and antipyretics actually impair recovery from infection.

The question however remains, whether considering social stresses or mental health disorders, why do some people subject to these factors kill themselves while the majority in the same situation do not?

In discussing the reasons why people experiencing the same stressor make different decisions about suicide Weaver comments that their decision is informed by culture which frames their understanding of their present circumstances and future prospects. Amongst cultural influences he lists ideas about masculinity, self-image, relationships, injustices, vengeance and beliefs about an afterlife.

¹¹⁹ <u>http://jamanetwork.com/journals/jama/fullarticle/194504</u>

¹¹⁶ Paul W. Andrews, Susan G. Kornstein, Lisa J. Halberstadt, Charles O. Gardner and Michael C. Neale Blue again: perturbational effects of antidepressants suggest monoaminergic homeostasis in major depression Front. Psychol., 07 July 2011

¹¹⁷ Page, A., Morrell, S., Hobbs, C., Carter, G., Dudley, M., Duflou, J., & Taylor, R. (2014). Suicide in young adults: psychiatric and socio-economic factors from a case-control study. BMC Psychiatry, 14, 68.

¹¹⁸Li Z, Page A, Martin G, Taylor R. Attributable risk of psychiatric and socio-economic factors for suicide from individual-level, population-based studies: a systematic review. Soc Sci Med. 2011 Feb;72(4):608-16.

¹²⁰ Communication from Eve Kloppenburg, Senior Policy Analyst, Ministry of Health received 26 May 2017.

He notes that the significance of these cultural beliefs varies in content and impact within subcultures and across time. History tells us that an arrest for theft or assault will represent dishonor in some sub cultures and honour in others, that the cultural meaning of divorce, being an unmarried mother or leaving school at 15 have changed over time and that those changes affect different groups within society differently.

One of the reasons framing responses to stressful life events contributes to suicide is because of the meaning associated with diagnostic labels. For those who are diagnosed with a mental disorder their understanding of their current circumstances and future prospects will be significantly altered particularly where they are told they have a brain disorder and that their condition is chronic and requires long term treatment.

In discussing the medicalization of suicide Weaver notes that ascribing suicide to mental disorder ignores the evidence and comments

The fluctuation in the male rate of suicide in concert with broad economic trends is a firm fact that ought to give pause to enthusiasts for a mental disorder and biochemical understanding of suicide.

He tracks the history of the medicalization of suicide which he believes is driven by politics rather than science, labels the research underpinning this medicalization as pseudo-science and criticizes mental health professionals for claiming credit for reductions in suicide rates which are clearly the result of social, political and economic changes and owe nothing to mental health treatment.

He comments that

it is impossible to credit intervention with downturns in overall national suicide rates, in age group suicide rates, or in gender-specific suicide rates without taking into account the economic, social and cultural factors that could have mitigated rates independent of direct action. The drop in rates in the 1950s for example, owed nothing to intervention, and another drop around 2000 may predate concerted efforts to address youth suicide.

He claims that while both researchers and politicians know that research in the mental health field does not meet the standards required by true science

There is good latent reason why suicide writers present their work as scientific. Politicians in modern states harbor the idea that problems are capable of solution. What is politics without promises? Quality of life and life expectancy are important to citizens in affluent societies, therefore politicians invest in medical research.

Weaver is highly critical of studies which use aggregate data to analyse suicide trends and identify at risk groups. He points out that this data is not reliable and comments that *"rising standards of professional conduct by coroners in the last twentieth century led to increases in the numbers of violent deaths reported as suicides"*

If this is the case we could expect the reverse to be true - that the near elimination of inquests resulting from changes to the Coroners Act in 2006 mean fewer violent deaths will be reported

as suicides and the data on which the Ministry of Health and the Chief Coroner base their reporting of suicide trends has become significantly less reliable. Consequently it is reasonable to assert that the Ministry's frequent claim to a good news story that suicides have dropped since their high in 1998, is an artifact of changes in the way suicide data is collected and analysed rather than being a true decrease in suicide rates.

Weaver points out that governments are seeking quick, low cost solutions which sound scientific rather than an approach he refers to as 'deep prevention' which he defines as "extensive social action to improve lives before they slump into despair about the future."

...measures that are long term and pertain to health from cradle to grave, meaningful work and far-reaching education.

As examples of deep prevention measures that have reduced suicide rates he cites universal social welfare and improved care of the aged, including palliative care.

His analysis is supported by the findings of a 2002 study which reported that

Suicide rates increased in states that reduced their per capita expenditures for public welfare during the 35-year period, 1960 to 1995.¹²¹ In 1990, not only were suicide rates higher in states that spent less for public welfare than in states that spent more, but states' spending for public welfare was the only variable that accounted for the widening of differences in states' suicide rates.¹²²

Reductions in suicide rates as a result of investment in social spending contrast strongly with evidence of increases in suicide rates as a result of increased mental health funding and suggest governments can expect a better return on investment from social change - reducing poverty, abuse and income disparity, increasing employment and engagement in education - than from increasing access to mental health services.

Weaver explains government reluctance to adopt a deep prevention approach in favour of a medical approach as follows

The medicalization or the therapy industry route to prevention is more politically palatable than deep prevention, not just due to the probable higher costs of the latter but on account of the prevalence of upbeat government chatter and avoidance in public life of expressions such as "intractable problem."

Despite considerable groping in the dark, the model of immediate intervention for dealing with suicide crises has political currency because it is linked with the unstoppable force of medical optimism and it implies life-saving now rather than years or decades away, Short term and seemingly low-cost solutions appeal

¹²¹ Zimmerman S. States' spending for public welfare and their suicide rates, 1960–1995: what is the problem? The Journal of Nervous and Mental Disease 2002; 190 349–360

¹²²Zimmerman SL1,J Nerv Ment Dis. 1995 Jul;183(7):425-34.Psychache in context:states' spending for public welfare and their suicide rates.

to governments which uniquely have the capacity to press a national agenda in a small unitary state such as New Zealand.

This analysis explains why the New Zealand government is currently rolling over a suicide prevention strategy with an almost total focus on medical intervention without any evaluation of its effectiveness or evidence it has reduced suicide rates which have risen under the 10 years in which the plan has been in place.

NZ Government Approach to Suicide Prevention

Access to Treatment

The New Zealand Suicide Prevention Strategy is based on the premise that suicide occurs because individuals fail to engage in mental health treatment and that increasing access to treatment will reduce suicide deaths and rates. In fact, there is no good evidence that mental health treatment reduces suicide rates and much evidence that it in fact increases them.

In 2008, Dr Marsha Linehan, Professor of Psychology and Adjunct Professor of Psychiatry and Behavioral Sciences at the University of Washington, author, and award winning researcher in suicide prevention stated

The central theory of suicide and suicide prevention that has shaped suicide prevention research to date contends that suicide is a symptom of a mental disease and prevention of suicide requires treatment of the underlying disease. Although an alluring model, to date there is no compelling evidence that the disease model of suicidal behaviour has led to effective interventions for suicidal behaviours or has prevented suicide. In addition, no published randomised trial has shown that interventions targeting mental disorders result in significant reductions in suicide attempts or death by suicide, This is despite thousands of randomised clinical trials investigating interventions for schizophrenia, depression, anxiety disorders, and substance abuse, disorders commonly linked to suicidal behaviours. Although many of these trials excluded highly suicidal patients, many did not, In sum, reducing symptoms of schizophrenia, depression, anxiety disorder as not been shown to reduce the incidence of suicide attempts or suicide.¹²³

Many surveys have shown that only around a third of those identified as mentally ill seek or are interested in seeking professional help. This lack of willingness to engage in mental health treatment has been interpreted as an outcome of under identification of mental illness and unmet need for treatment based on public ignorance, lack of diagnostic skill in primary care and under resourcing of services. As British psychiatrist Sami Timini points out however

¹²³ Linehan, M. M. (2008). Suicide intervention research: a field in desperate need of development. *Suicide and Life-Threatening Behavior*, *38*(5), 483-485.

there is little evidence to support the idea that popularising mental health diagnoses, convincing professionals and the public about the high prevalence of mental disorders, and convincing policy makers of the need to diagnose and treat more people, benefits the mental health of the society.¹²⁴

A variety of campaigns have been undertaken to increase public 'mental health literacy' and encourage more people to seek a diagnosis and access mental health treatment. These include the joint UK Royal College of Psychiatrists and Royal College of General Practitioners 'Defeat Depression' campaign in the early 1990s, the Australian 'Beyond Blue' campaign and the New Zealand 'National Depression Initiative'. All were designed to raise public awareness of depression, reduce stigma, train general practitioners in recognition and treatment, and make specialist mental health advice and support more accessible.

Evaluations of the campaigns have found no evidence they have led to any significant improvements in clinical outcomes, but strong evidence that they are associated with an increase in medical model beliefs about depression, an increase in rates of diagnosis of major depression and a rapid increase in antidepressant prescribing.¹²⁵ The Beyond Blue evaluation noted a decrease in mental health related quality of life over the period of the campaign, and found that low levels of belief that depression is a medical diagnosis requiring medical treatment was a significant protective factor for major depression.¹²⁶

Given the huge investment of taxpayer money in mental health services under the auspices of suicide prevention by governments around the world, it would be reasonable to expect a large number of studies comparing suicide rates of those who engage in treatment and those who do not. Unfortunately, this is not the case.

Our search found only one study that directly compared the suicide rates of depressed people who engaged in treatment and those who did not. The study involved 3006 people who were admitted to in-patient psychiatric services and assessed as at high risk of suicide and compared outcomes for those who engaged with services and those who refused treatment. It found that at all points of the study – 1,2,3 and 4 years post admittance – suicide deaths were higher in the treatment group than in the group who refused treatment.¹²⁷ Given that the only factor which distinguished these two populations was their engagement in treatment, depression severity cannot account for these differences.

Studies which examine the data at a population rather than individual level are more common and all find that increases in access to mental health treatment are associated with increased suicide rates.

¹²⁴ Timini, S. 2014 No more psychiatric labels: Why formal psychiatric diagnostic systems should be abolished Volume 14, Issue 3, September-December 2014, Pages 208–215

 $^{^{125}}$ Ibid

¹²⁶ Ibid

¹²⁷ Motto, J. Suicide Prevention for High Risk Persons who Refuse Treatment. Suicide and Life Threatening Behaviour. Vol 6(4), Winter 1976.

In 2004 Australian researchers Philip Burgess and Jane Pirkis in conjunction with the World Health Organisation conducted research on the impact of the introduction of mental health programmes, policies and legislation and access to pharmaceutical drugs on the suicide rates of 100 countries and found that

the introduction of a mental health policy and mental health legislation was associated with an increase in male and total suicide rates, and the introduction of a therapeutic drugs policy was associated with an increase in total suicide rates.¹²⁸

The results of this study have been replicated in two further studies. A 2010 analysis found there was a

significant positive correlation between suicide rates in both genders and the percentage of the total health budget spent on mental health; and 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 professionals¹²⁹.

A larger study of 191 countries replicated these findings in 2013. The authors reporting that both the number of psychiatrists and the number of mental health beds were significantly associated with higher national suicide rates.¹³⁰

New Zealand data published by the Ministry of Health shows the same pattern. A paper commissioned by the Ministry of Health to support development of a draft suicide prevention plan notes that it is not depressed people or Maori or youth but mental health service users who have the highest rate of suicide in New Zealand.¹³¹

The report notes that mental health service users account for 40% of suicides, while representing only 2.6% of the total population. This group's age standardised rate of suicide is 137.1 per 100,000, compared to 12.9 per 100,000 for the remainder of the population. This compares with a Māori suicide rate of 15.8 per 100,000 and a youth suicide rate of 39.1 per 100,000.¹³²

New Zealand government data shows that those at highest risk of suicide -Maori, youth and men - have the highest rates of mental health service engagement.

¹²⁸ 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 2004; 38:933–939

¹²⁹ Ajit Shah et al The Relationship Between General Population Suicide Rates and Mental Health Funding, Service Provision and National Policy: a Cross-National Study. Article in International Journal of Social Psychiatry 56(4):448-53 · September 2009

¹³⁰ 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), 339-342.

¹³¹ https://www.health.govt.nz/system/files/documents/pages/spof_final.pdf

¹³² https://www.health.govt.nz/system/files/documents/pages/spof_final.pdf

The 2015 annual report of the Director of Mental Health announces a 'positive' trend of a record number of people accessing specialist mental health and addiction services. The report shows that the number of people accessing specialist mental health and addictions services increased by 74% since 2005/06 – from 96,310 in 2005/06 to 167,840 in 2015/16.

It also reports that those groups with the highest suicide rates had the highest levels of engagement with mental health services on both a voluntary and compulsory basis. According to the data provided for 2015, Māori access rates to services exceeded those of other groups (5.8 percent of Māori compared with 3.1 percent of non-Māori) and increases in service use were 155% for Maori, 149% for Pacific People and 107% for young people. Men had 1.5 times the rate of compulsory treatment as women.

The Director points out that Māori make up approximately 16 percent of New Zealand's population, yet they account for 26 percent of all mental health service users and that in 2015, Māori males were the population group most likely to be subject to community and inpatient treatment orders. In 2015 Māori males were almost four times more likely to be subject to a community treatment order than non-Māori males. The Director reports that 98.4% of mental health services users who died from suicide had received treatment from a specialist service community team in the 12 months before their death.

Dr Crawshaw acknowledges that by 2013 the government had exceeded its target for engagement of young people in mental health system with an increase from 1.8 per cent of young people in engaged in treatment in 2002/3 to 3.3 per cent & in 2012/13 where the Ministry's target is 3 per cent.¹³³

It should be noted that these figures represent only those who access specialist mental health services. The vast majority of those who use mental health services access them through their GP with the Ministry of Health reporting that GPs manage these without referring to specialist services in 50-70% of cases.¹³⁴ Rates of access to mental health services therefore are far higher than that reported by the Director of Mental Health.

What the Director does not report is any data which shows that increasing use of mental health services and access to treatment is increasing the well-being of New Zealanders or reducing suicide rates. The only outcome data in the report is that of serious adverse events including suicide, self harm and other adverse events which have increased significantly particularly in those groups most frequently accessing mental health treatment. In addition to service user suicides, population suicide rates have increased alongside increased engagement in mental health treatment.

In discussing the findings of his report of increases in suicide rates amongst mental health services users, the Director of Mental Health reports that "mental disorders were a significant risk factor for suicidal behaviour" but provides no evidence to support this statement, simply again referencing the 2005 study of Collings and Beautrais. As such, it is difficult to understand

¹³³ <u>http://thewireless.co.nz/articles/asking-for-help-with-mental-health</u>

¹³⁴ Dowell AC, Garrett S, Collings S, McBain L, McKinlay E, Stanley J. 2009. Evaluation of the Primary Mental Health Initiatives: Summary report 2008. Wellington: University of Otago and Ministry of Health

how he can claim that a link between mental disorders and suicide is a finding of his own report.

Despite failing to provide any evidence that access to mental health services and treatment provides any health benefits for New Zealanders, the Director reports that "Increasing access to services will continue to be a major focus, especially for children and youth and for people with common mental health disorders or problems."

Access to, and engagement with, specialist mental health services didn't improve outcomes for the 54% of young Maori who died from suicide in the Suicide Mortality Review Committee (SuMRC) sample. The SuMRC review found that the median number of service contacts within 90 days of the deaths by suicide was 4 with an average of 14.9 telephone contacts, 7.4 onsite community mental health team appointments and 4.0 community mental health team visits in the home visits and 1.0 in Māori cultural settings. They found that the median number of service contacts within seven days of the deaths by suicide of the youth was 2 with an average of 5.5 telephone contacts, 4.6 onsite community mental health team appointments and 3.0 visits to youth in emergency departments.

The SuMRC conducted a detailed assessment of a sample of mental health services users who died from suicide to see what they could learn about the care they received. They report that most had been using services for at least 90 days. They comment

They were known to mental health services. This means there should have been longterm care plans for each of them. This was not evident. There was still a sense of 'firefighting' -providing ad hoc care rather than being proactive. There was also little evidence that the person themselves was involved in the planning of their care, other than to agreeing to follow management plans after risk assessments. From the review it was observed that for those most intense service users, the services appeared to offer more and more service contacts, with little perceived benefit. Increased input from mental health services may indicate a service becoming distracted with other issues due to the complexity of the service user's needs (eg, alcohol or drugs, or physical health issues). This may lead to helplessness on the part of the service, losing sight of recovery and focusing narrowly on one type of treatment (applied in various ways) or employing a scattergun approach. When a service reacts to a person in a way that may be detrimental -for example, categorising them as non-compliant, badly behaved, wellknown a person may live up to that label. This is not conducive to a recovery approach.

People who used services intensely would have many assessments, however, and it is hard to see how repeated assessments would have benefited the person. If a person is being assessed frequently, then a service needs to ask the questions: Is the person's situation changing so frequently that this needs to happen, or does the service not know what else to do?

The SuMRC comment that

The very high percentage of mental health service users (48%) who had contact with a mental health service in the week before their death warrants further investigation before any conclusions can be drawn

The SuMRC did not have access to primary mental health care data so were not able to determine the true percentage of access to mental health services in the week prior to death. A recent Australian study however showed that 76.9% of those who died from suicide had contact with a General Practitioner in the three months prior to their death.¹³⁵

There is no evidence that the Director of Mental Health intends to investigate this issue or any of the other evidence from the SuMRC and research showing access to mental health services produces poor outcomes. On the contrary, his claims that mental illness and suicide are linked and suggestion that treatment for mental illness will improve well-being and prevent suicide appear ideologically rather than evidence based.

Prescribing of Antidepressants as a Suicide Prevention Strategy

Despite the evidence that antidepressants have little or no efficacy above placebo, increase suicide risk and that there is no reliable evidence they protect against suicide, they continue to be marketed to New Zealanders as an important, safe and effective suicide prevention intervention.

Ministry of Health Guidelines on management of people at risk of suicide advise that effective treatment of mental illness can reduce or abolish the risk of suicide. They recommend as best practice that medication should be prescribed as part of the treatment of any underlying mental illness.¹³⁶

In an article published in the New Zealand Medical Journal on the treatment of moderate to serious depression in New Zealand, Professor Marie Crowe, of Otago University's Department of Psychological Medicine states

Both the current acute care model and the primary care model have an almost exclusive reliance on medication. This is despite a lack of evidence that pharmacological treatments have resulted in an improvement in the long-term outcome of patients with mood disorders.¹³⁷

As the Mental Health Foundation point out, while clinical trials have not demonstrated that those taking antidepressants are less likely to attempt suicide than those receiving a placebo the fact that antidepressants are heavily subsidised by the New Zealand government while talking therapies are prohibitively expensive for consumers, has resulted in prescribing of the drugs as the first line suicide prevention intervention, despite the preference of consumers for non-pharmacological interventions.¹³⁸

¹³⁵ De Leo D, Draper BM, Snowdon J, Kõlves K 2013 Contacts with health professionals before suicide: Missed opportunities for prevention? Comprehensive Psychiatry. Published online: 12 June 2013.

¹³⁶ New Zealand Guidelines Group 2003 The Assessment And Management Of People At Risk Of Suicide For Emergency Departments and Mental Health Service Acute Assessment Settings

¹³⁷ Marie T Crowe Treating recurrent mood disorders seriously 7th November 2014, New Zealand Medical Journal Volume 127 Number 1405

¹³⁸ Mental Health Foundation of New Zealand Discussion paper January 2012 Increasing use of antidepressants in New Zealand

The prescribing of antidepressants in New Zealand has shown sharp increases in recent years with Ministry of Health data showing an 11.4% increase in the number of people prescribed these drugs between 2012 and 2015 taking the total number of New Zealanders on the drugs from 432,593 to 481,988. This represents an increase from 9.4% of the New Zealand population having a prescription for antidepressants in 2012 to 10.4% of the population in 2015.

The Best Practice Advocacy Centre New Zealand (bpac) advises that dispensings of antidepressants to children aged 10-17 years increased 44% between 2010 and 2014 despite small changes in the prevalence of mental health conditions and no substantial changes in guidance on the pharmacological treatment of mental health conditions in young people. They advise that there has been a drop in the population in this age range meaning increased prescribing cannot be attributed to population change and is likely to result from "clinicians adopting a lower threshold for prescribing."¹³⁹

Ministry of Health data analysed by gender and ethnicity show sharp increases in prescribing for some subpopulations of New Zealand children as shown in the tables below:

% Increases in Antidepressant Prescribing to Children and Adolescents 2012-2015 by Ethnicity							
	Maori	Pacific	Other				
5-9 years	31	280	33				
10-14 years	81.8	65.9	27.1				
15-19 years	40.1	34.3	27.9				

% Increases in Antidepressant Prescribing to Children and Adolescents 2012-2015 by Ethnicity and Gender								
	Maori		Pacific		Other			
	Male	Female	Male	Female	Male	Female		
5-9 years	59.4	56.25	333	600	38.5	22.8		
10-14 years	84.1	80.3	82.3	55.5	22.5	30.5		
15-19 years	27.6	46.7	36.1	33.5	24.4	29.5		

In all cases, the increases in prescribing to children and adolescents far exceed that of the allages average.

If antidepressants were an effective suicide prevention measure the huge increases in their prescribing could be expected to have a significant effect on reducing suicide rates. On the contrary, increases in antidepressant prescribing have occurred in tandem with increasing suicide rates.

¹³⁹ http://www.bpac.org.nz/BPJ/2016/March/docs/BPJ74-depression-anxiety-under18.pdf

Restriction of Access to the Means of Suicide

A key plank of the New Zealand Suicide Prevention Strategy is reducing access to the means of suicide. This involves securing firearms, erecting barriers at jumping points and reducing car emissions. While these may be worthwhile activities the evidence is that their key impact is not to reduce suicide but to move suicides from one means to another. Importantly though, it is a strategy that has very little impact in a country like New Zealand where the majority of suicides are by hanging.

Despite the evidence of the use of antidepressants in suicide, reducing access to these drugs as a means of suicide has been ignored by the Ministry of Health.

The SuMRC found that for females and Māori, overdose of medication was the second most common suicide method and New Zealand research has found that

Antidepressant overdoses using TCAs remain the most common suicide poison used in New Zealand. The combination of easy access to, and the toxicity of TCAs has resulted in continued deaths from overdoses of these drugs, as repeatedly noted in New Zealand and internationally¹⁴⁰

While the Ministry of Health has focused on erecting barriers to jumping points and securing firearms, it has ignored the fact that prescription rates for tricyclic antidepressants have been increasing in New Zealand since 2003³⁹ and have done nothing to reduce the risk that the medical profession provide many suicidal people, the means to end their lives.

Prohibition on Telling Stories of Suicide Victims

We have, in other documents, set out the evidence that the benefits of open discussion about suicide outweigh any risks and that the risks identified in the literature have been unable to demonstrate any causal association between media reporting of suicide and suicide.

It is our view that the restrictions on publication of individual suicide stories has served to restrict free and frank discussion of the failings of the medical model of suicide and the role of the mental health system and antidepressants in New Zealand suicide deaths.

We note that in a paper on communicating the risk of drugs, the government recently stated

People react more emotionally to individual stories than they do to statistics about large numbers of suffering people and statistics in general have less influence on individual decisions.¹¹¹

¹⁴⁰ Lou M Gallagher, Diana Kappatos, Catherine Tisch, Pete M Ellis Suicide by poisoning in New Zealand—a toxicological analysis New Zealand Medical Journal 21st September 2012, Volume 125 Number 1362

¹⁴¹ Medsafe 21 March 2017 Risk Communication <u>http://www.medsafe.govt.nz/publications/OIA/23March17RiskCommunication.pdf</u>

In New Zealand it is a criminal act to publish the story of an individual suicide prior to the verdict of a Coroner – an event that can take many years. When told, the majority of these stories paint a picture of the failure of the medical model of suicide prevention.

It is our view that the compelling nature of the stories of individual suicides in New Zealand, the evidence that they reflect the failure of the medical model of suicide prevention and the impact they may have on decision making are the primary reasons the telling of those stories is prohibited.

We believe that if the government considered that discussion of individual suicides was harmful in itself, that reporting of overseas suicides would be restricted. The only difference between suicides of those residing outside of New Zealand and New Zealand citizens is that stories of the former will not raise issues of the failure of New Zealand mental health services and New Zealand government policy while the latter almost invariably do so.

Gatekeeper Training

Gatekeeper training is training provided to those in frontline roles and the general public which aims to educate them on how to identify mental illness and suicide risk, persuade their targets that they require professional help and refer them to mental health services. It has been promoted by Beautrais and others as having proven efficacy in suicide prevention.

In fact evaluations of these programmes have shown no impact on suicide rates.

As part of the Suicide Prevention Action Plan, the Ministry of Health has funded the ASIST QPR training programmes. The Ministry explains that these programmes improve the knowledge of community members so they can identify and support individuals at-risk of suicide and refer them to appropriate services. Accepting the teachings of the medical model of suicide prevention is referred to as 'mental health literacy' and programmes which improve mental health literacy as 'mental health first aid.'

In discussing concerns about young people's mental health literacy, Australian mental health researchers state

Lack of recognition of mental illnesses is a primary concern, as is the failure to recognise appropriate professional help and pharmacological treatments...Many young people do not have positive attitudes towards medication. In one study, half the adolescents and 40% of 18-25-year-olds felt that antidepressants were helpful, whereas, in another study, 57% of a sample of 13-16-year-olds felt that antidepressants were helpful.¹¹²

They describe as problematic findings that young people prefer to engage with friends or family when they are distressed and that

the value of encouraging a young person with a mental illness to seek professional help was not universally recognised. Parents had a preference for informal and general sources of help, rather than specialist mental health services.

¹⁴² Kelly, C. M., Jorm, A. F., & Wright, A. (2007). Improving mental health literacy as a strategy to facilitate early intervention for mental disorders. Med J Aust, 187(7 Suppl), S26-30.

They advise that mental health first aid programmes can help address these 'problems'.

Evaluations of these programmes have found that those who undertake the training are better able to recognise mental illness and are "more like health professionals in their beliefs about what treatments are likely to be helpful," ¹⁴³ " to believe that GPs, psychiatrists, clinical psychologists, antidepressants, counselling and cognitive behaviour therapy are helpful for depression and that those with mental illnesses would get worse without professional help.¹⁴⁴

They have had a sole focus on measuring changes in the knowledge, attitudes and behaviour found they change the knowledge and behaviour of participants but there is no evidence that they benefit those who receive assistance from ASIST or QPR programmes because, as a study in the Australian and New Zealand Journal of Psychiatry found

there has not yet been an evaluation of the effects on those who are the recipients of the first aid¹⁴⁵

More recently however, one study on the effect of mental health first aid training on teachers and their students has been conducted. This study found that while teachers were more likely to hand out mental health information

No increase in individual student support or change in student mental health was found.¹⁴⁶

A more recent study found that providing ASIST training to school staff resulted in increases in youth referred to treatment,¹¹⁷ while a study of the outcomes of delivering QPR training across 32 schools found that despite increases in school staff asking young people about suicide, the training had no effect on students disclosing suicidal thoughts or behaviours.¹⁴⁸

¹⁴³ Betty A. Kitchener & Anthony F. Jorm 2006 Mental health first aid training: review of evaluation studies <u>Australian and New Zealand Journal of Psychiatry</u> Volume 40, 2006 - <u>Issue 1</u>

¹⁴⁴ <u>Claire L. O'Reilly, J. Simon Bell, Patrick J. Kelly, Timothy F. Chen</u> Impact of Mental Health First aid Training on Pharmacy Students' Knowledge, Attitudes and Self-Reported Behaviour: A Controlled Trial Vol 45, Iss 7, 2011 Australian & New Zealand Journal Psychiatry

¹⁴⁵ <u>Betty A. Kitchener & Anthony F. Jorm</u> 2006 Mental health first aid training: review of evaluation studies <u>Australian and New Zealand Journal of Psychiatry</u> Volume 40, 2006 - <u>Issue 1</u>

¹⁴⁶ Jorm, A. F., Kitchener, B. A., Sawyer, M. G., Scales, H., & Cvetkovski, S. (2010). Mental health first aid training for high school teachers: a cluster randomized trial. *BMC psychiatry*, 10(1), 51

¹⁴⁷Ewell Foster, C. J., Burnside, A. N., Smith, P. K., Kramer, A. C., Wills, A. and A. King, C. (2016), Identification, Response, and Referral of Suicidal Youth Following Applied Suicide Intervention Skills Training. Suicide Life Threat Behav.

 ¹⁴⁸ Wyman, P. A., Brown, C. H., Inman, J., Cross, W., Schmeelk-Cone, K., Guo, J., & Pena, J. B. (2008).
 Randomized trial of a gatekeeper program for suicide prevention: 1-year impact on secondary school staff.
 Journal of consulting and clinical psychology, *76*(1), 104.

A recent study on the outcomes produced by providing ASIST training to an indigenous population showed only one effect - a six- fold increase in participant suicidal ideation .¹⁴⁹

The approach of gatekeeper programmes is echoed in the New Zealand Health and Physical Education Curriculum for schools which includes raising the awareness of mental health issues amongst students through destignatising mental illness, encouraging students to recognise mental health problems in themselves and their friends, facilitating processes for appropriate help-seeking for students and their peers.

Ironically, the resource kits for schools on responding to and preventing suicide advises that peer support programmes should not be implemented as providing such support puts too heavy a burden on students but diagnosing mental illness in their friends and referring them for help does not.¹³⁰

Promotion of Talking About Problems as a Suicide Prevention Strategy

A commonly held perception is that suicide, and particularly male suicide, is a result of reluctance on behalf of those at risk to talk about their problems. These beliefs underpin the provision of suicide hotlines and telephone counselling and many social media memes which encourage people to talk about their distress as a suicide prevention measure.

It is commonly believed that a reluctance of men to talk about their problems and express emotion is a causal factor in higher suicide rates for men than women^{151 152} and that men don't talk about their feelings and problems for fear of appearing weak.¹⁵³

The Mental Health Foundation claim that

Most men don't like to admit that they feel fragile or vulnerable, and so are less likely to talk about their feelings

Men may feel that it is somehow weak to have to depend on someone else, even for a short time, and think that they should deal with their problems themselves.

¹⁴⁹ Sareen, J., Isaak, C., Bolton, S. L., Enns, M. W., Elias, B., Deane, F., ... & Katz, L. Y. (2013). Gatekeeper training for suicide prevention in First Nations community members: a randomized controlled trial. *Depression and anxiety*, 30(10), 1021-1029.

¹⁵⁰ Ministry of Health Preventing and responding to suicide: Resource kit for schools <u>https://education.govt.nz/assets/Documents/School/Traumatic-incidents-and-</u> <u>emergencies/SuicidePreventionOCT2013.pdf</u>

¹⁵¹ Judd, F., Jackson, H., Fraser, C., Murray, G., Robins, G., & Komiti, A. (2006). Understanding suicide in Australian farmers. Social psychiatry and psychiatric epidemiology, 41(1), 1-10.

¹⁵² Hawton, K. (2000). Sex and suicide.

¹⁵³ <u>https://depression.org.nz/get-better/your-identity/men/</u>

Research however shows that males do not disclose their problems because they perceive it to be unproductive not because of the culture of masculinity. A 2012 study conducted by the University of Missouri found that

Despite common perceptions, boys did not endorse negative expectations such as feeling embarrassed or worried about being made fun of more than girls. Instead, boys were more likely than girls to expect to feel "weird" and like they were wasting time.

Interestingly, research on the utility of talking about problems shows boys may be correct.

Studies by sociologists have found that those who talk about their problems with others have higher levels of depression. In one study with this finding, the authors explain that

Talking about problems often may mean dwelling on them, reviving and rehearsing failures, uncertainties, injustices, and other depressing events, and focusing on depressive symptoms, In this light it is interesting to note that the sharp elevation in depression is observed in those who say they frequently use the strategy of talking to others.¹⁵⁴

The authors explain that a perception that support is available reduces distress but that disclosing problems to others does not. 155

Other studies have similarly found that talking about problems is either unhelpful or produces poorer outcomes. A study examining the effect of talking about their experience on those who are bereaved found no benefit to those who talk about their loss and share their emotions but that those who do so more frequently have poorer levels of adjustment.¹³⁶

Comparisons of those involved in traumatic events who received professional debriefing and those who do not, shows that that while rating it as helpful those who receive debriefing have worse outcomes in relation to their coping ability and mental health than those who are not debriefed.¹⁵⁷

In addition to the disempowerment that may arise from talking about problems, studies of helping interactions have shown that helpers often do things that reduce their own distress but which increase the distress of those seeking help. Those to whom problems are disclosed

¹⁵⁴ Ross, C. E., & Mirowsky, J. (1989). Explaining the social patterns of depression: control and problem solving-or support and talking?. *Journal of health and social behavior*, 206-219.

¹⁵⁵ Ross, C. E., & Mirowsky, J. (1989). Explaining the social patterns of depression: control and problem solving-or support and talking?. *Journal of health and social behavior*, 206-219.

¹⁵⁶ Stroebe, M., Stroebe, W., Schut, H., Zech, E., & van den Bout, J. (2002). Does disclosure of emotions facilitate recovery from bereavement? Evidence from two prospective studies. Journal of consulting and clinical psychology, 70(1), 169.

¹⁵⁷ Raphael, B., & Meldrum, L. (1995). Does debriefing after psychological trauma work?. BMJ: British Medical Journal, 310(6993), 1479.

frequently minimise the presenting problem or attempt to be inappropriately cheerful leaving those sharing their problems feeling inadequate, isolated, or misunderstood.¹⁵⁸

Even with trained telephone crisis line providers a study found that 15.6% behaviour considered unacceptable occurred during the calls including multiple examples of those delivering listening services telling a suicidal caller to go ahead and kill themselves, showing no empathy or consideration for the caller and being aggressive or rude.¹⁵⁹

The belief that talking about problems will reduce emotional distress and prevent suicide does not appear to have a solid evidence base. It is also perceived by many to be a form of victim blaming in which men, who die from suicide are seen as responsible for their deaths as a result of failing to behave more like women.

Iatrogenic Suicide

Antidepressant Induced Suicide

It seems counter-intuitive that drugs marketed as antidepressants can worsen depression and cause suicidal thinking and behaviour, including completed suicide. The evidence that they do so however is sufficiently strong that antidepressant manufacturers list completed suicide as a known effect of the drugs and government drug regulators around the world warn they at least double the risk of suicide.

In February 2017,, the World Health Organ<mark>isa</mark>tion updated its information on depression and stated that antidepressants

should not be used for treating depression in children and are not the first line of treatment in adolescents, among whom they should be used with caution.¹⁶⁰

In 2016 Professor Peter Gotzsche published the results of a large study showing antidepressants double the risk of suicide in young people. In the same year, the New Zealand Suicide Mortality Review Committee reported that 50% of their sample of suicide completers had a history of being prescribed antidepressants. Recently an American jury found that clinical trial data supported the fact that suicide risk extends across all age groups and that those taking the antidepressant Paroxetine are almost 9 times as likely to attempt suicide or kill themselves as

¹⁵⁸ Kessler, R. C., & McLeod, J. D. (1984). Sex differences in vulnerability to undesirable life events. American sociological review, 620-631.

¹⁵⁹ Mishara, B. L., Chagnon, F., Daigle, M., Balan, B., Raymond, S., Marcoux, I., ... & Berman, A. (2007). Comparing Models of Helper Behavior to Actual Practice in Telephone Crisis Intervention: A Silent Monitoring Study of Calls to the US 1-800-SUICIDE Network. *Suicide and Life-Threatening Behavior*, *37*(3), 291-307.

¹⁶⁰ http://www.who.int/mediacentre/factsheets/fs369/en/

those taking a placebo and awarded \$3million to the widow of an antidepressant induced suicide victim.¹⁶¹

These are the latest and most compelling in a large number of studies and datasets showing suicide risk associated with antidepressants. Published since 1990, this body of evidence was sufficiently compelling to prompt the FDA to require suicide warnings on all antidepressants in 2004 and Medsafe to warn that the risk of suicide outweighs the benefits of prescribing antidepressants to those under 18.

Harvard trained psychiatrist and medical expert Dr Peter Breggin who testified at the FDA hearings which resulted in SSRI suicide warnings, provides a comprehensive history and analysis of the scientific evidence supporting a causal link between suicide and antidepressants in his 2004 paper *Suicidality, violence and mania caused by selective serotonin reuptake inhibitors(SSRIs): A review and analysis.*¹⁶²

The manufacturers of SSRIs acknowledge that their clinical trials have shown suicide risk associated with the use of their drugs.

The evidence of antidepressant induced suicide risk sits alongside research showing the drugs have little or no benefit to those who take them. Professor Irving Kirsch from Harvard Medical School has undertaken a number of studies of the relative effectiveness of SSRIs and placebo and found that "analyses of the published data and the unpublished data that were hidden by drug companies reveals that most (if not all) of the benefits are due to the placebo effect."¹⁶³ His studies have been replicated numerous times.^{164 165 166 167}

Medsafe advises prescribers that the risk of suicide outweighs any benefits in prescribing antidepressants to children and adolescents and the manufacturers of these drugs advise in their datasheets that the drugs are not recommended for use in those under 18 years as safety and efficacy has not been established in this population.

¹⁶⁴ Fountoulakis K. N., & Möller H. J. (2011). Efficacy of antidepressants: A re-analysis and re-interpretation of the Kirsch data. International Journal of Neuro-Psychopharmacology, 14, 405

¹⁶⁵ Fournier J. C., DeRubeis R. J., Hollon S. D., Dimidjian S., Amsterdam J. D., Shelton R. C., & Fawcett J. (2010). Antidepressant drug effects and depression severity: a patient-level meta-analysis. Journal of the American Medical Association, 303, 47–53. doi: 10.1001/jama.2009.1943

¹⁶⁶ NICE.. (2004). Depression: Management of depression in primary and secondary care [Clinical practice guideline 23]. London, UK: National Institute for Health and Care Excellence; Retrieved from <u>http://www.nice.org.uk/page.aspx?o=235213</u>

¹⁶¹ https://baumhedlundlaw.com/pdf/dolin-trial-transcripts/dolin-day-five-a-3-21-17.pdf

¹⁶² International Journal of Risk & Safety in Medicine 16 (2003/2004) 31–49

¹⁶³ Kirsch I. Antidepressants and the Placebo Effect. Zeitschrift Fur Psychologie. 2014;222(3):128-134. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4172306/

¹⁶⁷ Turner E. H., Matthews A. M., Linardatos E., Tell R. A., & Rosenthal R. (2008). Selective publication of antidepressant trials and its influence on apparent efficacy. New England Journal of Medicine, 358, 252–260.

Medsafe also advises that suicide risk is doubled in those who use antidepressants.

Antidepressant Regulation & Suicide

Following the tragedy of severe birth defects affecting babies born to women prescribed Thalidomide, governments around the world established regimes for the regulation of pharmaceutical drugs. The purpose of drug regulation is to reduce the risk of harm to consumers by ensuring drugs are safe and effective prior to their release to market and setting out the conditions under which medicines can be prescribed and dispensed.

In New Zealand the Medicines Act 1981 sets out the process for pharmaceutical companies to obtain approval to market drugs and prescribers to make them available to consumers and is administered by our regulatory agency, Medsafe.

The Act prescribes a highly permissive regulatory regime which requires little evidence of safety before drugs are approved and no restrictions on doctors prescribing those drugs even where they do not have approval under the Act.

The World Health Organisation in discussing the risks and issues with drug regulation notes the alliance between academia and the pharmaceutical and biotechnology industries which it states "has given rise to serious and widespread concern over ethical and scientific issues" which include

- *the potential for conflict of interest*
- *unethical patient recruitment practices*
- *inadequacy of informed consent*
- lack of capacity to ensure on-going monitoring of clinical trials and adherence to principles of sound and ethical clinical practice
- poor reporting and management of adverse events¹⁶⁸

Investigations into the practices employed by pharmaceutical companies to skew clinical trial data, conceal adverse reactions and overestimate efficacy have given rise to allegations of fraud rather than poor practice and of serious compromise to drug regulators assessments of efficacy and safety.

The FDA point out that even without these issues, drug safety data has severe limitations as a result of the small number of subjects in each clinical trial, the short duration of clinical trials which provide no information on long term effects of drugs, the limits on expert analysis of trial data and the fact that in the real world, patients taking the drugs are likely to be taking other drugs which may cause unanticipated interactions.¹⁶⁹

The New Zealand government's acknowledgement of the doubling of risk of suicidality associated with antidepressant use and the world health organisation recommendation that the drugs be used with caution and the evidence of antidepressant use amongst those who die from suicide in New Zealand is inconsistent with the government's permissive approach to antidepressant regulation.

¹⁶⁸ http://apps.who.int/medicinedocs/en/d/Js4893e/5.html#Js4893e.5

¹⁶⁹ <u>http://www.fda.gov/AboutFDA/Transparency/Basics/ucm269834.htm</u>

Section 25 of the Medicines Act allows for a practice known as 'off label' prescribing. This allows for drugs to be legally prescribed to populations and for conditions for which they are not approved. In New Zealand antidepressants have not received regulatory approval for use in children under 18 years and are only approved for the treatment of depression, obsessive compulsive disorder and premenstrual dysphoric disorder. Section 25 however allows doctors to prescribe the drugs to babies under the age of one and for bedwetting, pain and other unapproved indications. A prescriber providing unapproved drugs or approved drugs for unapproved purposes is not subject to any checks or balances on their practice and faces no accountability process should their patient die as a result of their prescribing unapproved drugs.

Medsafe comment that

The Medicines Act 1981 permits an authorised prescriber to prescribe, administer or arrange for the administration of medicines for the treatment of a patient in his or her care. The medicine and its use may or may not be approved. The terms of section 25 are inclusive and permissive, allowing the authorised prescriber to "procure the sale or supply of any medicine" for a particular patient in his or her care. "Any medicine" includes approved and unapproved medicines. The Act puts no restriction on the use of a medicine, even in a situation in which it is contraindicated.¹⁷⁰

Approaches to Government Regulation of Potentially Harmful Products

Internationally, the regulation of potentially harmful products is categorised as consistent with either the precautionary principle or a permissive approach.

The European Union describes the precautionary principle as "a strategy to cope with possible risks where scientific understanding is yet incomplete" and provides the following definition

When human activities may lead to morally unacceptable harm that is scientifically plausible but uncertain, actions shall be taken to avoid or diminish that harm. Morally unacceptable harm refers to harm to humans or the environment that is

- threatening to human life or health, or
- serious and effectively irreversible, or
- *inequitable to present or future generations, or*
- imposed without adequate consideration of the human rights of those affected.¹⁷¹

Regulation consistent with the precautionary principle places the burden of proof that a product is safe on those proposing its use while a permissive approach allows the use of that product until evidence of harm emerges via monitoring or consumer reports.

The decision on which approach to use depends on the view of governments as to whether the burden of proof should lie with government, consumer or industry and on decisions as to whether the presumption should be that products are unsafe until proven otherwise or that products are safe until proven otherwise. This involves a determination as to whether priority

¹⁷⁰ http://www.medsafe.govt.nz/profs/riss/unapp.asp

¹⁷¹ <u>http://www.precautionaryprinciple.eu/</u>

should be placed on the protection of human health or on the economic health of governments or corporations.

History shows us that damage to human health and safety is usually identified after significant harm has occurred and many have died, and that the type of damage may be totally unexpected and may even be effectively irreversible. ¹⁷²

The European Commission states that

where there are reasonable grounds for concern that potential hazards may affect the environment or human, animal or plant health, and when at the same time the lack of scientific information precludes a detailed scientific evaluation, the precautionary principle has been the politically accepted risk management strategy in several fields.¹⁷³

The Commission notes that while the precautionary principle is generally applied to environmental protection, it considers its scope should also cover the protection of human health.¹⁷⁴ It notes that it is a political responsibility to determine the "acceptable" level of risk for a society and that decision makers must be aware of the "degree of uncertainty attached to the results of the evaluation of the available scientific information" and reverse the burden of proving injury, by treating potentially harmful products as dangerous "unless and until businesses do the scientific work necessary to demonstrate that they are safe."

There are many examples of serious or irretrievable harm arising from a permissive approach to legislation and many examples where the adoption of the precautionary approach would have saved lives and money. A Dutch study has estimated that a ban on the use of asbestos in 1965, when its harm was plausible but unproven, instead of in 1993 when it was accepted as hazardous, would have saved 34,000 lives and €19 billion in clean up and compensation $costs.^{175}$

There are also many examples of where a precautionary approach has saved thousands of people from serious harm or death. Among them, the approach of Dr John Snow who in 1854 managed to persuade officials to remove the handle of a London water pump in order to stop a cholera epidemic despite the evidence for the causal link between the spread of cholera and contact with the water pump being weak and who in doing so prevented thousands of deaths and of Dr. Frances Oldham Kelsey whose insistence that a drug company provide proof of safety prior to approval saved hundreds of thousands of American children from the effects of Thalidomide.

The Precautionary Approach in New Zealand

The New Zealand Treasury reports that while the precautionary principle is applied in a number of policy areas in New Zealand there is no integrated risk management framework in

¹⁷² Paul Johnston & David Santillo 2006 The Precautionary Principle: A Barrier to Innovation and Progress? Greenpeace Research Laboratories University of Exeter.

¹⁷³ EU's Communication on Precautionary Principle https://www.gdrc.org/u-gov/precaution-4.html

¹⁷⁴ EU's Communication on Precautionary Principle https://www.gdrc.org/u-gov/precaution-4.html

¹⁷⁵ Late lessons from early warnings: the precautionary principle 1896–2000 (EEA, 2002) Retrieved from http://www.precautionaryprinciple.eu/

this country with officials and other decision makers determining the level of risk tolerance or aversion acceptable to the New Zealand public.

Treasury reports that there is considerable variation in the way the precautionary principle has been applied and that it is

therefore open to wide interpretation, with similar risks being treated differently and cases ending up in litigation as a result...

In the field of iatrogenic suicide however, New Zealand's statutory bar on legal proceedings against medical professionals means those who are harmed or killed by antidepressants do not have recourse to litigation. This of course has slowed the testing of evidence of harm. As those who determine the tolerance level for risk, successive governments and the Ministry of Health have signalled acceptance of antidepressant induced suicides by rejecting a precautionary approach to antidepressant prescribing.

In New Zealand, the Fisheries Act 1996 and the Hazardous Substances and New Organisms Act 1996 apply a precautionary approach with s7 of the latter act emphasising the need for caution in managing adverse effects "where there is scientific and technical uncertainty about those effects" (Palmer, 2001)¹⁷⁶

In the policy arena, a precautionary approach is proposed as a principle in the Sustainable Development Programme of Action, while precautionary decision-making is an underlying principle in the New Zealand Biodiversity Strategy.

While the precautionary approach in New Zealand is generally applied to environmental rather than human health, the Operational Policy Unit of the Department for Internal Affairs Gambling Regulation division, explicitly states it takes a precautionary approach to the approval of gambling products when considering the approval of potentially harmful gambling products under the Act.

Under the heading "Approach to Managing Uncertainty" It states

Where research or evidence is lacking, uncertain or ambiguous, and there is a reasonable level of concern that reasonably significant and/or widespread harm may occur, the Gambling Act indicates that a precautionary approach should be adopted.⁸ The precautionary approach rejects the notion that risks are acceptable until harm has been proven, or, that risks can continue unmitigated until such time as the effectiveness of a harm minimisation measure is proven. Where concerns about an increase in harm in a particular case are on reasonable grounds; and the anticipated level of harm is reasonably significant and/or widespread...the onus will be on the applicant to demonstrate either that the level of harm (or the potential for it) is not significant, or that any increase in harm can be appropriately ameliorated.¹⁷⁷

¹⁷⁶ <u>http://www.treasury.govt.nz/publications/research-policy/ppp/2006/06-06/06.htm</u>

¹⁷⁷ <u>https://www.dia.govt.nz/diawebsite.nsf/wpg_URL/Services-Casino-and-Non-Casino-Gaming-Internal-Guidelines-for-Harm-Prevention-Harm-Minimisation-and-Responsible-Gambling?OpenDocument#fifteen</u>

By contrast, the regulation of drugs which a large body of evidence suggests cause suicide and a large number of other serious harms, provides a permissive regulatory regime and allows doctors to bypass regulations altogether and prescribe drugs suspected of causing suicide despite those drugs not having been subject to government approval processes.

Engagement in the Mental Health System & Suicide.

As previously discussed, many research studies have shown that it is contact with mental health services or psychiatric hospitalisation rather than mental illness that is the strongest risk factor for suicide. The Suicide Mortality Review Committee (SuMRC) report that half of their sample had accessed the mental health service (and that because of a gap in data reporting, this is likely to be underreported) and that this does not include those who accessed mental health treatment through their GP. They also report a significant finding that a high number of mental health service users accessed services within the week prior to their death by suicide.

Further findings of the SuMRC provide some insight into those findings.

The review noted

a lack of a recovery focus in the care arrangements for those people whose files were reviewed; that is, there was little evidence that services had been hopeful that their clients would recover and statements were made that the person died as a result of their mental illness, which indicated a view that the person's death was inevitable

It also found

for some service users there was a pattern of increasing (the amount of) contact with mental health services, without necessarily identifying whether it was the most appropriate care for that person; in other words, more of the same care was given, without consideration of its efficacy.

Increasingly intense involvement with a service that demonstrates no hope for your recovery and which is having no positive results is highly likely to increase a sense of hopelessness, something strongly associated with suicide.^{178 179 180}

The SuMRC review of internal DHB investigations into the deaths of mental health service users who died from suicide found that

...DHBs that recognised that their services weren't working appeared to respond by providing more of the same. This included more medication (though maybe a different type), offering more inpatient stays, more assessments, more management

¹⁷⁸ Kovacs, M., & Garrison, B. (1985). Hopelessness and eventual suicide: a 10-year prospective study of patients hospitalized with suicidal ideation. *American journal of Psychiatry*, *1*(42), 559-563.

¹⁷⁹ Saltz, A., & Marsh, S. (1990). Relationship between hopelessness and ultimate suicide: a replication with psychiatric outpatients. American journal of Psychiatry, 147(2), 190-195.

¹⁸⁰ Beck, A. T., Brown, G., & Steer, R. A. (1989). Prediction of eventual suicide in psychiatric inpatients by clinical ratings of hopelessness. *Journal of consulting and clinical psychology*, *57*(2), 309.

plans, and more respite. There did not seem to be any long-term view, and few responses were tailored to the individual.

In effect, engagement in specialist mental health services increased risk through exposing people to the factors most strongly associated with suicide – the use of antidepressants and psychiatric hospitalisation.

The report also identified that mental health services often applied damaging labels to people which included being

'well-known' to the service (implying management of current mental health issues would be similar to past management); being ' non-compliant' with medication (even if the person had reported that the medication had intolerable side effects); being seen as malingering (or otherwise 'bad' behaviour);

SuMRC noted that some people were overwhelmed by a large number of service contacts with little perceived added benefit, explaining

One way the mental health services seemed to deal with complexity was by both increasing the number of people involved in someone's care and increasing the amount of contact the person had with services. A danger of this approach is that it increased the risk of developing communication problems within and between services. It may have also led to frustration on the part of both the service and the service user as more and more resources were thrown at the 'problem' and little progress was seen.

They noted that repeated risk assessments and involvement of new people in the care plan meant service users have to "repeat their story over and over again, usually to different people." They comment that

Each risk assessment results in a plan, which may or may not be different to the previous plan. From a mental health service user's perspective, the temptation may be to eventually deny suicidality to make the risk assessments stop.

We believe the evidence points to the deaths occurring not despite but *because* of care provided by the mental health service.

The disempowerment of distressed and suffering individuals and their families and the lack of belief by services that people can return to normal functioning can only give rise to feelings of hopelessness and helplessness that underpin suicide. This view is supported by a study of suicidal behaviours in those who suffered negative life events which found that autonomy, relatedness, and competence, significantly moderated the relationship between those events and suicidality.¹⁸¹

Our research shows that self efficacy – a belief in your ability to control and change your circumstances – is critical to suicide prevention. No matter how difficult or traumatic your life or experiences are, your belief that things will not always be this way and that you have the skills

¹⁸¹ Rowe CA, Walker KL, Britton PC, Hirsch JK (USA) The relationship between negative life events and suicidal behavior: Moderating role of basic psychological needs *Crisis* 34, 233-241, 2013

and ability to effect change gives hope for the future which protects against suicide. Social learning theory tells us perceptions that others have faith in our abilities is critical to self-efficacy. A service that communicates a lack of belief in your capability and a belief that you are a victim of your brain chemistry, destroys self-efficacy and increases suicide risk.

We note that the snapshot of services provided by the SuMRC shows no evidence of resource constraints or lack of access to services which are so often cited as the reasons behind the failure of mental health services. On the contrary, it paints a picture of a system that wastes resources on activities which have no benefit.

Maori & The Mental Health System

Maori suicide rates, particularly those of Maori children and youth, are consistently significantly higher than those of Pakeha. While some of this excess mortality can be ascribed to Maori over representation in negative social and economic indicators, the higher suicide rate remains even after the effect of these factors is accounted for.

While the Ministry of Health argue that the disparity between Maori and Pakeha suicide rates reflects higher rates of mental illness in Maori, the evidence points to colonisation and the impact of a colonial approach to suicide prevention as responsible for much of the gap between Maori and Pakeha suicide rates.

In 2006 the Ministry of Health published a National Mental Health Survey. The survey was conducted in conjunction with a WHO initiative funded by some of the world's largest pharmaceutical companies. Despite the fact that Maori communities made it clear they did not believe it was appropriate to use DSM based assessment tools for Maori participants, the Ministry of Health and survey authors proceeded with their use.

The survey found that 51% of Maori had been mentally ill at some point during their lives and that the risk of developing a mental disorder at some time in their life was 60% for Maori. In effect, being mentally ill was normal for Maori according to the survey. This survey served to institutionalise the view, both within the mental health system and more widely of Maori as particularly vulnerable to pathology.¹⁸² It of course took no account of the impacts of colonisation, racism and discrimination in defining Maori responses to loss, trauma and social stressors as mental illnesses.

In a paper published in 2014, Auckland University's senior lecturer in sociology, Bruce Cohen tracks the history of Maori diagnosis and hospitalisation for mental disorders finding that rates were significantly lower for Maori than Pakeha between 1867 to 1943 but rose sharply during

¹⁸² Cohen, BMZ. 2014 Passive-Aggressive: Māori Resistance and the Continuance of Colonial Psychiatry in Aotearoa New Zealand Disability and the Global South, 2014 Open Access Vol.1, No. 2, 319-339 ISSN 2050-7364

the 50s, 60s and 70s when the trend for over representation of Maori in psychiatric hospitalisation emerged.¹⁸³ This reversal occurred, as it has for other indigenous cultures, as Maori resistance and protest peaked in demonstrations such as that at Bastion Point and the Māori land rights march to Wellington in 1975.

Cohen argues that the results of the National Mental Health Survey should have provoked reflection amongst psychiatrists about whether the results indicated Maori were pathological or that colonial psychiatry was pathologising but instead was used to argue for more resources to identify and treat mental illness in Maori.

The increased funding was sought for research and service delivery which use non-Maori concepts and processes to justify the labelling of Maori as disordered and incarceration of Maori in psychiatric hospitals. Wellington University researchers Lawson Te-Aho and Liu comment that

unless Maori are able to exercise control over the design of interventions for suicide prevention, the solution will continue to be improperly framed in Western psychological traditions as an individualized, deficit-focused problem inside the individual.¹⁸⁴

Rather than develop Maori specific conceptualisations and approaches to suicide prevention, the delivery of mental health services have been tweaked in an effort to make them more culturally appropriate and to therefore overcome Maori resistance to accessing and engaging in mental health treatment. The underlying understanding of and approach to Maori mental illness remained firmly rooted in western psychiatry's notions of individual pathology however.

Cohen argues that the expansion of Kaupapa Maori Services (KMS) has simply appropriated Maori people, language and concepts to engage more Maori in the system. He comments that

While KMS may appear attractive, such services often work alongside and are reliant on mainstream psychiatry, they employ clinicians (whether Pākehā or Māori) trained in western psychiatry, and they are not utilized when hospital admission is considered necessary. Thus, there is a danger that western psychiatry has appropriated the language of Māori well-being and healing in the name of the further expansion and surveillance of the Māori population. The result has been a proliferation of the psychiatric discourse in recent years, one which has been particularly aided by the country's first epidemiological study on the general mental health of the population in 2003/04 (see Oakley Browne et al. 2006).¹⁸⁵

¹⁸³ Cohen, BMZ. 2014 Passive-Aggressive: Māori Resistance and the Continuance of Colonial Psychiatry in Aotearoa New Zealand Disability and the Global South, 2014 Open Access Vol.1, No. 2, 319-339 ISSN 2050-7364

¹⁸⁴ Lawson-Te Aho, K. & Liu, J. Indigenous Suicide and Colonization: The Legacy of Violence and the Necessity of Self-Determination International Journal of Conflict & Violence Vol. 4 (1) 2010, pp. 124 – 133

¹⁸⁵ Cohen, BMZ. 2014 Passive-Aggressive: Māori Resistance and the Continuance of Colonial Psychiatry in Aotearoa New Zealand Disability and the Global South, 2014 Open Access Vol.1, No. 2, 319-339 ISSN 2050-7364

While services have been framed as reflecting a Maori cultural approach and embracing Maori world views, the reality of the attitudes and approaches of those developing and delivering services has been revealed not only in increased diagnosis and incarceration of Maori, Maori over-representation in the use of seclusion and suicide rates but in surveys of attitudes to Maori within services.

A study conducted by Auckland University researcher John Read on the beliefs of New Zealand's psychiatrists about issues pertaining to Maori mental health, found that11% of all psychiatrists and 61% of the New Zealand born male psychiatrists with 10 years of experience - those most likely to develop training, policies, procedures and protocols - believe Maori are genetically pre-disposed to madness. It led Read to ask

Is the belief that a particular race is more genetically predisposed to 'madness' than other races any less racist than the belief that a race is genetically/biologically inferior?

Comments from psychiatrists completing the survey included the following

I mean the Maoris are always going on about the importance of land etc. etc. so why did they bloody well give it away. They went on about the importance of forestries and lakes and then that bloody idiot cut down the tree on One Tree Hill. I feel that they are getting the appropriate services they need, just not using them, medication is the answer – but they just don't take their pills – if cannabis was prescribed, I'd bet they'd bloody take that.

I wish Masters students would stop sending me crap studies like this, about pointless, meaningless, cultural rubbish. They (Maori) only represent about 10 per cent of the population, for God's sake.

I have yet to see a Maori patient present with problems as a result of loss of land.

When asked whether western diagnostic systems are appropriate for use with Maori clients and whether it is appropriate for Pakeha clinicians to work with Maori clients the comments included

We can work with Maori as effectively as Maori work with Maori. At least I am a qualified psychiatrist- not a life-experience qualified Maori.

In response to a question on training for Pakeha psychiatrists working with Maori

There is no need for taha Maori in training programs, as psychiatrists we are taught skills and we apply them in a cookbook manner. My effectiveness as a psychiatrist is not dependent on the colour of my skin, my culture, nor my understanding of bloody Maori culture.

When asked whether services should consider the whole person

How can we work holistically? We can't work spiritually, that's a job for a witchdoctor.

And when asked whether the Treaty should form the basis of health services for Maori

Need should be the basis for provision of health services, not a bloody 150-year-old document.

Sociologists have long pointed out that psychiatry is an agent of social control with Cohen arguing that the role of psychiatry is to enforce the current social order, and colonial psychiatry's role is to maintain white privilege in Aotearoa New Zealand through the use of its power to define as deviant people and their feelings and behaviours.

While social deprivation explains some of the excess suicide mortality in Maori, studies which control for social factors still find greater suicide risk for Maori. We believe the work of Cohen, Read and Lawson Te-Aho and the fact that Maori have higher engagement rates with mental health services is evidence that the mental health system in New Zealand not only fails to acknowledge the role of racism, discrimination, colonisation and marginalisation as drivers of Maori suicide but, through its own paradigms and practices, increases exposure to those factors and thus increases suicide risk for Maori.

Genetics & Iatrogenic Suicide

The scope of human variation is vast even between members of the same ethnic groups and families with these differences including genetic differences in the way in which individuals metabolise drugs. They result in increased risk of adverse events for some and increased risk of lack of effectiveness for others.

As genetic testing is not routinely performed, drug prescribers have no knowledge prior to prescribing whether their patients have a genetic variation which may significantly impact their risk of adverse reactions or non-response to the drug being prescribed.

Until recently drugs have been prescribed in a 'one size fits all' paradigm but the advent of pharmacogenetics allows for adjustment to individual variation and personalised medicine.

The majority of drugs, and of antidepressants particularly, are metabolised by the CYP2D6 enzyme, an enzyme strongly affected by genetic variability. In any sample of patients, some individuals will be CYP2D6 deficient; others will have normal CYP2D6 activity; and still others will have increased activity.

Pharmacogenetics groups people into four categories- poor, intermediate, extensive and ultrarapid metabolisers. Extensive metabolisers (EMs) have two functional alleles and are efficient metabolisers of drugs processed on the CYP2D6 pathway, intermediate metabolisers (IMs) have only one functional allele and therefore reduced metabolism activity while poor metabolisers (PMs) have no functional alleles and no functional activity. Ultra-rapid metabolisers (UMs) have more than two alleles and increased activity. Intermediate and poor metabolisers are subject to higher risk of adverse drug reactions because their lack of functional alleles slows their ability to clear drugs from their systems. Ultra-rapid metabolisers by contrast clear drugs rapidly – before they are able to confer any therapeutic effect. Studies have shown that 75-85% of the population are extensive metabolisers while the rest of the population is made up of intermediate metabolisers (10-15%), poor metabolisers (5-10%) and ultrarapid metabolisers (1-10%).¹⁸⁶

The majority of genetic variations to CYP2D6 result in absent or reduced enzyme activity. For these poor and intermediate metabolisers any medication that is metabolised and/or eliminated through this pathway may act differently to the way a doctor would expect from observation of the majority of their patients who are extensive metabolisers. These patients are at risk of two issues depending on the nature of the drugs they are prescribed. With some drugs they are likely to experience elevated drug concentrations which increase their risk for adverse reactions. In other drugs which require the presence of a functional enzyme in order to work, they are likely to have no response to the drug at all.

Many studies have shown the role an individual's metabolism profile has on their risk of adverse drug effects. In a study of 100 consecutive psychiatric inpatients tested for CYP2D6, the number of adverse effects in patients treated with drugs metabolised on this pathway were highest in PMs and higher in IMs than in EMs or UMs.¹⁸⁷ Similarly, studies have found UMs highly over-represented in non-responders to antidepressant therapy.⁵¹

Suicidal thinking and behaviour are well documented adverse reactions to SSRIs sufficiently established in clinical studies to have prompted suicide warnings on all antidepressants in the United States, Canada and other countries including New Zealand.

Antidepressants that are known to be processed via the CYP2D6 enzyme are very commonly prescribed in this country and include amitriptyline, clomipramine, desipramine, duloxetine, fluoxetine, fluoxetine, fluoxetine, imipramine, mirtazapine, nortriptyline, paroxetine, sertraline, and venlafaxine.¹⁸⁸

Poor and intermediate matabolisers, an estimated 25% of the population, are at increased risk of suicidality and other adverse reactions in taking these drugs with the prescriber having no knowledge of this increased risk at the time of prescribing. Studies of those who have died by suicide or committed acts of violence while taking SSRIs have shown most are poor or intermediate metabolisers.¹⁸⁹

¹⁸⁶ U A Meyer, 2000 Pharmacogenetics and adverse drug reactions Lancet 2000; 356:1667–71

¹⁸⁷ Chou WH, Yan FX, de Leon J, Barnhill J, Rogers T & Cronin M *et al.* Extension of a pilot study: impact from the cytochrome *P*450 2D6 polymorphism on outcome and costs associated with severe mental illness. *J Clin Psychopharmacol* 2000; 20: 246–251

¹⁸⁸ Commonly prescribed antipsychotics processed via this pathway include aripiprazole, clozapine, fluphenazine, haloperidol, metoclopramide, olanzapine, perphenazine, quetiapine, risperidone, and thioridazine.

¹⁸⁹Eikelenboom-Schieveld SJ, Lucire Y, Fogleman JC. The relevance of cytochrome P450 polymorphism in forensic medicine and akathisia-related violence and suicide. J Forensic Leg Med. 2016 Jul;41:65-71. doi: 10.1016/j.jflm.2016.04.003. Epub 2016 Apr 9.

¹⁹⁰ Lucire, Y. & Crotty, C 2011 Pharmgenomics Pers Med. Antidepressant-induced akathisia-related homicides associated with diminishing mutations in metabolizing genes of the CYP450 family 2011; 4: 65–81.

To complicate matters, in addition to the fact that those who have variations in enzyme activity are at risk of adverse reactions, some antidepressants are acknowledged by their manufacturers have been shown to suppress gene function and produce reduced enzyme activity in extensive metabolisers. In effect these drugs cause normal metabolisers to behave as poor metabolisers. Fluoxetine and Paroxetine, are particularly potent inhibitors of CYP2D6 and invidividuals taking these drugs may have almost no CYP2D6 activity despite being extensive or normal metabolisers.¹⁹¹

A study which examined this phenomenon reported that fluoxetine at a long-term (2-3 week) dose of 20 mg/d converted an average of 43% of EMs to PMs and at 40 mg/d converted 95% of patients from EMs to PMs.¹⁹²

Clinical pharmacologist, Emeritus Professor of Pharmacology and expert in adverse drug reactions related to the cytochrome P450 enzyme, Professor Urs Myer explains how alterations to the dose of an antidepressant is critical to safety and efficacy using the example of the antidepressant Nortryptyline in which studies have shown extensive metabolisers reach an optimal concentration of the drug at 75-150 mg per day while PMs need only 10-20mg per day to reach the same concentration and UMs require 300-500mg per day. Myer describes the evidence for the role of genetic variation in adverse drug reactions as "incontrovertible"¹⁹³ and comments

> Obviously, if the genotype or phenotype of the patient is not known, poor metabolisers will be overdosed and be at high risk of drug toxicity, whereas ultrarapid metabolisers will be underdosed.¹⁹⁴

This explains why a study conducted by the Ministry of Health in 2007 which showed a causal relationship between increased antidepressant prescribing and increases in serious suicide attempts, found Fluoxetine, Paroxetine and Nortriptyline were the drugs most implicated in this increase.¹⁹⁵

The absence of routine genetic testing severely undermines the ability of doctors to make drug dose alterations to optimise effective responses and minimise adverse reactions to antidepressants.

Because adverse reactions to antidepressants mimic the symptoms of depression and anxiety, rather than switching to a drug that does not use the CYP2D6 pathway or abandoning medication in favour of non-drug treatment options, the prescriber is likely to increase the dose

¹⁹¹ John R. Horn, PharmD, FCCP, and Philip D. Hansten, PharmD, 2008. Get to Know an Enzyme: CYP2D6 http://www.pharmacvtimes.com/publications/issue/2008/2008-07/2008-07-8624

¹⁹² Nassan, Malik et al. Pharmacokinetic Pharmacogenetic Prescribing Guidelines for Antidepressants: A Template for Psychiatric Precision Medicine Mayo Clinic Proceedings, Volume 91, Issue 7, 897 - 907

¹⁹³ U A Meyer, 2000 Pharmacogenetics and adverse drug reactions Lancet 2000; 356:1667-71 ¹⁹⁴ Ibid

¹⁹⁵ Ministry of Health. 2007. Patterns of Antidepressant Drug Prescribing and Intentional Self-harm Outcomes in New Zealand: An ecological study. Wellington: Ministry of Health.

http://www.moh.govt.nz/notebook/nbbooks.nsf/0/E3F37A7185817D15CC25732100764040/\$file/patternsantidepressant-drug-prescribing-v1.pdf

of the drug or switch to another drug processed by the same enzyme exposing their patient to even greater levels of risk. Similarly the response of prescribers to lack of therapeutic effect is generally an increase in dose or switch to another similar drug rather than a switch to non-drug alternatives.

This is a well-recognised phenomenon with Myer stating

Adverse effects clearly occur more frequently in poor metabolisers and may be misinterpreted as symptoms of depression and lead to erroneous further increases in the dose.¹⁹⁶

The advice of Medsafe and other regulators that depression rather than adverse drug reaction is the strongest risk for suicidality, despite evidence that this is incorrect, steers doctors towards increasing drug dose or switching drugs rather than identifying an adverse drug reaction and discontinuing pharmacotherapy.

Given this evidence, it may be expected that genetic testing for metabolism would be widely undertaken as a means of supporting clinical decision making around prescribing but this is not the case.

A Clinical Pharmacogenetics Implementation Consortium (CPIC), established to review and develop peer-reviewed guidelines and address clinical barriers to implementation of pharmacogenomic tests into practice notes that

Despite the growing evidence of the clinical importance of pharmacogenetics, its adoption into clinical practice has been hindered. This problem is attributed in part to the fact that health care professionals feel uncomfortable ordering/interpreting these tests, the lack of training in pharmacogenetics, and the continuously and rapidly emerging data in the field. The introduction of multidisciplinary pharmacogenetic education into the everyday workflow of prescribers through electronic alerts at the time of prescribing has been suggested.¹⁹⁷

Between people with different ethnic backgrounds, the pattern of genetic variations differs dramatically.¹⁹⁸ Many studies have found that some ethnic groups have unique variations not found in other ethnic groups while the prevalence of PMs, IMs and UMs varies widely between different ethnic groups and geographic locations. This data provides a possible explanation for differing patterns of adverse reactions and non-response in specific regions and countries of the world and has led researches to recommend that ethnic origin must be considered in drug prescribing.¹⁹⁹

 $^{^{196}}$ Ibid

¹⁹⁷ Nassan, Malik et al. Pharmacokinetic Pharmacogenetic Prescribing Guidelines for Antidepressants: A Template for Psychiatric Precision Medicine Mayo Clinic Proceedings, Volume 91, Issue 7, 897-907

¹⁹⁸ Shu-Feng Zhou, Jun-Ping Liu, and Balram Chowbay Polymorphism of human cytochrome P450 enzymes and its clinical impact Drug Metabolism Reviews Vol. 41, Jss. 2,2009

¹⁹⁹ U A Meyer, 2000 Pharmacogenetics and adverse drug reactions. Lancet 2000; 356:1667-71

The few studies of the prevalence of PM, IM and UM between NZ Maori and Caucasian New Zealanders have shown clear differences between the two ethnic groups.²⁰⁰²⁰¹²⁰²

While Pakeha New Zealanders have higher rates of poor metabolism for drugs metabolised by the CYP2D6 enzyme, Maori have higher rates of poor metabolism for drugs metabolised at CYPC19.

A study published in the New Zealand Medical Jounal in 2008 found differences in prevalence of PMs, IMs, EMs and Ums between Maori and Pakeha on three drug metabolism pathways and stated that

These findings may ultimately have implications for clinicians prescribing commonly used drugs metabolised via these enzymes such as fluoxetine and warfarin. For example, if a patient with Māori ancestry has a different likelihood of possessing variant CYP450 alleles this might alter their risk of adverse events or otherwise influence successful treatment outcomes.²⁰³

An article published in the same journal in 2010 described genetic variation between Maori and NZ Europeans where one variation on the *CYP2C19* enzyme was present in 24% of Maori in comparison to only 15% of Pakeha. On another, Maori and Pasifika people had four to five times the incidence of reduced functional metabolism as Pakeha.²⁰⁴ Both variations result in reduced metabolism of SSRI antidepressants.

The authors claim these differences should be considered by doctors when interpreting clinical trial data and that using pharmacogenetics to individually tailor treatment may improve outcomes to a greater extent in some ethnic groups than others. They further state that

Taking this hypothesis one step further, it is possible that therapy guided by genomics may help reduce the disparity in treatment outcome in populations such as Māori.²⁰⁵

While Medsafe bases its advice, and prescribers their decisions, on clinical trial data, these trials do not include either Maori or Pakeha New Zealanders. This fact and a lack of

²⁰⁵ Ibid

²⁰⁰ Gearry RB, Lea RA, Roberts RL, Chambers GK, Barclay ML, Kennedy MA. CARD15 allele frequency differences in New Zealand Maori: ancestry specific susceptibility to Crohn's disease in New Zealand? Gut. 2006;55(4):580. doi:10.1136/gut.2005.085464.

 ²⁰¹ Lea RA1, Roberts RL, Green MR, Kennedy MA, Chambers GK. N Z Med J. 2008 Apr 18;121(1272):33 7.Allele frequency differences of cytochrome P450 polymorphisms in a sample of New Zealand Māori.

²⁰² Patrick Gladding Personalised medicine in New Zealand The New Zealand Medical Journal NZMJ 18 April 2008, Vol 121 No 1272; ISSN 1175 8716 Page 10 http://www.nzma.org.nz/journal/1211272/3003/ ©NZMA

 ²⁰³ Lea RA1, Roberts RL, Green MR, Kennedy MA, Chambers GK. N Z Med J. 2008 Apr 18;121(1272):33 7.Allele frequency differences of cytochrome P450 polymorphisms in a sample of New Zealand Māori.

²⁰⁴ Patrick Gladding, Harvey White, Mark Webster Prasugrel, Maori, and personalised medicine in New Zealand NZMJ 5th March 2010, Volume 123 Number 1310

information on the prevalence of genetic variations amongst our population and particularly Maori and Pacific New Zealanders, means we should be cautious about claims of efficacy and safety of drugs arising from clinical trial data. Quite simply, this data tells us little about how New Zealanders are likely to respond to the drugs being tested.

In the future, genetic testing to identify slow and fast metabolizers of a wide range of drugs may be conducted early in life, on a one-time basis, with the information placed on file in an individual's medical record. The test involves a simple cheek swab and results are generally available within 48 hours.

Internationally, several psychiatric hospitals have already adopted *CYP2D6* testing before treating a patient with antidepressant or antipsychotic drug ²⁰⁶ and the pharmaceutical industry attempts to control these risks by screening new drugs early in development and dropping those drugs which are metabolised on the CYP2D6 pathway where alternatives are available.²⁰⁷

The Mayo Clinic provide a service whereby when prescribing antidepressants to a poor or intermediate an alert will appear on the computerized physician order entry system and advised that in the absence of clear FDA guidelines for dose adjustment, an alternative medication that is metabolized by another enzyme should be considered.²⁰⁸

A similar system could be instituted in New Zealand via an extension to the current New Zealand Medical Warning System whereby the Centre for Adverse Reaction Monitoring records warning or danger alerts for medicines for individual patients against their National Health Index (NHI) number in the MWS. The system is designed to alert hospitals of potential known adverse reaction risks for individuals when their medical records are accessed but could be extended to store individual metabolism data and alert GPs that their patients are poor, intermediate or ultra-rapid metabolisers and provide data on drug dosage alterations or similar drugs processed on pathways for which the patient is an extensive metaboliser.

It would be important that doctors and patients understood this testing identifies increased risk but does not suggest safety or efficacy in those who are extensive metabolisers. Epigenetics tells us that drug metabolism is altered by a myriad of factors and that even those with normal metabolism are at risk of adverse drug events as a result of lifestyle factors and the prescribing of multiple drugs. Knowing that an individual is at additional risk of sudden onset treatment emergent suicidality or violence however may persuade prescribers to look to nonpharmacological approaches to supporting their patients through emotional distress.

In addition to the benefits to patient safety, genetic testing has the potential to provide significant cost savings by reducing the economic cost of adverse reactions which are estimated to be as much as \$30.1 billion annually in the USA as a result of increased hospitalization,

²⁰⁶ Shu-Feng Zhou, Jun-Ping Liu, and Balram Chowbay Polymorphism of human cytochrome P450 enzymes and its clinical impact Drug Metabolism Reviews Vol. 41, Iss. 2,2009

²⁰⁷ M Ingelman-Sundberg Genetic polymorphisms of cytochrome P450 2D6 (CYP2D6): clinical consequences, evolutionary aspects and functional diversity The Pharmacogenomics Journal (2005) 5, 6–13. doi:10.1038/sj.tpj.6500285 Published online 19 October 2004

²⁰⁸ Nassan, Malik et al. Pharmacokinetic Pharmacogenetic Prescribing Guidelines for Antidepressants: A Template for Psychiatric Precision Medicine Mayo Clinic Proceedings , Volume 91 , Issue 7 , 897 – 907

lengthening of hospital stay, additional clinical investigations and the prescription of additional medications to control the adverse effect.²⁰⁹

Through the gathering of data on genetic variation amongst antidepressant users who die from suicide, the Coroners Court has the opportunity to play a key role in progressing our understanding of how the risks of adverse reactions and non-response to antidepressants in the New Zealand population generally and in Maori and other specific ethnic groups within New Zealand.

This data could then be used to support medical professionals to prescribe with far more precision, to respond appropriately to treatment emergent suicidality and to avoid the use of antidepressants in those who are likely to be at elevated risk of suicide either through adverse reactions or non-response. Metabolism testing by pathologists post mortem would provide valuable data on whether these variations in the New Zealand population for whom no research exists predict completed suicide and should be a mandatory component of post mortem data gathering by Coroners.

In mandating such testing, the court could make significant progress towards realisation of its goal of preventing further suicides.

This makes both social and economic sense with recent analysis finding a favourable costbenefit ratio for gene-guided antidepressant treatment.²¹⁰

An American pharmacogenomics company has conducted a preliminary study which identifies those at high and low risk of antidepressant induced suicide with 90% accuracy. Our communications with this company indicate they would be very receptive to conducting a study of the genetics of New Zealand suicide victims were the Chief Coroner to make blood samples available.

In our correspondence with Medsafe we asked whether genetic testing would enhance medicine safety to which they replied

The provision of genotyping results specific to the metabolism of medicines would be useful particularly for CARM's causality assessments of spontaneous adverse reaction reports. If this information was provided, it could be used to assist in conducting causality assessments.

NZ Government Failure to Collect, Assess & Communicate Suicide Data

²⁰⁹ Sultana, J., Cutroneo, P., & Trifirò, G. (2013). Clinical and economic burden of adverse drug reactions. Journal of Pharmacology & Pharmacotherapeutics, 4(Suppl1), S73–S77.

²¹⁰ Chiara Fabbri, Alessandro Minarini, Tomihisa Niitsu, and Alessandro Serretti Understanding the pharmacogenetics of selective serotonin reuptake inhibitors Expert Opinion on Drug Metabolism & Toxicology Vol. 10, Iss. 8, 2014

Death Investigations

Completed suicide cannot ethically be studied through controlled trials. Clearly, where suicide risk emerges, researchers must intervene rather than observe the natural course of progression from suicidality to completed suicide. For this reason, the gathering and analysis of data on those who have died from suicide is critical to the understanding of the causes of suicide deaths.

In New Zealand three key forms of death investigation are conducted when someone dies from suicide. These are conducted by the Coroners Court, DHBs or other government agencies with which the person was involved immediately prior to their death and by the newly established Suicide Mortality Review Committee.

Coroners Investigations

The Coroners Act states the purpose of Coronial enquiries is to prevent deaths and promote justice by identifying the causes and circumstances of sudden or unexplained deaths and making recommendations or comments that may reduce the chances of further deaths in similar circumstances.

There is no evidence that Coronial recommendations in New Zealand have prevented any suicide deaths. In particular where suicide victims have been prescribed antidepressants, the Coroner's Court has deliberately ignored the evidence of scientists, families of the deceased and Medsafe and has refused to record whether suicide victims were taking antidepressants let alone assess the role of the drugs in individual suicides to support the making of recommendations which may prevent further self inflicted deaths.

In December 2008, Wellington Coroner Ian Smith met with the Medicines Adverse Reactions Committee (MARC). The meeting minutes record that he

addressed the meeting to advise the Committee of his concerns regarding the use of SSRI antidepressants. In his experience, patients are not adequately informed of the risks of the use of the SSRIs and other antidepressants. In particular, the risk of clinical worsening of depression and suicide risk, as described in product datasheets, should be highlighted to patients, and also to their immediate families. He expressed concern that the follow-up system for GP appointments was not robust enough, and patients diagnosed with depression who do not attend a scheduled appointment are not adequately followed up. He considered that counselling should be accessible, and always used in conjunction with medication.²¹¹

The minutes further record that

The Committee expressed their agreement with the Coroner's comments, and recommended that a formal request be made to the Coroner's Office to forward the decisions relating to medication related cases directly to the NZPhvC²¹².²¹³

²¹¹ Minutes of the 136th Meeting of the Medicines Adverse Reactions Committee - 11 December 2008 <u>http://www.medsafe.govt.nz/profs/adverse/Minutes136.htm</u>

²¹² New Zealand Pharmacovigilance Centre

We submitted an OIA requesting the numbers of reports made to the NZPhvC where a suicide victim had been prescribed an SSRI between 2000 and 2016. We were advised by the Ministry of Health that two reports were made by Coroners or Coronial Services in this 16 year period.

Coroners have the ability to make a substantial contribution to the work of the SuMRC and the understanding of suicide causality in general. They can do this through the gathering of all relevant data during their investigations into suicide deaths. Not only is this not done, but the report of the SuMRC showed that despite the committee's requests, the Chief Coroner did not contribute any data to their review.

The Coroners Act gives Coroners wide powers of information gathering with S79(1) allowing coroners to

admit any evidence the coroner thinks fit, whether or not it would be admissible in a court of law.

Despite this mandate and despite increasing rates of suicide, the Coroners Court has in recent years reduced the amount of information it gathers rather than increasing it. While 100% of suspected suicides were the subject of an inquest prior to 2007, currently fewer than 10% of these deaths are subject to an in-depth investigation into the circumstances surrounding the death.

The vast majority of cases are determined by Coroners 'on the papers' – in chambers hearings where evidence gathered by the police is not subject to cross examination and where families and other parties including the Coroner, do not have the opportunity to question witnesses or raise issues of concern. In an even more concerning move, the current Chief Coroner has outsourced decision making in cases coming before the Coroners Court – to the law firm whose experience and understanding of suicide arises from their role in defending mental health services against allegations by families that their negligence and prescribing of psychotropic drugs caused the suicide of their loved one.

The Coronial Services website reports that the following information is collected about people who have died

- name
- age
- sex
- date of birth
- place of usual residence
- how long they lived in New Zealand
- country of birth
- employment
- marital status
- ethnicity
- date of notification of death
- time/location of incident

²¹³ Minutes of the 136th Meeting of the Medicines Adverse Reactions Committee - 11 December 2008 <u>http://www.medsafe.govt.nz/profs/adverse/Minutes136.htm</u>

- activity at time of incident
- if a work-related incident, occupation at the time of incident
- industry the person worked in at the time of incident
- intent (both suspected at time death reported and final)
- mechanism of injury (primary, secondary and tertiary)
- object or substance involved (primary, secondary and tertiary)
- medical cause(s) of death (as specified in post mortem report)
- where the death is related to a motor vehicle accident:
 - vehicle type
 - o driver/passenger
 - counterpart (such as, if another vehicle is involved)
 - context (that is, where it happened, what type of accident it was)

These factors are characterised by the fact they are far less modifiable than those which could be collected and which Chief Coroner Deborah Marshall has identified as known risk factors for suicide - a recent relationship break-up, recent engagement with the police and/or mental health services and unemployment. Why, if the Chief Coroner has identified these risk factors are they not routinely collected by the Coroners Court in addition to factors such as gender and age which while useful to know are not open to modification?

In addition to the factors identified by the Chief Coroner, the Coroners Court fails to collect information on the sexual orientation of those who die by suicide, recent involvement with the family or employment court, involvement with CYFS or mental health services, bereavement, bullying or harassment, drug and alcohol use and a range of other factors known to be associated with suicide and which would provide useful data for identifying the relative weight of suicide risk factors, early warning signals and strategies for suicide prevention.

Section 57A of the Coroners Act provides for coroners to make recommendations or comments for the purpose of reducing the chances of further deaths occurring in circumstances similar to those in which a death they are investigating occurred along with an explanation of how the recommendation or comment may, if drawn to public attention, reduce the chances of further deaths occurring in similar circumstances. The gathering of a broad range of good quality data is a necessary precursor to the making of comments and recommendations which fulfil the purpose of this section.

A research study on the utility of Coroners recommendations on improving the health system found that as a result of poor quality recommendations, failure to consult, appointing inappropriate experts, failing to review research scientific evidence and failing to access previous similar cases to assess patterns New Zealander Coroners recommendations "have failed to have a significant impact on preventing adverse events."²¹⁴

In 2016 the Suicide Mortality Review Committee reported that 50% of men aged 18-45 who had died by suicide between 2007 and 2011 had been prescribed antidepressants. Despite the Coroners Act providing a clear mandate and mechanism for collection of this data, it was not collected by the Coroners investigating these deaths. Given the strength of evidence that

²¹⁴ Moore, J. 2014 Coroners' recommendations about healthcare-related deaths as a potential tool for improving patient safety and quality of care 18th July 2014, Volume 127 Number 1398

antidepressants increase suicide risk, and the regularity with which this factor has been brought to the attention of the Coroners Court, it is difficult to understand why this would be the case.

It is worth noting that a large study of 35 countries during the period from 1979 to 2007 found that as forensic and physical autopsy rates fell, so did reported suicides. The authors suggest that falling suicide rates may be an artefact of reduced numbers of death investigations rather than a true drop in rate.²¹⁵

This is particularly relevant to New Zealand as the report of the Suicide Mortality Review Committee showed that Coroners are not collecting data on the use of prescription drugs and alcohol in those who die from suicide. They state that

Data relating to alcohol and drug use (including prescription/pharmacy drugs) was difficult to analyse due to a large number of missing variables. For example, for approximately a third of people in all three subgroups there was no data or 'not stated' data about alcohol in the blood at the time of their deaths. The analysis of rangatahi Māori data suggests that 98/194 (51%) may have had problematic alcohol and/or drug use, although this needs to be interpreted with caution due to the quality of data. For men and mental health service users, data on prescription/pharmacy drug involvement in death was 'unknown' for 74% and 73% of deaths, respectively.²¹⁶

It is difficult to understand why Coroners are not requiring toxicology testing for drugs and alcohol as part of post mortem examinations when this data is critical to understanding the role these substances play in suicide deaths.

DHB Investigations

Following the suicide of someone under the care of specialist mental health services, DHBs are required to undertake a review of factors that contributed to the death and identify any service changes required. These reviews are generally of poor quality and invariably find the DHB did not contribute to the death while making recommendations for minor changes to systems and processes. The findings are offered up to Coroners as evidence that further deaths will be prevented as a way of protecting the service against adverse findings.

If conducted properly, these reviews could be aggregated to identify patterns and common factors in suicide deaths but no such process is undertaken.

The SuMRC advise that

Following a death by suicide, health and sometimes social agencies conduct formal or informal reviews of varying nature and quality. However, such reviews may be to some extent focused on the needs of services and agencies. There is no formal mechanism to bring these reviews together to identify common areas for improvement. Sustainable

²¹⁵ S C Sim, M Kacevska, M Ingelman-Sundberg. (2013) Pharmacogenomics of drug-metabolizing enzymes: a recent update on clinical implications and endogenous effects. *The Pharmacogenomics Journal* 13:1, 1-11. Online publication date: 23-Oct-2012

²¹⁶ Suicide Mortality Review Committee <u>http://www.hqsc.govt.nz/assets/SUMRC/PR/SuMRC-full-report-May-2016.pdf</u>

and systematic oversight of these processes, with an effective feedback loop, is often missing.

They also commented that these reports "seemed to treat the person with little respect" and that "The national policy emphasis on a recovery focus for mental health services was not evident within most of the DHB reports."

The investigations conducted by mental health services into their management of those who died from suicide almost invariably identified that the person had 'complex issues' but the SuMRC note that in fact their issues were no more complex than those of most service users.

The review notes

There was little evidence that services had been hopeful that their clients would recover. This may be because the reports were written in hindsight. However, statements were made that the person died as a result of their mental illness, which sounded as if that person's death was inevitable. Such a conclusion may reflect that the service may have:

- considered that nothing could be done to prevent the death
- *not known how to prevent the death*
- written the report with consideration to liability.

The SuMRC note that in their review of service user suicide deaths

There were no examples where the person, their family and the mental health services worked together as equals to help the person through their suicidality in the sample examined.

They further note that

A majority of the reports reached a conclusion that there were no identifiable direct mental health service contributing factors leading to the person's suicide. These deaths were seen as 'not preventable', a 'tragic outcome', or solely as a result of the person's mental illness. Deaths were viewed as occurring despite the quality of care provided by the mental health service.

SuMRC Investigations

In 2014 the government decided to pilot a suicide mortality review. Other New Zealand reviews include the Child and Youth Mortality Review and the Family Violence Mortality Review. We applaud this decision and believe the pilot produced some very useful insights into suicide deaths in this country.

Less impressive however is the support provided to the committee conducting the review. They report that

Due to data quality issues, data was not provided by the Office of the Director of Mental Health.

Given the government's view that suicide is caused by mental illness, it is shocking that the Director of Mental Health's data was of such poor quality that it was not able to be provided to the committee reviewing suicide deaths. We are left wondering if there are other reasons the Director did not want to provide data to the reviewers.

The Suicide Mortality Review Committee (SUMRC) is an independent committee that reviews suicide deaths and advises on how to reduce the number of suicide deaths. In response to concerns that New Zealand has failed to achieve the reductions in suicide rates evidenced in other countries, and that suicide rates for maori youth have increased by 65% (and 90% of young Maori women), in 2014 a trial SuMRC was established to test the benefits that can be gained from mortality review in the area of suicide.

While the SuMRC was hampered by lack of timely provision of data from government agencies, its report showed it was able to provide new insights into suicide in New Zealand. A cost benefit analysis found it represented good value for money.

Monitoring of Antidepressant Suicide Risk in New Zealand

The official government advice on suicide risk associated with antidepressants was first formulated in 2004 and despite the emergence of significant new evidence on the harms associated with the drugs, this advice has not changed.

In a letter to parliament in 2016, Director of Mental Health John Crawshaw advised that

The risk of adverse drug events is widely acknowledged and for this reason the safety of psychiatric medication is under constant scrutiny...²¹⁷

and that

there will always be a need to remain vigilant about medication side effects, opportunities for quality improvement in processes and the updating and implementation of clinical guidelines.²¹⁸

In light of recent new information on the suicide risk of antidepressants, this claim deserves examination.

We submitted an OIA requesting information on the government's attention to and assessment of the work of two of the world's best known researchers on antidepressant induced suicide risk, Professor Peter Gotzsche and Professor David Healy. We asked for all documents including emails that mentioned these two researchers. We were advised that the government found no documents that mentioned Gotzsche – a clear indication that his study showing a doubling of

²¹⁷ <u>https://www.parliament.nz/resource/en-</u> NZ/51SCHE_EVI_51DBHOH_PET<u>68353_1_A526898/48cce3f96f75d130ec6b83b3367b22081388f9fa</u>

²¹⁸ <u>https://www.parliament.nz/resource/en-</u> NZ/51SCHE_EVI_51DBHOH_PET68353_1_A526898/48cce3f96f75d130ec6b83b3367b22081388f9fa

the risk of antidepressant induced suicide and violence which has received global attention, has been ignored by the Ministry of Health.

In relation to Healy, the Ministry provided one email. The email was from the Senior Policy Analyst responsible for New Zealand's National Depression Initiative to the Ministry of Health. The email claims that in relation to antidepressant induced suicide Professor Healy is

somewhat out on a limb on the topic and hasn't actually had much research published on the topic that I can find, just lots of opinion pieces.. I haven't included any of David Healy's work in the evidence brief because the relevant material was not published in a peer reviewed journal.

In fact psychiatrist and psychopharmacologist, Professor Healy's position is supported by a body of evidence of sufficient weight and credibility that it resulted in suicide warnings for SSRIs being imposed by the FDA and Medsafe. As of 5 November 2015 Professor Healy has published 21 books, 56 book chapters and no less than 211 research studies in peer reviewed journals.²¹⁹ He has also been an expert witness in many trials in Europe and the United States involving antidepressants and suicide.²²⁰

Having ascertained that the Ministry of Health had failed to critically assess the research report of Professor Gotzsche, we filed an OIA with the Ministry specifically asking whether Medsafe and the Medicines Adverse Reactions Committee (MARC) had reviewed Professor Gotzsche's study.

We were advised that

Medsafe has not reviewed the study on suicidality and aggression during antidepressant treatment which Professor Peter Gotzsche was involved in. Medsafe is not currently actively reviewing the risk of suicide and/or aggression in children and adolescents.

They go on to say that

The doubling in risk of suicidality in children and adolescents with major depressive disorder who are taking antidepressants is already known. In addition, symptoms of anxiety, agitation, panic attacks, insomnia, irritability, hostility (aggressiveness), impulsivity, akathisia, hypomania and mania have been reported in adults, adolescents and children being treated with antidepressants.

Medsafe appear to have ignored the fact that Gotzsche's study did not limit its analysis of suicide risk to those children diagnosed with major depressive disorder but included children diagnosed with non-insulin dependent diabetes, Fibromyalgia, Diabetic neuropathic pain, imitative symptoms of benign prostatic hyperplasia, social phobia, panic disorder, stress urinary incontinence, post-traumatic stress and OCD.

Medsafe advise that the MARC's role is to provide expert advice on medical and scientific evaluations of medicines safety issues which are referred to it by Medsafe but that Medsafe did not refer Gotzsche's study to the MARC.

²¹⁹ http://inhn.org/fileadmin/Profiles/Healy_List_of_pub.pdf

²²⁰ https://davidhealy.org/bio/

While Medsafe had ignored international research on the role of antidepressants in suicide, we thought they may have paid greater attention to the report of the New Zealand Suicide Mortality Review Committee (SuMRC). We considered that the Committee's finding that 50% of those who die from Suicide in New Zealand have been prescribed antidepressants may have prompted Medsafe to review their advice on the efficacy and safety of the drugs.

In our OIA we asked what action Medsafe and MARC had taken in response to the Suicide Mortality Review Committee's findings on antidepressant prescribing and if they had taken no action, why not. We also asked whether Medsafe considered these findings to be a signal of an adverse drug effect and what action they intended to take to investigate the causal relationship between the use of antidepressants and the suicide deaths analysed by the SuMRC.

Their response was

Medsafe was not made aware of the Suicide Mortality Review Committee's (SuMRC) findings. Therefore no action has been taken and the report has not been referred to MARC for advice.

They further advised that they did not intend to undertake any assessment of a causal link between the use of antidepressants by those who had died from suicide as they only conduct such assessments where cases are reported to the Centre for Adverse Reaction Monitoring.

Knowing that the SuMRC reported 635 of the men aged 25-34 who died from suicide between 2007 and 2011 had a record of having been prescribed an antidepressant, we searched the CARM adverse reaction report database for all antidepressants prescribed in New Zealand to see how many of these suicides had been reported to CARM as possible adverse drug reactions and would therefore be subject to an assessment of whether the drug played a role in their death. The number of suspected adverse drug reactions reported for subjects included in the SuMRC was zero.

Medsafe's decision to rely solely on adverse reaction reports to CARM in assessing the links between suicide and antidepressants is hugely problematic. The subjects of the SuMRC were mental health services users and subject to coronial investigations but that none of the deaths were reported to CARM by mental health professionals or Coroners. With doctors and coroners failing to report suicide deaths involving antidepressant use, unless consumers and their families are aware of the adverse reaction reporting process, no such reports will be made and no causality assessments undertaken.

The SuMRC also provides a challenge to Dr Crawshaw's claim to be vigilant about monitoring the adverse effects of psychiatric drugs. Their report found that data collected on the use of prescription and/or pharmacy drugs in young people who died from suicide was unknown in 73% of cases and ascribed this to the failure to test for these drugs post mortem and issues with the Ministry of Health dataset.

Overall, Dr Crawshaw's claims that the adverse effects of psychiatric drugs are under constant monitoring in New Zealand does not stand up under scrutiny.

Informed Consent

In other jurisdictions, regulators have mandated the placing of a Black Box Warning, the highest warning of lethality, on all SSRI antidepressants.

Both the United States and Canada require that all SSRI packaging includes warnings that SSRIs double the risk of suicidality in those under the age of 25.

In New Zealand, Medsafe has not required a black box warning on SSRIs nor required that these drugs are dispensed with an information leaflet for patients providing information on possible adverse reactions and risks.

Medsafe claim the reason for not warning consumers on the suicide risk of these drugs is that they "have tended to take the position that that information is the obligation of the doctor to talk to the patient about, not for the patient to read on the outside of the pack"²²¹ and that

to be able to require that to be handed out to each patient when they pick up a medicine requires new legislation and we have actually been lobbying for new legislation to bring this into effect since... the mid 1990s, so under existing legislation the best we can do just now is actually make these products, these documents available off our website and to try to encourage people to use them, which is what we do.⁹²²

In 2013 the University of Otago Pharmacovigilance Research Team reported that results from a national survey showed that awareness of Medsafe and CARM is low amongst the New Zealand public with only 1% of participants able to correctly name these agencies, and 93% of participants having never visited the Medsafe website.²²³

The report advised that despite high use of medicines in New Zealand there is a low awareness of medicine safety issues amongst New Zealanders. The survey showed a widespread lack of awareness amongst consumers that the drug trial and approval process means new medicines may have serious adverse effects that have not been discovered at the time they are released to market and that the majority of participants incorrectly believed that medicines would only be approved for marketing if they were completely safe.²²⁴

It also found that the majority of participants relied on their doctors to decide whether they should take a medicine, and that amongst those who believed new medicines would only be approved if they were completely safe, 35% considered it their decision whether to take the medicine, while 65% relied on their doctor.²²⁵

The University of Otago Pharmacovigilance Research Team national survey showed the New Zealand public want to learn more about personal medicines. Forty percent of participants wanted more information than they were given when prescribed a new medicine by their doctor and where there were to emerging drug safety issues. The survey showed that leaflets in

²²¹ Evidence of Dr Stuart Jessamine, Transcript of Evidence from the Inquest into the Death of Toran Tiavare Henry P1302 para 10

²²² Ibid P1304 para15

²²³ <u>https://nzphvc.otago.ac.nz/Developing_an_Integrated_Pharmacovigilance_System_for_New_Zealand.pdf</u>

²²⁴ University of Otago Pharmacovigilance Research Team. *Developing an integrated pharmacovigilance system for New Zealand: Final deliverable report from the University of Otago pharmacovigilance research team.* Dunedin: University of Otago; 2013 https://nzphyc.otago.ac.nz/Developing an Integrated Pharmacovigilance System for New Zealand.pdf

²²⁵ University of Otago Pharmacovigilance Research Team. Developing an integrated pharmacovigilance system for New Zealand: Final deliverable report from the University of Otago pharmacovigilance research team. Dunedin: University of Otago; 2013 https://nzphyc.otago.ac.nz/Developing an Integrated Pharmacovigilance System for New Zealand.pdf

drug packaging were highly valued sources for drug safety information. In reality, many drugs in New Zealand come without package leaflets ²²⁶ and the report comments that

the introduction of package inserts for all medicines on the New Zealand market would be welcomed by patients and consumers.²²⁷

Research on the provision of information on drug safety by doctors prescribing antidepressants would suggest that reliance on doctors to inform patients of medication risks, is misplaced.

The National Survey found that potential adverse reactions often receive only cursory discussion, if at all, in doctorpatient interactions.²²⁸

This finding accords with a 2012 analysis of 462 transcripts of doctor-patient interactions in which the New Zealand Pharmacovigilance Centre was involved, which found that found adverse outcomes were among the least discussed issues in these consultations, with only 8.2% discussing possible ADRs, 2% discussing the risk of occurrence, and 2.3% discussing precautions to avoid the adverse drug reaction.²²⁹

The national survey showed New Zealanders want early communications from Medsafe on suspicions of drug risks and that "a majority of the public would prefer early communications and prompt information where risk is suspected rather than warnings being delayed until risks have been unequivocally proven.²³⁰

The survey also showed support for previous research showing the public rely more on media reports than health care professionals for information on emerging health issues. Given that New Zealanders want more information on adverse drug reactions, that suicide is an issue of major public concern, that recent studies have confirmed a doubling of suicide risks associated with antidepressant use and that Medsafe encourage families to monitor suicide risk in patients commencing antidepressants, warnings about the risk of antidepressant induced suicide should be issued to the public via the media.

The survey authors acknowledge that it is not necessary to wait until the proof of harm is certain saying

https://nzphvc.otago.ac.nz/Developing_an_Integrated_Pharmacovigilance_System_for_New_Zealand.pdf

²³⁰ <u>https://nzphvc.otago.ac.nz/Developing_an_Integrated_Pharmacovigilance_System_for_New_Zealand.pdf</u>

²²⁶Evidence from Stuart Jessamine, Transcript of Evidence of Inquest into the Death of Toran Henry P1301 para 5

²²⁷ https://nzphvc.otago.ac.nz/Developing_an_Integrated_Pharmacovigilance_System_for_New_Zealand.pdf

²²⁸ University of Otago Pharmacovigilance Research Team. Developing an integrated pharmacovigilance system for New Zealand: Final deliverable report from the University of Otago pharmacovigilance research team. Dunedin: University of Otago; 2013

²²⁹ Cox, A.R. & Butt, T. F (2012) Adverse drug reactions. When the risk becomes a reality for patients. Drug Safety, 35(11): 977-981.

Warnings often must be issued when some level of uncertainty exists about the exact nature of the harm. An impediment to open, honest and frank communication is fear that acknowledging uncertainty may heighten public concern; however, waiting until all uncertainty is reduced usually means that the warning is simply too late. Therefore, messages are most accurate and effective when stated in equivocal terms (e.g., we do not yet have all the facts). The message can be refined as more information becomes available. Overly reassuring messages (e.g., this product is perfectly safe) can imply a lack of openness or honesty about the risk; thereby undermining trust and compromising credibility.²³¹

They comment that while officials often justify their withholding of information about risk, it is a "*myth that the public will panic if it has accurate information about a crisis*"²³² and comment that

It is important to trust the public -most people can bear dire warnings and will want to do the right thing.²³³

The report makes a raft of recommendations for improving pharmacovigilance in New Zealand, few of which appear to have been implemented.

Government Failure to Develop Evidence Based Suicide Prevention Strategies

The World Health Organisation advises that countries that have a suicide prevention strategy should "focus on evaluation and improvement, updating their knowledge with new data and emphasizing effectiveness and efficiency."²³⁴ It suggests measurement of the strategy's progress using indicators that can include:

- a percentage reduction in the suicide rate;
- the number of suicide prevention interventions successfully implemented;
- a decrease in the number of hospitalized suicide attempts.²³⁵

A 2013 systematic review of evaluations of suicide prevention programmes targeting Indigenous peoples in Australia, United States, Canada and New Zealand found no evaluations from New Zealand.²³⁶

²³¹ University of Otago Pharmacovigilance Research Team. Developing an integrated pharmacovigilance system for New Zealand: Final deliverable report from the University of Otago pharmacovigilance research team. Dunedin: University of Otago; 2013

https://nzphvc.otago.ac.nz/Developing_an_Integrated_Pharmacovigilance_System_for_New_Zealand.pdf

²³² Ibid

²³³ Ibid

²³⁴ http://www.who.int/mental_health/suicide-prevention/world_report_2014/en/

²³⁵ http://www.who.int/mental_health/suicide-prevention/world_report_2014/en/

²³⁶ Clifford AC, Doran CM, Tsey K A systematic review of suicide prevention interventions targeting Indigenous peoples in Australia, United States, Canada and New Zealand *BMC Public Health* 13, 463, 2013

Director of mental health Dr John Crawshaw said told the media in August 2016 that work was under way to look at what was learned from the two previous suicide prevention strategies and associated action plans and that this work would inform the new strategy.²³⁷

In response to our request for a copy of this work, we were provided with a Ministry of Health internal document which advised simultaneously that funding for evaluation had been removed as part of the New Zealand Suicide Prevention Action Plan 2013–2016 and that

we still know relatively little about what works in preventing suicide, therefore it is important to continue to invest in evaluation.²³⁸

The document contains repeated references to reports on suicide prevention activities and research which it advises have not been released. The frequency with which it states "revisit the reports and consider whether there are any relevant findings and/or implications for the future" indicate they have also not been reviewed by the Ministry and evaluated for any knowledge they may contribute to suicide prevention.

Under the goal *Develop, implement and evaluate a suicide prevention research and information dissemination plan* the Ministry comments that "this occurs on largely an ad-hoc basis, if at all" and recommends that "there should be a plan in place for dissemination of any research that falls under the Suicide Prevention Strategy."

In its conclusion, the Ministry's document comments that

Focus points for suicide prevention activity are not always determined by the evidence, where there is the greatest need and/or where there is the greatest potential gain to be made.

And that

Despite having eight agencies involved in the current suicide prevention action plan, and the Ministry of Health leading it, the Ministry of Health knows relatively little about suicide prevention actions that are led by other government agencies

In the absence of any evaluation of whether the current suicide prevention strategy has impacted suicide rates, the Ministry of Health issued a draft Suicide Prevention Strategy for public consultation.

We consider it irresponsible to have embarked on this process without having conducted an evaluation of the outcomes of the current strategy in terms of reductions in population and subpopulation suicide rates and self harm hospitalisations, which aspects of the strategy and action plan (if any) have produced a reduction in suicides and self harm and which have increased or had no effect on these outcomes.

²³⁷ Georgia Forrester Evaluation of suicide prevention strategy urgently needed, MP says August 2 2016

²³⁸Private communication with Eve Kloppenburg, Senior Policy Analyst, Ministry of Health.

The New Zealand government clearly believes methodologies exist to robustly determine the causal link between completed suicide and factors such as depression and media reporting. These methodologies therefore should be able to determine whether there is a causal link between completed suicide and engagement with the mental health system, antidepressant use, reductions in inquests and other factors.

Given the failure of the Ministry of Health to conduct outcome evaluations over the past 10 years and its withholding of data from reviews and evaluations of suicide focused activities we would argue that this evaluation should be undertaken by an independent expert and overseen by the Auditor General.

Recommendations

On the basis of the evidence provided in this paper, we propose the following actions.

1. Move primary responsibility for suicide prevention from MOH to MSD

We agree with the SuMRC that

There is an opportunity to be forward-thinking as development of a new suicide prevention strategy and action plan occurs for 2016.

And that

Future suicide prevention activities should aim to progress the interagency agenda so that suicide prevention is approached across all social services and not solely within health.

We strongly believe that allowing the Ministry of Health to retain responsibility for suicide prevention given the increases in suicide rates under their watch, their failure to evaluate suicide prevention strategy and action and their unwillingness to review evidence can only produce one result – a futher increase in suicide rates in New Zealand.

This paper sets out the evidence that conceiving of and approaching suicide as a medical issue increases suicide rates. It suggests that shifting thinking to a conceptualisation of suicide as a social issue and implementing strategies to reduce the social drivers of suicide will reduce those rates.

We propose that this shift in thinking, focus and strategic direction requires that primary government responsibility for suicide prevention move from the Ministry of Health to the Ministry of Social Development.

We believe this will achieve many of the things needed to reduce suicide. Government announcing a shift in its thinking from a medical to a social conceptualisation of suicide will herald a change in the conversation about suicide, lead to the development of new and innovative suicide prevention strategies and engage a range of new sectors in suicide prevention.

It will help people identify the ways in which they can contribute to preventing suicide by changing social environments in a way they cannot conceive of when suicide is seen as the product of 'broken brains.'

Studies of why people engage in action to prevent climate change show engagement relies on belief that the threat of global warming may affect them, beliefs about the causes of climate change²³⁹ and beliefs about the effectiveness of their actions.²⁴⁰Similarly we can expect people to engage in suicide prevention where they believe they may be affected by suicide and that suicide is caused by issues which they have the ability to impact.

When suicide is presented as an issue that affects those who are mentally ill and that suicide prevention requires correcting chemical imbalances in the brain, they majority will perceive the issue is unlikely to affect them and that effecting change is beyond their capabilities.

Conversely when people understand suicide can affect anyone suffering trauma, loss or distress and is reduced by creating environments within our families, communities and society in which every individual feels valued, supported and has hope that things will change, they are likely to take action on suicide prevention.

The Ministry of Social Development is best placed to coordinate efforts to ensure that suicide prevention efforts focus on employment, child welfare, supporting families, crime reduction and the development of cohesive communities leaving the Ministry of Health to focus on physical illnesses and overmedication as their suicide prevention responsibilities.

We believe that while claims are made that the Ministry of Health and mental health services are not up to the task of preventing suicide, the truth is that suicide is not a medical issue and therefore no healthcare system is capable of achieving the goal of suicide prevention.

In our view, tasking health services with preventing suicide is akin to asking a builder to bake you a cake and criticising them when their hammers and nails, construction skills and knowledge of the building code fail to produce the fabulous multi-tier confection you desired. While you can rightly criticise the builder for failing to admit they cannot perform the task, for concealing their failure and claiming it was due to resource constraints or a particularly difficult recipe and for continuing to accept cake making commissions, you cannot ignore the fact that the key problem was in asking the builder to undertake a task which should rightly have been assigned to someone whose knowledge, skills and core business is in making cakes.

²³⁹ O'connor, R. E., Bard, R. J., & Fisher, A. (1999). Risk perceptions, general environmental beliefs, and willingness to address climate change. *Risk analysis*, *19*(3), 461-471.

With the evidence demonstrating that suicide is a result of political, cultural and social factors, psychiatrists with their diagnostic systems and prescription pads are being asked to perform a task that is so far outside of their skillset that failure is inevitable.

It is our hope that moving responsibility for suicide prevention from health to social development would achieve the following

- Public education would be repositioned from messages that mental health disorders cause suicide to messages that trauma, loss, social isolation and hopelessness cause suicide. That strategies would encourage the engagement of families and communities in creating social environments that protect against suicide rather than encouraging families and communities to believe they do not have the skills to prevent suicide and hand over distressed individuals to mental health professionals
- That strategies to reduce joblessness, poverty, discrimination, social isolation, poor physical health and other drivers of suicide would become the focus of suicide prevention activities.
- That the government would engage the knowledge, skill, competencies and attributes of families and communities to support individuals through the natural distress arising from negative life events and adverse life circumstances.
- That government organisations such as WINZ, IRD, the New Zealand Police, the Ministry of Education and others would identify that they have a direct role to play in suicide prevention rather than an indirect role in referring clients to mental health services and develop in-house suicide prevention strategies.
- That suicide prevention will start long before individuals exhibit distress. With Weavers finding that In 66.3% of suicide inquests there were "was no mention of anything that could be taken as a warning" it is critical suicide prevention efforts focus on preventing suicidality rather than merely responding to it.

2. Reduce Spending on Mental Health Services

International studies have shown that increased spending on mental health services is associated with increased suicide rates. The New Zealand evidence is that alongside increases in the funding of mental health services, the mental health of the population has declined. Increases in mental health spending have not reduced suicide rates and at least for Maori, youth and mental health services users, occurred in tandem with significant increases in suicide rates. Engagement with the mental health system has consistently been shown as the strongest risk factor for suicide. As government promises an additional \$200m for mental health services, it should be mindful that the only return on this investment in the past has investment has been increased numbers of New Zealanders experiencing diminished prospects for employment, social inclusion and good physical health as a result of stigmatising labels, rising antidepressant use and reduced self-efficacy beliefs.

Increasing demand for mental health services despite evidence that the public are reluctant to engage in such services indicate that demand is driven by the lack of alternatives to non-medical alternatives rather than a need for mental health treatment. Studies show that when distressed, New Zealanders prefer non-medical, non-pharmacological interventions but that in this country mental health services, headed by psychiatrists with no tools other than medication, are the only option presented to those seeking support for distress which impairs functioning.

The evidence suggests that relocating funding from mental health services to services which reduce the incidence and impact of the social drivers of suicide is critical to improving outcomes. Reduced funding for mental health services would focus health system resources and attention on addressing its core business with its role in suicide prevention being to improve physical health and reduce iatrongenic harm. It would reduce the rates of diagnosis, treatment and hospitalisation which have been shown to increase suicide rates and cause a variety of other harms.

3. Adopt A Precautionary Approach Antidepressant Regulation in New Zealand

The Government is currently proposing to replace the Medicines Act 1981 with a new therapeutic products regulatory regime. We recommend that this regime adopt a precautionary approach to the regulation of antidepressants. We further recommend that this precautionary approach prohibit off-label prescribing.

4. Introduce Mandatory Reporting of Adverse Drug Reactions

The reporting of adverse drug reactions is hampered by a number of factors primarily under reporting by doctors.

While regulatory agencies such as medsafe claim 10% of adverse reactions are reported, surveys show the rates are far lower.

A study of adverse event detection and reporting by GPs found that "Overall, GPs reported to the pharmacovigilance centre only one out of every 1144 adverse drug reactions" and that the rate of under reporting was highest for psychiatric drugs at one report per 2119 adverse effects.²¹¹

Other studies have found that even in the case of serious and previously unknown reactions, reports may only be filed for 1 in 4600 cases and that over a period of 7 years the US Food and Drug Administration received an average of only 82 reports annually about adverse reactions

²⁴¹ A. Alvarez-Requejo, A. Carvajal, B. Begaud, Y. Moride, T. Vega, L. H. Martin Arias Under-reporting of adverse drug reactions Estimate based on a spontaneous reporting scheme and a sentinel system Eur J Clin Pharmacol (1998) 54: 483-488

related to digoxin, despite over 200 000 admissions to hospital due to digoxin related adverse reactions.²⁴²

A number of solutions to the problem of under reporting of adverse drug reactions have been proposed. One option is to make reporting mandatory for healthcare professionals, an option for which there is strong consumer support.²¹³

Another option involves the use of health databases already in operation to monitor adverse reactions. In some places, databases which record prescriptions match data with systems recording hospitalisation for adverse drug effects.

A number of studies have suggested doctors should be paid to file adverse reaction reports²⁴⁴ with one study showing that payment of a fee to doctors for filing adverse reaction reports increased reporting 50-fold.²⁴⁵ While this may seem a costly exercise, if it reduces adverse drug reactions it may in fact result in significant cost savings given the report of the World Health Organisation that some countries spend 15 -20% of their hospital budget dealing with drug complications.²⁴⁶ On the other hand, the complaints of doctors that adverse drug reporting is onerous and that they are not paid for the time taken to complete reports belies reports from Medsafe that the majority of reports from GPs are in fact completed and filed by Practice Nurses.

In New Zealand where consumer reporting is very low by international standards, increasing knowledge and awareness of the adverse reporting system could increase both the number of reports and the quality of reporting given the finding of a study comparing consumer and healthcare professional reports for an antidepressant which found that

the overall quality of professional reporting and interpretation of data seemed poor, providing intelligence that was in some ways inferior to that provided in spontaneous reports from patients.²¹⁷

Despite the clearly stated view of the World Health Organisation that adverse drug reaction reporting is a moral and professional obligation of health professionals²⁴⁸ it is obvious that

244 Vogel, L. & Sysak, T. 2012 Physicians should be paid to report adverse drug reactions, experts say CMAJ May 15, 2012 vol. 184 no. 8 E409-E410

²⁴⁵ Feely J, Moriarty S, O'Connor P. Stimulating reporting of adverse drug reactions by using a fee. BMJ 1990;300:22-3

²⁴⁶ World Health Organization. (2002). Safety of medicines: a guide to detecting and reporting adverse drug reactions: why health professionals need to take action. In Safety of medicines: a guide to detecting and reporting adverse drug reactions: why health professionals need to take action.

²⁴² Lexchin, J. (2006). Is there still a role for spontaneous reporting of adverse drug reactions?. Canadian Medical Association Journal, 174(2), 191-192.

²⁴³ Bruce C. Carleton, PharmD, M. Anne Smith, MSc Drug safety: Side effects and mistakes or adverse reactions and deadly errors? Issue: BCMJ, Vol. 48, No. 7, September 2006, page(s) 329-333 Articles

²⁴⁷ Medawar, C., & Herxheimer, A. (2004). A comparison of adverse drug reaction reports from professionals and users, relating to risk of dependence and suicidal behaviour with paroxetine. *International Journal of Risk & Safety in Medicine*, *16*(1), 5-19.

relying on the ethics and professionalism of health professionals has not resulted in reporting of adverse reactions.

Consequently, we recommend that mandatory reporting of adverse drug reactions by healthcare professionals and coroners be introduced to New Zealand along with a programme of public education and practical support for increased consumer reporting. We also recommend that current health information databases are used to generate ADR reports.

5. Establish an Independent Suicide Research Body

Given the failure of the Ministry of Health to collect, critically evaluate and disseminate research on suicide we believe there is a need for an independent body to provide access to high quality research and information on suicide and its prevention in New Zealand.

We propose the establishment of an organisation similar to the Family Violence Clearinghouse which is operated by the University of Auckland, under a contract funded by the Families Commission and was launched in 2005 in association *New Zealand Family Violence Prevention Strategy*.

We believe such a body should include experts from a wide range of disciplines including sociology, anthropology, philosophy, history, psychology and others rather than simply those representing a biomedical approach.

We consider this group or another similarly constituted body could perform the functions of conducting outcome evaluations of suicide prevention strategies and initiatives and provide expert advice to government on suicide prevention as well as disseminating research on suicide prevention.

6. Provide Comprehensive Training for Coroners

We sought information from the Office of the Chief Coroner on the training and access to advice that may inform Coroners' understanding of the causes of suicide. We were advised that New Zealand Coroners had attended two conferences in Australia which addressed suicide, that training related to suicide had been provided by the Director of Mental Health and Le Va and that the Chief Coroner had met with Annette Beautrais.

We recommend that education for Coroners on the causes of suicide be extended beyond biomedical and mental health explanations.

7. Provide accurate information on suicide

We recommend an audit of government communications on suicide with a view to identifying and removing unsupported and potentially harmful references to chemical imbalances, the relationship between depression and suicide and engagement in mental health treatment and antidepressant use as protective against suicide.

²⁴⁸ World Health Organization. (2002). Safety of medicines: a guide to detecting and reporting adverse drug reactions: why health professionals need to take action. In Safety of medicines: a guide to detecting and reporting adverse drug reactions: why health professionals need to take action.

8. Apply Suicide Warnings to All SSRI Antidepressants

We recommend that a black box warning be mandated for all SSRI antidepressants and that package leaflets which include these warnings and information on medication monitoring be provided with every antidepressant dispensing.

9. Establish a Permanent SuMRC

We believe the SuMRC has provided new and useful information on suicide deaths in New Zealand despite not having been provided with timely and quality data by government departments. We believe that properly resourced and provided with access to the data it requires, adopting recommendations arising from annual reports from the SuMRC has the potential to make a significant contribution to suicide prevention in New Zealand.

10. Conduct an Annual Review of Coroner's Files

We recommend that an annual review of all Coroners files in which a verdict of suicide is returned (or researchers consider the death was a suicide) be conducted annually. Such a review would build on the work of Professor Weaver and could be used to inform the SuMRC process, the development of suicide prevention strategies and initiatives and a mechanism for monitoring progress in reducing the social, cultural and political causes of suicide. Such a review could, for example, show provide data on whether initiatives to reduce poverty, the burden of debt or social isolation were reflected in lower numbers of suicides attributed to these factors.

11. Reinstate Inquests for All Suspected Suicide Deaths

We do not consider the Coroners Court in its current form is fit for purpose and have in other reports recommended significant changes to the way in which the Court investigates suspected suicide deaths. Given the decision of the government not to make changes to the Coroners Court however, we recommend that an inquest should be held for all suspected suicides to ensure all relevant data is gathered to prevent further deaths. We further recommend that services be developed (similar to those provided to the victims of crime through Victims Advisers) and funded legal representation to support the full participation of families in these proceedings and that urgent action should be taken to ensure Coroners have access to a range of appropriate experts at inquests.

12. Expand the Data Collected by Coronial Services

We recommend that the Coroners Court expand the data it collects on those who die from suicide to include data on the negative life events and adverse life circumstances of those who die from suicide. We believe this data should also include sexual orientation, involvement with government agencies, use of prescription and non-prescription drugs and physical and mental health diagnoses. This data should be made more easily accessible than is currently the case.

13. Standardise Information Collected in Post-Mortem Examinations of Suciide Victims

We recommend standardisation in the information collected in post-mortem examinations of suspected suicides including mandatory toxicology testing which identifies the presence or absence of pharmaceutical, legal and illegal drugs at all not just toxic levels.

14. Conduct Genotyping of All Suicides Where Substances are Detected

We recommend Coroners order genetic testing to determine the genotype of the deceased on pathways on which the detected drugs are metabolised. We recommend this information is provided to CARM and that a causality assessment conducted and provided to the Coroner conducting the inquest.

15. Allow Open Discussion of Suicide

We recommend the prohibition on publication of information about individual suicides be lifted.

16. Conduct an Independent Outcome Evaluation of the Suicide Prevention Strategy.

We recommend the Auditor General be required to undertake an audit of the outcomes of the Suicide Prevention Strategy and the performance of the Ministry of Health in managing and implementing this strategy. We recommend that the outcome of this audit inform the development of a new strategy and action plan.

17. Mandate full physical health checks for those presenting with mental health and suicidality.

We recommend the revision of all guidelines on mental health treatment to ensure physical health issues are excluded as the cause of mental health issues and suicidality before a psychiatric diagnosis is considered or applied.