

Volume 4

SUICIDE RESEARCH: SELECTED READINGS

J. Sveticic, A. Milner, D. De Leo

May 2010–October 2010

Australian Institute for Suicide Research and Prevention

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WHO Collaborating Centre for Research and Training in Suicide Prevention

National Centre of Excellence in Suicide Prevention

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Contents

Foreword	vii
Acknowledgments	ix
Introduction	
Context	1
Methodology	2
Key articles	
Ajdacic-Gross et al, 2010. Seasonality in suicide — a review and search of new concepts for explaining the heterogeneous phenomena	8
Alston, 2010. Rural male suicide in Australia	10
Arana et al, 2010. Suicide-related events in patients treated with antiepileptic drugs	12
Barnes et al, 2010. Suicide and self-injury among children and youth with chronic health conditions	14
Batty et al, 2010. Psychosis alters association between IQ and future risk of attempted suicide: Cohort study of 1,109,475 Swedish men	16
Beautrais et al, 2010. Postcard intervention for repeat self-harm: Randomised controlled trial	18
Bennewith et al, 2010. Suicidal behaviour and suicide from the Clifton suspension bridge, Bristol and surrounding area in the UK: 1994-2003	20
Bertolote et al, 2010. Repetition of suicide attempts	22
Boenisch et al, 2010. The role of alcohol use disorder and alcohol consumption in suicide attempts: A secondary analysis of 1921 suicide attempts	24
De Leo et al, 2010. Achieving standardised reporting of suicide in Australia: Rationale and program for change	27
Fountoulakis et al, 2010. Suicide prevention programs through community intervention	29
Hinduja et al, 2010. Bullying, cyberbullying, and suicide	31

Kuo et al, 2010. Asthma and suicide mortality in young people: A 12-year follow-up study	33
Niederkrotenthaler et al, 2010. Role of media reports in completed and prevented suicide: Werther v. Papageno effects	35
Meltzer et al, 2010. Personal debt and suicidal ideation	38
Milner et al, 2010. Who seeks treatment where? Suicidal behaviours and health care: Evidence from a community survey	40
Oliffe et al, 2010. 'You feel like you can't live anymore': Suicide from the perspectives of men who experience depression	42
Patorno et al, 2010. Anticonvulsant medications and the risk of suicide, attempted suicide, or violent death	44
Pickles et al, 2010. Predictors of suicidality across the life span: The Isle of Wight study	47
Reisch et al, 2010. An fMRI study on mental pain and suicidal behaviour	49
Runeson et al, 2010. Method of attempted suicide as predictor of subsequent successful suicide: national long term cohort study	51
Scott et al, 2010. Chronic physical conditions and their association with first onset of suicidal behavior in the world mental health surveys	54
Scott et al, 2010. School-based screening for suicide risk: Balancing costs and benefits	56
Sinyor et al, 2010. Effect of a barrier at Bloor Street Viaduct on suicide rates in Toronto: natural experiment	59
Stein et al, 2010. Cross-national analysis of the associations between traumatic events and suicidal behavior: findings from the WHO World Mental Health Surveys	62
Williams et al, 2010. Accuracy of official suicide mortality data in Queensland	65
Wilson et al, 2010. The support needs and experiences of suicidally bereaved family and friends	67
Wyman et al, 2010. An outcome evaluation of the sources of strength suicide prevention program delivered by adolescent peer leaders in high schools	69

Recommended readings71

Citation list

Fatal suicidal behaviour:

Epidemiology136
Risk and protective factors140
Prevention152
Postvention and bereavement155

Non-fatal suicidal behaviour:

Epidemiology157
Risk and protective factors160
Care and support184
Case reports190
Miscellaneous.....195

Foreword

This volume contains quotations from internationally peer-reviewed suicide research published during the semester May 2010 – October 2010; it is the fourth of a series produced biannually by our Institute with the aim of assisting the Commonwealth Department of Health and Ageing in being constantly updated on new evidences from the scientific community. Compared to previous volumes, an increased number of examined materials have to be referred. In fact, during the current semester, the number of articles scrutinised has been globally 30% bigger than in the initial edition, with a progression that testifies a remarkably growing interest from scholars for the field of suicide research (718 articles for the first issue, 757 for the second, 892 for the third, and 1,121 for the present issue).

As usual, the initial section of the volume collects a number of publications that could have particular relevance for the Australian people in terms of potential applicability. These researches are accompanied by a short comment from us, and an explanation of the motives that justify why we have considered of interest the implementation of studies' findings in the Australian context. An introductory part provides the rationale and the methodology followed in the identification of papers.

The central part of the volume represents a selection of research articles of particular significance; their abstracts are reported in extenso, underlining our invitation at reading those papers in full text: they represent a remarkable advancement of suicide research knowledge.

The last section reports all items retrievable from major electronic databases. We have catalogued them on the basis of their prevailing reference to fatal and non-fatal suicidal behaviours, with various sub-headings (e.g., epidemiology, risk factors, etc). The deriving list guarantees a level of completeness superior to any individual system; it can constitute a useful tool for all those interested in a quick update of what most recently published on the topic.

Our intent was to make suicide research more approachable to non-specialists, and in the meantime provide an opportunity for a vademecum of quotations credible also at the professional level. A compilation such as the one that we provide here is not easily obtainable from usual sources and can save a considerable amount of time to readers. We believe that our effort in this direction may be an appropriate interpretation of one of the technical support roles to the government that the new status of National Centre of Excellence in Suicide Prevention — which has deeply honoured our commitment — entails for us.

The significant growth of our centre, the Australian Institute for Suicide Research and Prevention, and its influential function, both nationally and internationally, in the fight against suicide, could not happen without the constant support of Queens-

land Health and Griffith University. We hope that our passionate dedication to the cause of suicide prevention may compensate their continuing trust in our work.

Diego De Leo, DSc

Director, Australian Institute for Suicide Research and Prevention

Acknowledgments

This report has been produced by the Australian Institute for Suicide Research and Prevention, WHO Collaborating Centre for Research and Training in Suicide Prevention and National Centre of Excellence in Suicide Prevention. The assistance of the Commonwealth Department of Health and Ageing in the funding of this report is gratefully acknowledged.

Introduction

Context

Suicide places a substantial burden on individuals, communities and society in terms of emotional, economic and health care costs. In Australia, about 2000 people die from suicide every year, a death rate well in excess of transport-related mortality. At the time of preparing this volume, the latest available statistics released by the Australian Bureau of Statistics¹ indicated that, in 2008, 2,190 deaths by suicide were registered in Australia, representing an age-standardized rate of 9.4 per 100,000.

Further, a study on mortality in Australia for the years 1997–2001 found that suicide was the leading cause of avoidable mortality in the 25–44 year age group, for both males (29.5%) and females (16.7%), while in the age group 15–24 suicide accounted for almost a third of deaths due to avoidable mortality.² In 2003, self-inflicted injuries were responsible for 27% of the total injury burden in Australia, leading to an estimated 49,379 years of life lost (YLL) due to premature mortality, with the greatest burdens observed in men aged 25–64.³

Despite the estimated mortality, the prevalence of suicide and self-harming behaviour in particular remains difficult to gauge, due to the often secretive nature of these activities. Indeed, the ABS acknowledges the difficulties in obtaining reliable data for suicides in the past few years.^{4,5} Without a clear understanding of the scope of suicidal behaviours and the range of interventions available, the opportunity to implement effective initiatives is reduced. Further, it is important that suicide prevention policies are developed on the foundation of evidence-based empirical research, especially as the quality and validity of the available information may be misleading or inaccurate. Additionally, the social and economic impact of suicide underlines the importance of appropriate research-based prevention strategies, addressing not only significant direct costs on health system and lost productivity, but also the emotional suffering for families and communities.

The Australian Institute for Suicide Research and Prevention (AISRAP) has, through the years, gained an international reputation as one of the leading research institutions in the field of suicide prevention. The most important recognition came via the designation as a World Health Organization (WHO) Collaborating Centre in mid-2005. More recently (Spring 2008), the Commonwealth Department of Health and Ageing (DoHA) appointed AISRAP as the National Centre of Excellence in Suicide Prevention. This latter recognition awards not only many years of high-quality research, but also of fruitful cooperation between the institute and several different governmental agencies. The new

role given to AISRAP will translate into an even deeper commitment to the cause of suicide prevention among community members of Australia.

As part of this initiative, AISRAP is committed to the creation of a databank of the recent scientific literature documenting the nature and extent of suicidal and self-harming behavior and recommended practices in preventing and responding to these behaviors. The key output for the project is a critical biannual review of the national and international literature outlining recent advances and promising developments in research in suicide prevention, particularly where this can help to inform national activities. This task is not aimed at providing a critique of new researches, but rather at drawing attention to investigations that may have particular relevance to the Australian context. In doing so, we are committed to a user-friendly language, in order to render research outcomes and their interpretation accessible also to a non-expert audience.

In summary, this particular review serves three primary purposes:

1. to inform future State and Commonwealth suicide prevention policies
2. to assist in the improvement of existing initiatives, and the development of new and innovative Australian projects for the prevention of suicidal and self-harming behaviors within the context of the Living is for Everyone (LIFE) Framework (2008)
3. to provide directions for Australian research priorities in suicidology.

The review is presented in three sections. The first contains a selection of the best articles published in the last six months internationally. For each article identified by us (the method of choosing articles is described below), the original abstract is accompanied by a brief comment explaining why we thought the study was providing an important contribution to research and why we considered its possible applicability to Australia. The second section presents the abstracts of the most relevant literature — following our criteria — collected between May 2010 and October 2010; while the final section presents a list of citations of all literature published over this time period.

Methodology

The literature search was conducted in four phases.

Phase 1

Phase 1 consisted of weekly searches of the academic literature performed from November 2009 to April 2010. To ensure thorough coverage of the available published research, the literature was sourced using several scientific electronic databases including: Pubmed, Proquest, Scopus, Safetylit and Web of Science, using the following key words: *suicide, suicidal, self-harm, self-injury and parasuicide*.

Results from the weekly searches were downloaded and combined into one database (deleting duplicates).

Specific inclusion criteria for Phase One included:

- Timeliness: the article was published (either electronically or in hard-copy) between May 2010 and October 2010.

- Relevance: the article explicitly referred to fatal and/or non-fatal suicidal behaviour and related issues and/or interventions directly targeted at preventing/treating these behaviours.
- The article was written in English.

Articles about euthanasia, assisted suicide, suicide terrorist attacks, and/or book reviews, abstracts and conference presentations were excluded.

Also, articles that have been published in electronic versions (ahead of print) and therefore included in the previous volume (Volumes 1, 2 and 3 of *Suicide Research: Selected Readings*) were excluded to avoid duplication.

Phase 2

Following an initial reading of the abstracts (retrieved in Phase 1), the list of articles was refined down to the most relevant literature. In Phase 2 articles were only included if they were published in an international, peer-reviewed journal.

In Phase 2, articles were excluded when they:

- were not particularly instructive or original
- were of a descriptive nature (e.g. a case-report)
- consisted of historical/philosophical content
- were a description of surgical reconstruction/treatment of self-inflicted injuries
- concerned biological and/or genetic interpretations of suicidal behaviour, the results of which could not be easily adoptable in the context of the LIFE Framework.

In order to minimise the potential for biased evaluations, two researchers working independently read through the full text of all articles selected to create a list of most relevant papers. This process was then duplicated by a third researcher for any articles on which consensus could not be reached.

The strength and quality of the research evidence was evaluated based on the *Critical Appraisal Skills Programme (CASP) Appraisal Tools* published by the Public Health Resource Unit, England (2006). These tools, publically available online, consist of checklists for critically appraising systematic reviews, randomized controlled trials (RCT), qualitative research, economic evaluation studies, cohort studies, diagnostic test studies and case control studies.

Phase 3

One of the aims of this review was to identify research that is both evidence-based and of potential relevance to the Australian context. Thus, the final stage of applied methodology focused on research conducted in countries with populations or health systems sufficiently comparable to Australia. Only articles in which the full-text was available were considered. It is important to note that failure of an article to be selected for inclusion in Phase 3 does not entail any negative judgment on its 'objective' quality.

Specific inclusion criteria for Phase 3 included:

- applicability to Australia
- the paper met all criteria for scientificity (i.e., the methodology was considered sound)

- the paper represented a particularly compelling addition to the literature, which would be likely to stimulate suicide prevention initiatives and research
- inevitably, an important aspect was the importance of the journal in which the paper was published (because of the high standards that have to be met in order to obtain publication in that specific journal); priority was given to papers published in high impact factor journals
- particular attention has been paid to widen the literature horizon to include sociological and anthropological research that may have particular relevance to the Australian context.

After a thorough reading of these articles ('Key articles' for the considered time-frame), a written comment was produced for each article detailing:

- methodological strengths and weaknesses (e.g., sample size, validity of measurement instruments, appropriateness of analysis performed)
- practical implications of the research results to the Australian context
- suggestions for integrating research findings within the domains of the LIFE framework suicide prevention activities.

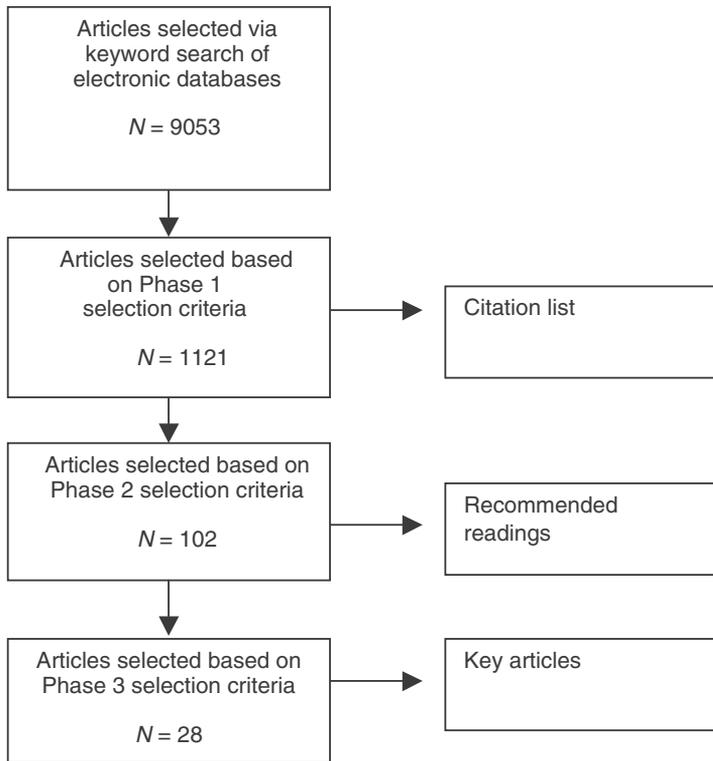


Figure 1 Flowchart of process.

Phase 4

In the final phase of the search procedure all articles were divided into the following classifications:

- *Fatal suicidal behaviour* (epidemiology, risk and protective factors, prevention, post-vention and bereavement)
- *Non-fatal suicidal/self-harming behaviours* (epidemiology, risk and protective factors, prevention, care and support)
- *Case reports* include reports of fatal and non-fatal suicidal behaviours
- *Miscellaneous* includes all research articles that could not be classified into any other category.

Allocation to these categories was not always straightforward, and where papers spanned more than one area, consensus of the research team determined which domain the article would be placed in. Within each section of the report (i.e., Key articles, Recommended readings, Citation list) articles are presented in alphabetical order by author.

Endnotes

- 1 Australian Bureau of Statistics (2010). *Causes of death, Australia, 2008* (Cat. No. 3303.0). Canberra, Australia.
- 2 Page A, Tobias M, Glover J, Wright C, Hetzel D, Fisher E (2006). *Australian and New Zealand atlas of avoidable mortality*. Public Health Information Development Unit, University of Adelaide, Adelaide.
- 3 Begg S, Vos T, Barker B, Stevenson C, Stanley L, Lopez A (2007). *The burden of disease and injury in Australia 2003*. Australian Institute for Health and Welfare, Canberra.
- 4 Australian Bureau of Statistics (2009). *Causes of death, Australia, 2007, Technical note 1* (Cat. No. 3303.0). Canberra, Australia.
- 5 Australian Bureau of Statistics (2009). *Causes of death, Australia, 2007, Explanatory notes* (Cat. No. 3303.0). Canberra, Australia.

Key Articles

Seasonality in suicide — a review and search of new concepts for explaining the heterogeneous phenomena

Ajdacic-Gross V, Bopp M, Ring M, Gutzwiller F, Rossler W (Switzerland)

Social Science and Medicine 71, 657-666, 2010

Seasonality is one of the oldest and most resistant-to-elucidation issues in suicide research. However, in recent years epidemiological research has yielded new results, which provide new perspectives on the matter. This qualitative review summarises research published since the 1990s. In particular, the focus is on studies dealing with the historical change of seasonality, cross-sectional comparisons including method-specific diversity, and the association with weather variables and other putative covariates. Recent research has shown that in Western countries the seasonality of suicide is tending to diminish and may, eventually, disappear. It can no longer be considered a universal and homogeneous phenomenon. In addition, different major seasonal cycles have now been determined which mainly depend on different suicide methods. Just as in the epidemiology of suicide methods, the (seasonal) availability and perceived adequacy of methods emerge as the major driving force beyond the seasonal phenomena in suicide.

Comment

Main findings: Researchers have discussed possible relationships between ‘seasonality’ (defined as cyclical changes related to seasons of the year) and suicide since the 1800s; yet to date, these links remain insufficiently understood. This review article summarises the major empirical findings and theoretical contributions on the topic from the last two decades. Internationally, most research suggests that an increase in suicide occurs during spring and summer months, followed by a decrease in winter months. There have been a number of explanations posited for this finding, including the possibility that heat excites the nervous system or various components of the serotonergic system, leading to more impulsive suicidal behaviour. In terms of empirical findings in recent decades, studies covering extended timeframes have shown a decrease of the impacts seasonality has on changing suicide rates in the United States and European countries. There is contradictory evidence on the topic from Australia, where the effect of seasonality on male suicide appears to have increased during the period 1970 to 1999. Certain methods, such as hanging, appear to be more strongly influenced by seasonality than ‘non-violent’ methods such as drug overdose. These differences in seasonality of suicide methods may be explained through the ‘opportunity concept’ theory, which suggests that hanging may be more amenable during summer months, whereas pills and drugs are available, accessible and convenient methods throughout the year.

There also appears to be differences based on locality, with rural areas having more observable effects of seasonality than urban areas. Durkheim applied a sociological explanation for this effect, arguing that suicide is tied to the intensity of cyclical social activities, such as farming.¹ The authors of this review paper argue that the relationship between seasonality and suicide is likely to be highly complex, and may involve a number of biological, social, contextual, and circumstantial factors associated with method choice.

Implications: There is growing literature on the effects of climate change on suicide.^{2,3} A recent report from Italy³ shows some empirical support for this relationship, finding that ‘global warming’ was related to male suicide. Preti and colleagues³ made a number of possible suggestions for combating possible risk factors associated with climate change, such as implementing interventions aimed at reducing anthropogenic effects (e.g. reducing air pollution and improving energy allocation). Discussions of climate changes effects are increasingly relevant for the Australian context, particularly in rural areas, where cyclic weather events such as drought and flood have been suggested to be affecting rates of suicides by farmers.^{4,5} However, given the complexities in this type of work, there is a need for research designs able to control for possible confounders, such as the influence of other social contextual factors on suicide.

Endnotes

- 1 Chew KSY, McCleary R (1995). The spring peak in suicides: A cross-national analysis. *Social Science & Medicine* 40, 223–230.
- 2 Berry HL, Bowen K, Kjellstrom T (2010). Climate change and mental health: a causal pathways framework. *International Journal of Public Health* 55, 123–132.
- 3 Preti A, Lentin G, Maugeri M (2007). Global warming possibly linked to an enhanced risk of suicide: Data from Italy, 1974–2003. *Journal of Affective Disorders* 102, 19–25.
- 4 Berry HL, Kelly BJ, Hanigan IC, Coates JH, McMichael AJ, Welsh JA, Kjellstrom T (2008). *Rural mental health impacts of climate change*. The Australian National University, Canberra.
- 5 Alston M (2010). Rural male suicide in Australia. *Social Science & Medicine*. Published online: 25 May 2010. doi:10.1016/j.socscimed.2010.04.036, 2010

Rural male suicide in Australia

Alston M (Australia)

Social Science and Medicine. Published online: 25 May 2010. doi:10.1016/j.socscimed.2010.04.036, 2010

The rate of suicide amongst Australia's rural men is significantly higher than rural women, urban men or urban women. There are many explanations for this phenomenon including higher levels of social isolation, lower socio-economic circumstances and ready access to firearms. Another factor is the challenge of climate transformation for farmers. In recent times rural areas of Australia have been subject to intense climate change events including a significant drought that has lingered on for over a decade. Climate variability together with lower socio-economic conditions and reduced farm production has combined to produce insidious impacts on the health of rural men. This paper draws on research conducted over several years with rural men working on farms to argue that attention to the health and wellbeing of rural men requires an understanding not only of these factors but also of the cultural context, inequitable gender relations and a dominant form of masculine hegemony that lauds stoicism in the face of adversity. A failure to address these factors will limit the success of health and welfare programs for rural men.

Comment

Main findings: Alston's article on Australian rural male suicide focuses on an important area of research. The primary argument of the paper is that rural masculinity and a sense of stoicism restrict the ability of rural males to ask for help. Males may be more likely to limit their interactions when under 'threats' due to fear of shame or being perceived as weak. In addition, rural males are often unable to understand their mental ill-health as a result of complex circumstances, such as climate variability and financial strains, and perceive it mainly as a sign of their individual failure. The review provides an understanding of the context in which rural suicide is embedded, including the ongoing decline in Australian farming families, the continued out-migration of young persons, and the increased number of women having to leave the family unit to find work in cities. Alston calls attention to the fact that rural males have worse health than their urban counterparts, which is believed to be linked to a more unhealthy lifestyle, increased consumption of alcohol, and failure to seek professional help for mental or physical problems. The review then turns to the results of several qualitative studies on rural male suicide conducted between 2004 and 2009. This research demonstrates some of the key factors associated with suicide in rural areas, including a greater sense of hopelessness (inability to control weather, financial challenges, or changes in policies), stoicism and feelings of being a failure (self, family and community), gender-stresses (loss of role as the primary breadwinner), use of alcohol to 'self-medicate, and lack of available and appropriate services. All these factors contribute to a greater sense of 'entrapment', leading to an increased risk for suicide in rural males.

Implications: Alston makes a number of suggestions to reduce male suicide in rural areas. First, there is a need for more 'culturally appropriate' services, where rural men and women can feel that they are able to freely discuss the problems associated with the running of a farm and their own mental health. This requires a long-term commitment to the issue to ensure that programs and services become a socially-accepted source of help in rural environments. There is also the need for greater recognition of the financial stress in rural communities and the provision of a 'dignified' means by which families can leave farms. It is also necessary to provide rehabilitation services through which farmers can obtain the skills to gain employment within other industries. These two strategies (culturally acceptable health services and financial recuperation) require implementation of significant policy changes at the government level. Concurrent with these actions, future work is needed on expanding current understandings of the potential harm associated with masculine gender norms in rural Australia and coping behaviours employed by these men. Farming families also need to be provided with the means to increase protective factors by encouraging communication within the family and between close friends. Community service providers are recommended to take a greater role in acknowledging and educating males about the importance of maintaining strong connections with their spouses, family, friends, and community members.

Suicide-related events in patients treated with antiepileptic drugs

Arana A, Wentworth CE, Ayuso-mateos JL, Arellano FM (UK)

The New England Journal of Medicine 363, 542-551, 2010

Background: A previous meta-analysis of data from clinical trials showed an association between antiepileptic drugs and suicidality (suicidal ideation, behavior, or both). We used observational data to examine the association between the use or nonuse of antiepileptic drugs and suicide-related events (attempted suicides and completed suicides) in patients with epilepsy, depression, or bipolar disorder.

Method: We used data collected as part of the clinical care of patients who were representative of the general population in the United Kingdom to identify patients with epilepsy, depression, or bipolar disorder and to determine whether they received antiepileptic drugs. We estimated the incidence rate of suicide-related events and used logistic regression to compute odds ratios, controlling for confounding factors.

Results: In a cohort of 5,130,795 patients, the incidence of suicide-related events per 100,000 person-years was 15.0 (95% confidence interval [CI], 14.6 to 15.5) among patients without epilepsy, depression, bipolar disorder, or antiepileptic-drug treatment, 38.2 (95% CI, 26.3 to 53.7) among patients with epilepsy who did not receive antiepileptic drugs, and 48.2 (95% CI, 39.4 to 58.5) among patients with epilepsy who received antiepileptic drugs. In adjusted analyses, the use of antiepileptic drugs was not associated with an increased risk of suicide-related events among patients with epilepsy (odds ratio, 0.59; 95% CI, 0.35 to 0.98) or bipolar disorder (1.13; 95% CI, 0.35 to 3.61) but was significantly associated with an increased risk among patients with depression (1.65; 95% CI, 1.24 to 2.19) and those who did not have epilepsy, depression, or bipolar disorder (2.57; 95% CI, 1.78 to 3.71).

Conclusion: The current use of antiepileptic drugs was not associated with an increased risk of suicide-related events among patients with epilepsy, but it was associated with an increased risk of such events among patients with depression and among those who did not have epilepsy, depression, or bipolar disorder.

Comment

Main findings: This study on the relationship between suicide and antiepileptic drugs in patients with epilepsy, depression or bipolar disorder was developed in response to a previous meta-analysis conducted on the same topic, which found that antiepileptic medication was associated with an increased risk of suicide.¹ This has led the Food and Drug Administration (FDA) towards issuing a safety warning about the risk of suicidality associated with these drugs.

Arana and colleagues used data from a population-representative database which contained information on more than 5 million English patients. Analysis examined patients with/without epilepsy, depression or bipolar who had used/not used antiepileptic medication. The results of the paper found a significantly higher rate of suicide in patients with epilepsy who received anti-epileptic drugs compared to those who did not receive any medication. However, after adjusting for age, medical, and psychological history, this association lost its statistical significance. Analysis also indicated that the risk for suicide-related events increased among patients who received antiepileptic drugs for indications other than epilepsy, depression or bipolar disorder (potentially to alleviate pain, which is recognised as an independent risk for suicidality). Overall, results of this observational study did not confirm the findings reported by the FDA.

Potential limitations of the study, as acknowledged by the authors, is the fact that patients with a history of suicide-related events were excluded from the study to minimise the confounding effect related to their existing elevated risk for (repeated) suicidal behaviours. As a result, the incidence rate of completed suicides was lower in this research than in some comparable studies, which implies that the study findings may not be extrapolated to the general population of patients treated with antiepileptic drugs.

Implications: In Australia, as in many other countries, persons with epilepsy are noted to have high rates of suicide.^{2,3} A past meta-analysis¹ indicated that medications used to treat epilepsy are associated with higher suicide risk. These findings caused considerable concern in the research and health care communities, given the limited non-drug treatments for epilepsy. However, as noted by Hesdorff and colleagues,⁴ the US meta-analysis has several limitations hindering the validity of obtained findings. The research by Arana and colleagues may be considered as a more convincing illustration of the relationship between epileptic medication and suicide, as it uses systematically observed data from a population-representative database. It also examines exposure to antiepileptic medications over a longitudinal timeframe, while controlling for potentially confounding effects of a number of possible covariates. However, we underline the need from more clinical research before reaching conclusions about the relationship between antiepileptic medication and suicide.

Endnotes

- 1 Katz R (2008). *Briefing document for the July 10, 2008 Advisory Committee meeting to discuss antiepileptic drugs (AED) and suicidality*. Memorandum (Accessed 14 October 2010, at <http://www.fda.gov/ohrms/dockets/ac/08/briefing/2008-4372b1-01-FDA-Katz.pdf>)
- 2 Christensen J, Vestergaard M, Mortensen PB, Sidenius P, Agerbo E (2007). Epilepsy and risk of suicide: a population-based case-control study. *Lancet Neurology* 6, 693-698.
- 3 Bell GS, Gaitatzis A, Bell CL, Johnson AL, Sander JW (2009). Suicide in people with epilepsy: How great is the risk? *Epilepsia* 50, 1933-1944.
- 4 Hesdorffer DC, Kanner AM (2009). The FDA alert on suicidality and antiepileptic drugs: Fire or false alarm? *Epilepsia* 50, 978-986.

Suicide and self-injury among children and youth with chronic health conditions

Barnes AJ, Eisenberg ME, Resnick MD (USA)

Pediatrics 125, 889-895, 2010

Objective: Chronic conditions may be associated with suicide risk. This study aimed to specify the extent to which youth chronic conditions are at risk for suicidality and self-harm.

Methods: Logistic regression was used to estimate odds of self-harm, suicidal ideation, and suicide attempts in 10- to 19-year-olds with and without chronic physical and/or mental health conditions.

Results: Independent of race, socioeconomic status, absent parent, special education status, substance use, and emotional distress, youth with co-occurring chronic physical and mental conditions ($n = 4099$) had significantly higher odds of self-harm (odds ratio [OR]: 2.5 [99% confidence interval (CI): 2.3-2.8), suicidal ideation (OR: 2.5 [99% CI: 2.3-2.8), and suicide attempts (OR: 3.5 [99% CI: 3.1-3.9]) than healthy peers ($n = 106\ 967$), as did those with chronic mental conditions alone ($n = 8752$). Youth with chronic physical conditions alone ($n = 12\ 554$) were at slightly elevated risk for all 3 outcomes. Findings were similar among male and female youth, with a risk gradient by grade.

Conclusions: Chronic physical conditions are associated with a slightly elevated risk for self-harm, suicidal thinking, and attempted suicide; chronic mental conditions are associated with an increased risk for all 3 outcomes. Co-occurring chronic physical and mental conditions are associated with an increased risk for self-harm and suicidal ideation that is similar to the risk in chronic mental conditions and with an attempted suicide risk in excess of that predicted by the chronic mental health conditions alone. Preventive interventions for these youth should be developed and evaluated.

Comment

Main findings: The cross-sectional study by Barnes and colleagues showed that suicide and self-harm are relatively common in children with chronic health conditions. Participants with both chronic physical and mental health conditions (without specification of the condition) had 2.5 to 3.5 times the odds of self-harm, suicide ideation and suicide attempt compared to those without chronic health conditions. This relationship appeared to be significantly more observable in those in the highest grades of school compared to those in lower grades. Further testing showed that the associations between self-harm/suicidality remained significant after adjusting for possible confounders such as age, gender, race, family structure, socio-economic status, special education, substance use history and 'emotional wellbeing'. The authors speculate about

the possibility of a developmental trajectory among children with chronic conditions that could contribute to overall levels of emotional distress and suicide. However, future work is needed to investigate whether the pathways between chronic health conditions and suicide are bi-direction or uni-dimensional in nature. For example, a suicidal teenager may engage in behaviours that increase the likelihood of chronic diseases (e.g. unprotected sex leading to sexually transmitted infections). Opposite to this direction of causality, a chronic condition causing significant impairment may lead to increased risk of suicidality.

The size of the study sample is impressive (136,549 of school attendants aged between 10 and 19 years), and was gathered from 2007 survey conducted in 91% of all public schools in Minnesota. The survey included questions on both chronic conditions (physical, mental, or both physical and mental) and suicide/self-harm. The dimensional approach used in the study is a further strength, as this allowed individuals to rate the level of distress caused by chronic health conditions. Limitations include the self-report design and the fact that the survey does not include information on the type of chronic condition experienced by the individual.

Implications: The topic investigated by Barnes and colleagues (2010) is an increasing area of concern among Australian youth, as younger cohorts have been found to have the highest growth in rates of chronic disease prevalence comparative to other age groups.¹ A chronic disease is defined as an ongoing condition characterised by a diagnosis of a specific physical or mental condition, functional limitation, and service use or need beyond routine care.¹ From a developmental perspective, chronic conditions may cause delays in the physical, psychological or emotional development of an adolescent. The findings from the present article indicate that these health conditions are associated with adverse outcomes, including an increased risk of self-harm, suicide ideation and suicide attempts. The results highlight the need for an improved screening of children with chronic health conditions and the development of strategies focusing on factors that may prevent distress and suicidality. As indicated by the authors, future research is required to identify the links between chronic health conditions with the contextual (e.g. living circumstances, education), familial and individual factors (e.g. physical, psychological factors) that may contribute to the risk for suicide.

Endnote

- 1 Australian Institute for Health and Welfare (2007). *Young Australians: their health and well-being 2007*. Australian Government, Canberra.

Psychosis alters association between IQ and future risk of attempted suicide: cohort study of 1,109,475 Swedish men

Batty GD, Whitley E, Deary IJ, Gale CR, Tynelius P, Rasmussen F (Sweden)

British Medical Journal 340, c2506, 2010

Objectives: To explore associations between IQ measured in early adulthood and subsequent hospital admissions for attempted suicide and to explore the role of psychosis and examine associations of IQ with specific methods of attempted suicide.

Design: Cohort study.

Setting: Sweden.

Participants: 1,109,475 Swedish men with IQ measured in early adulthood followed up for an average 24 years.

Main outcome measures: Hospital admission for attempted suicide.

Results: 17,736 (1.6%) men had at least one hospital admission for attempted suicide by any means during follow-up. After adjustment for age and socio-economic status, lower IQ scores were associated with an elevated risk of attempted suicide by any means (hazard ratio per standard deviation decrease in IQ = 1.57, 95% confidence interval 1.54 to 1.60), with stepwise increases in risk across the full IQ range (P for trend < .001). Similar associations were observed for all specific methods of attempted suicide. Separate analyses indicated that associations between IQ and attempted suicide were restricted to participants without psychosis and that IQ had no marked impact on risk of attempted suicide in those with psychosis.

Conclusions: Low IQ scores in early adulthood were associated with a subsequently increased risk of attempted suicide in men free from psychosis. A greater understanding of the mechanisms underlying these associations may provide opportunities and strategies for prevention.

Comment

Main findings: As discussed in the paper by Batty and colleagues, past ecological studies suggest that countries with higher IQs have higher suicide rates, while individual-level observations suggest that persons with lower IQs have a greater number of suicide attempts. This Swedish cohort study followed a population-representative sample of more than 1 million males, linking their IQ scores (obtained during the military service conscription examination) with data from hospital admission following attempted suicides. After adjustment for a wide range of medical, socio-economic, educational and lifestyle factors, results of a Cox-regression model suggested that males in the lowest IQ group were close to 9 times more likely to have an admission for a suicide attempt than men in the highest IQ group. This association was also evident when examining risks for attempted sui-

cides by specific methods. Finally, results suggest no association between IQ and attempted suicide in a subsample of cases with diagnosed psychosis. This may be a reflection of the strength of the direct link between psychosis and attempted suicide, which appeared to be stronger than the influence of intelligence.

Implications: Past research has found increased risk factors for suicide in persons with low IQ.¹ Intelligence is also associated with problem-solving ability, which indicates that persons with low IQ may be less able to find practical solutions in times of emotional crisis. This observation was supported by findings of Batty and colleagues which found the low results on the 'logical subscale' of an IQ test to be the strongest predictor of subsequent suicidality. It is also relevant to consider the possible role of lowered emotional and verbal IQ in affecting the ability to recognise and communicate emotional problems to others. At this stage, more research is needed to identify the casual mechanisms through which low IQ influences suicide. Because of this, it is impossible to suggest practical policy solutions or interventions. One explanation for the link between intelligence and suicide proposed by Batty and colleagues is that low IQ tends to correlate with lower socioeconomic status and income, so people with lower IQ scores may experience more social and financial disadvantage, leading to an increase in suicidal thoughts and behaviours. Low IQ has also been associated with higher alcohol use, which is thought to be a contributing factor in a number of suicide attempts and deaths.² However, considering the lack of research in the area, these explanations remain speculative at this point in time. Further, while the presented study expands current understandings on this topic, its findings need to be replicated in women and other cultural contexts.

Endnotes

- 1 1. Batty GD, Deary IJ, Macintyre S (2006). Childhood IQ and life course socioeconomic position in relation to alcohol induced hangovers in adulthood: the Aberdeen children of the 1950s study. *Journal of Epidemiology and Community Health* 60, 872-874.
- 2 2. Boenisch S, Bramesfeld A, Mergl R, Havers I, Althaus D, Lehfeld H, Niklewski G, Hegerl U (2010). The role of alcohol use disorder and alcohol consumption in suicide attempts — A secondary analysis of 1921 suicide attempts. *European Psychiatry*. Published online: 3 June 2010. doi:10.1016/j.eurpsy.2009.11.007

Postcard intervention for repeat self-harm: Randomised controlled trial

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British Journal of Psychiatry 197, 55-60, 2010

Background: Self-harm and suicidal behaviour are common reasons for emergency department presentation. Those who present with self-harm have an elevated risk of further suicidal behaviour and death.

Aims: To examine whether a postcard intervention reduces self-harm re-presentations in individuals presenting to the emergency department.

Method: Randomised controlled trial conducted in Christchurch, New Zealand. The intervention consisted of six postcards mailed during the 12 months following an index emergency department attendance for self-harm. Outcome measures were the proportion of participants re-presenting with self-harm and the number of re-presentations for self-harm in the 12 months following the initial presentation.

Results: After adjustment for prior self-harm, there were no significant differences between the control and intervention groups in the proportion of participants re-presenting with self-harm or in the total number of re-presentations for self-harm.

Conclusion: The postcard intervention did not reduce further self-harm. Together with previous results this finding suggests that the postcard intervention may be effective only for selected subgroups.

Comment

Main findings: The study by Beautrais and colleagues sought to assess the efficacy of a post-card intervention on self-harm presentations to a hospital emergency department in New Zealand. The topic of this study is timely, considering recent evidence from several countries that self-harm constitutes an increasing proportion of presentations to emergency services. It is also recognised that self-harm is associated with other adverse outcomes, such as subsequent death by suicide. The study design follows earlier work by Carter et al.¹ by implementing a 'postcard' follow-up, which inquires into the wellbeing of the participant and encourages long-term contact with the Psychiatric Emergency Services (PES). The main differences between this study and earlier work relates to a shorter follow-up time (12 months vs. 24 months) and a wider inclusion criterion (all self-harm cases were considered, while earlier study only included poisoning cases). Before adjusting for prior self-harm, results suggested that the intervention led to a significant reduction in the number of self-harm presentations to the PES and the emergency department. However, after adjusting for prior self-harm presentations, results suggested that the post-card intervention did not significantly reduce re-presentation in individuals presenting to a PES following the index episode of self-harm. The authors of the study explain that this may be due to underlying differences between the intervention and the control group in the 12 months prior to the study.

Implications: This study shows the importance of controlling for pre-existing group differences in controlled clinical trials. However, it is also important to highlight that the results of this study differ from previously published studies on postcard interventions.^{1,2} As suggested by Beautrais and colleagues, this may reflect differences in study design or sample variations. These alternate findings indicate the need for more research on the efficacy of postcard interventions on suicidal behaviour. This is particularly necessary in the Australian context, which lacks research on controlled trials for suicidal behaviours in general.

Endnotes

- 1 Carter GL, Clover K, Whyte IM, Dawson AH, D'Este C (2007). Postcards from the edge: 24-month outcomes of a randomised controlled trial for hospital-treated self-poisoning. *British Journal of Psychiatry* 191, 548- 553.
- 2 Motto JA, Bostrom AG (2001). A randomized controlled trial of postcrisis suicide prevention. *Psychiatric Services* 52, 828-33.

Suicidal behaviour and suicide from the Clifton suspension bridge, Bristol and surrounding area in the UK: 1994–2003

Bennewith O, Nowers M, Gunnell D (UK)

European Journal of Public Health. Published online: 14 July 2010. doi: 10.1093/eurpub/ckq092, 2010

Objective: Little is known about the characteristics of people who die by jumping from different locations (e.g. bridges, buildings) and the factors that might influence the effectiveness of suicide prevention measures at such sites.

Method: We collected data on suicides by jumping ($n = 134$) between 1994 and 2003 in Bristol, UK, an area that includes the Clifton Suspension Bridge, a site renowned for suicide. We also carried out interviews with Bridge staff and obtained records of fatal and non-fatal incidents on the bridge (1996–2005) before and after preventive barriers were installed in 1998.

Results: The main sites from which people jumped were bridges ($n = 71$); car parks ($n = 12$); cliffs ($n = 20$) and places of residence ($n = 20$). People jumping from the latter tended to be older than those jumping from other sites; people jumping from different sites did not differ in their levels of past self-harm or current psychiatric care. As previously reported, suicides from the bridge halved after the barriers were erected; people jumping from the Clifton Suspension Bridge following their construction were more likely to have previously self-harmed and to have received specialist psychiatric care. The number of incidents on the bridge did not decrease after barriers were installed but Bridge staff reported that the barriers ‘bought time’, making intervention possible.

Conclusions: There is little difference in the characteristics of people jumping from different locations. Barriers may prevent suicides among people at lower risk of repeat self-harm. Staff at suicide hotspots can make an important contribution to the effectiveness of installations to prevent suicide by jumping.

Comment

Main findings: This paper complements a previous study by the authors, which examined the effectiveness of anti-suicide barriers on the Clifton Suspension Bridge in the UK, demonstrating that in the four years — since implementation in 1999 — the number of deaths from this location has halved.¹ The aim of this paper was to provide information on characteristics of people who died by jumping from different locations in Bristol. This area of research has strong potential for informing preventative measures, but to date has not yet received much attention in international literature. Apart from age (people jumping from their own residence tend to be older), no significant differences were observed between people jumping from different sites in Bristol. A second aim of the study was to examine characteristic of people that had jumped from the Clifton Suspension Bridge after the erection of barriers. Results indicated that these persons were more likely to have a history of self-harm and be receiving psychiatric help at time of death than people who jumped off the bridge in the previous years.

Authors conducted interviews with 10 staff employed as attendants at the Bridge, who reported their more frequent involvement in ‘incidents’ on the bridge after the barriers were installed (71.3% before the barriers were installed and 83.5% after). Police escorted approximately three-quarters of potential jumpers away from the scene. Interviews with staff suggest that the bridge barriers had increased the amount of time available for a person to get help and prevent the suicide. Young single males who did not make eye contact and people ‘hanging around the buttress or chains’ most often attracted attention as potential at-risk cases.

Implications: Restrictions to means of suicide, such as the fencing of bridges, have been confirmed to be an effective component of many suicide prevention strategies.² In addition, being able to better identify those at-risk of suicide, may lead to an improved ability to reduce the number of deaths by people who choose bridge-jumping as a method of suicide. These factors indicate the need for a study on the characteristics of bridge-jumpers in the Australia context. Additional relevant findings of the study come from the observations of staff attendants on the bridge, who stated that the installation of barriers increased the amount of time available to reach a suicidal individual and reduce the possibility of deaths. When installation of permanent barriers restricting access to bridges is not feasible (often due to financial constraints), alternative methods should be considered. Aside from 24-hour monitoring by bridge attendants, preventative measures may include video surveillance and clearly visible no-cost telephones with direct access to help lines.

Endnotes

- 1 Bennewith O, Nowers M, Gunnell D (2007). Effect of barriers on the Clifton suspension bridge, England on local patterns of suicide: implications for prevention. *British Journal of Psychiatry* 190, 266-267.
- 2 Daigle M (2005). Suicide prevention through means restriction: Assessing the risk of substitution: A critical review and synthesis. *Accident Analysis & Prevention* 37, 625-632.

Repetition of suicide attempts

Bertolote JM, Fleischmann A, De Leo D, Phillips MR, Botega NJ, Vijayakumar L, de Silva D, Schlebusch L, Nguyen VT, Sisask M, Bolhari J, Wasserman D (Switzerland)

Crisis 31, 194-201, 2010

Background: Attempted suicide is a strong risk factor for subsequent suicidal behaviors. Innovative strategies to deal with people who have attempted suicide are needed, particularly in resource-poor settings.

Aims: To evaluate a brief educational intervention and periodic follow-up contacts (BIC) for suicide attempters in five culturally different sites (Campinas, Brazil; Chennai, India; Colombo, Sri Lanka; Karaj, Islamic Republic of Iran; and Yuncheng, People's Republic of China) as part of the WHO Multisite Intervention Study on Suicidal Behaviors (SUPRE-MISS).

Methods: Among the 1,867 suicide attempters enrolled in the emergency departments of the participating sites, 922 (49.4%) were randomly assigned to a brief intervention and contact (BIC) group and 945 (50.6%) to a treatment as usual (TAU) group. Repeated suicide attempts over the 18 months following the index attempt — the secondary outcome measure presented in this paper — were identified by follow-up calls or visits. Subsequent completed suicide — the primary outcome measure — has been reported in a previous paper.

Results: Overall, the proportion of subjects with repeated suicide attempts was similar in the BIC and TAU groups (7.6% vs. 7.5%, $\chi^2(2) = 0.013$; $p = .909$), but there were differences in rates across the five sites.

Conclusions: This study from five low- and middle-income countries does not confirm the effectiveness of brief educational intervention and follow-up contacts for suicide attempters in reducing subsequent repetition of suicide attempts up to 18 months after discharge from emergency departments.

Comment

Main findings: Bertolote and colleagues present results of comparative evaluations of brief interventions, consisting of follow-up contacts with suicide attempters, performed in five culturally diverse countries around the world (all considered to be resource-poor settings). This study was conducted a part of the Multisite Intervention Study on Suicidal Behaviours (SUPRE-MISS), developed by the World Health Organization. Suicide attempters were randomly allocated to treatment as usual (TAU) or to the group that received TAU plus brief intervention (BIC) in the form of periodic follow-up contacts. Results showed that over the 18-month follow-up there were no significant differences between the two groups in regards to numbers of subsequent suicide attempts. Notable differences were reported among participating countries (e.g. in China, only 1% of sample repeated suicide attempt over the studied time period, while in Brazil percentage of repeats was 27%).

Interestingly, previous studies derived from this study demonstrated beneficial effects on reducing number of deaths by suicide for persons receiving BIC interventions after admission to emergency departments for suicide attempts.¹ Authors conclude that brief interventions may have varied effects on different outcome measures and suggest that in the future diverse interventions may need to be developed to address heterogeneous needs of sub-groups of suicide attempters (e.g. first time vs. repeated attempters).

Implications: This study failed to demonstrate the effectiveness of brief intervention in reducing the rate of repetition of suicide attempts across the selected five middle and low-income countries. Nevertheless, this and similarly designed interventions, offer an approach to minimising adverse outcomes for persons at-risk for suicide in countries without highly trained staff. Corroborating evidence of the beneficial utilisation of telephone outreach interventions in post-discharge protocols for management of suicide attempters comes also from Australia.²

Endnotes

- 1 Fleischmann A, Bertolote JM, Wasserman D, De Leo D, Bolhari J, Botega NJ, De Silva D, Phillips M, Vijayakumar L, Värnik A, Schlegel L, Thanh HT (2008). Effectiveness of brief intervention and contact for suicide attempters: A randomized controlled trial in five countries. *Bulletin of the World Health Organization* 86, 703–709.
- 2 De Leo D, Heller T (2007). Intensive case management in suicide attempters following discharge from inpatient psychiatric care. *Australian Journal of Primary Health* 13, 49–58.

The role of alcohol use disorder and alcohol consumption in suicide attempts: A secondary analysis of 1921 suicide attempts

Boenisch S, Bramesfeld A, Mergl R, Havers I, Althaus D, Lehfeld H, Niklewski G, Hegerl U (Germany)

European Psychiatry. Published online: 3 June 2010. doi:10.1016/j.eurpsy.2009.11.007, 2010

Background: It is not known how characteristics of suicide attempts vary with different forms of alcohol involvement. The aim of this study is to clarify the role of alcohol use disorder and acute alcohol consumption in suicide attempts.

Methods: Data on 1921 suicide attempts was gathered in a major German city over a 5-year period. Suicide attempts were categorised according to a diagnosis of alcohol use disorder and acute alcohol consumption at the time of the attempt. Group comparisons and multinomial logistic regression were used for statistical analysis.

Results: In 331 suicide attempts (17%) an alcohol use disorder was diagnosed. Six hundred and twenty-two suicide attempts (32%) were committed with acute alcohol consumption. Suicide attempts by individuals with alcohol use disorder were more often committed by men, older individuals and as a recurrent attempt, independently of alcohol consumption at the time of the attempt. When alcohol was consumed in suicide attempts by individuals with alcohol use disorder, low-risk methods were used most often.

Conclusions: Individuals with a diagnosis of alcohol use disorder are a high-risk group for multiple suicide attempts and should be a target group for suicide prevention. Screening for suicidality should be a regular part of the clinical assessment in individuals with alcohol use disorder.

Comment

Main findings: This study on use of alcohol by suicide attempters carries many practical implications for development of suicide prevention programs targeting this vulnerable population. The large study sample allowed the authors to distinguish between four groups of suicide attempters: those with 'no alcohol' (63% of the sample, defined as those persons without alcohol consumption at the time of the attempt and without a diagnosis of alcohol use disorder); those with diagnosed alcohol use disorder without alcohol consumption at the time of the attempt (4.6% of the sample); those who consumed alcohol prior to the suicide attempt without a diagnosis of alcohol use disorder (19.7%), and those with a diagnosis of alcohol use disorder who had consumed alcohol prior to suicide (12.6%). Results demonstrated that more men than women used alcohol prior to attempt and had a diagnosed substance use disorder. Further relevant findings concern the choice of suicide method in males with diagnosis of alcohol use disorder: those who drank alcohol prior to suicide attempt more often chose low-risk method (medication overdoses and cutting) than those who had not consumed alcohol. The authors suggest that alcohol consumption increases the odds of engaging in impulsive suicidal behaviours, characterised by weaker intentions of achieving fatal outcomes. On the other hand, it is possible that while low-risk methods are chosen by some individuals due to their availability or personal preference towards less violent methods, alcohol may have been simultaneously consumed in an attempt to strengthen the effects of ingested medications.

Implications: Although numerous studies have shown that alcohol use (either chronic or acute) plays a very significant role in fatal and non-fatal suicidal behaviours, these associations can vary between populations. In Australia, the only similar study was conducted nearly 20 years ago in Western Australia, where positive blood alcohol reading was found in about a third of suicide cases.¹ Those cases were most often young males, with a recent relationship breakdown and limited contacts with professional help. Yet, to date, no Australian study has compared the rates of alcohol found in suicide victims with national trends of total per capita consumption of alcohol. Internationally, evidence about the positive impacts of national alcohol-restriction policies on lowering levels intoxication of suicide cases comes from Estonia.² An investigation of these links may carry significant implications for the improved management (i.e. availability) of alcohol to persons most vulnerable to suicide. Further, better understanding of risk factors associated with suicides by persons who (mis)use alcohol can assist in the development of targeted suicide prevention and early intervention approaches. The authors suggest that the findings of their study confirms that persons with a diagnosis of alcohol use disorder are a high-risk group for multiple suicide attempts. Boenisch and colleagues recommend the need for improved screening of suicidality as a mandatory part of clinical assessments of these patients. Indeed, in light of the growing evidence about the prevalence of alcohol abuse among persons attempting or completing suicides, it is reasonable

to focus on developing nationally coordinated efforts towards lowering suicidality among people (ab)using alcohol, much like has been the case with targeting suicidality in depressed persons in recent years.

In addition, some international studies suggest that measures to restrict alcohol use also assist in reducing suicides,³ such as raising the minimum legal drinking age, increasing taxes on alcohol sales, limiting the sale of alcohol products by age or time of day on certain businesses, and mandating that workplaces be alcohol-free. Lastly, the identification of persons that consume alcohol in harmful amounts as a method of self-medication when experiencing symptoms of depression or other mental illnesses remains a challenge for the future. While majority of these persons may never come to the attention of (mental) health professionals, their drinking increases vulnerability to a range of mental health problems and suicidal behaviors. To break this cycle, significant changes need to be established on a broader community level to lower the social acceptability of alcohol, encourage help-seeking behaviors and increase availability of alternative ways of coping. This seems to be particularly true for males.⁴

Endnotes

- 1 Hayward L, Zubrick SR, Silburn S (1992). Blood alcohol levels in suicide cases. *Journal of Epidemiology and Community Health* 46, 256–260.
- 2 Värnik A, Kõlves K, Väli M, Toeding LM, Wasserman D (2007). Do alcohol restrictions reduce suicide mortality? *Addiction* 102, 251–256.
- 3 Mann JJ, Apter A, Bertolote J, Beautrais A, Currier D, Haas A, Hegerl U, Lonnqvist J, Malone K, Marusic A, Mehlum L, Patton G, Phillips M, Rutz W, Rihmer Z, Schmidtke A, Shaffer D, Silverman M, Takahashi Y, Varnik A, Wasserman D, Yip P, Hendin H (2005). Suicide prevention strategies: a systematic review. *Journal of the American Medical Association* 294, 2064–2074.
- 4 Alston M (2010). Rural male suicide in Australia. *Social Science and Medicine*. Published online: 25 May 2010. doi: 10.1016/j.socscimed.2010.04.036.

Achieving standardised reporting of suicide in Australia: Rationale and program for change

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Medical Journal of Australia 192, 452-456, 2010

Suicide and intentional self-harm are issues of major importance in public health and public policy, with rates widely used as progress indicators in these areas. Accurate statistics are vital for appropriately targeted prevention strategies and research, costing of suicide and to combat associated stigma. Under-reporting of Australian suicide rates probably grew from 2002 to 2006; Australian Bureau of Statistics (ABS) suicide data were at least 11% or 16% undercounted (depending on case definitions) in 2004. In coronial cases with undetermined intent for 2005 to 2007, intentional self-harm was found in 39%. Systemic reasons for undercounting include: (1) absence of a central authority for producing mortality data; (2) inconsistent coronial processes for determining intent, as a result of inadequate information inputs, suicide stigma, and high standards of proof; (3) collection and coding methods that are problematic for data stakeholders; and (4) lack of systemic resourcing, training and shared expertise. Revision of data after coronial case closure, beginning with ABS deaths registered in 2007, is planned and will reduce undercounting. Other reasons for undercounting, such as missing or ambiguous information (e.g. single-vehicle road crashes, drowning), differential ascertainment (e.g. between jurisdictions), or lack of recorded information on groups such as Indigenous people and gay, lesbian, bisexual and transgender people require separate responses. A systemic coordinated program should address current inaccuracies, and social stigma about suicide and self-harm must be tackled if widespread underreporting is to stop.

Comment

Main findings: The paper by De Leo and colleagues discusses the under-counting of suicides in Australia in relation to coronial processes and the coding practices of the Australian Bureau of Statistics (ABS). The size of this problem is significant, as demonstrated by the comparison with suicides recorded in the Queensland Suicide Register (QSR). In 2002, the QSR reported 8.7% more suicides than the ABS; by 2007, this discrepancy grew to 43%. To a certain extent, these differences reflect the longer time taken by coroners to close suicide cases and problems in the determination of suicide intent, either due to lack of medico-legal evidence required to reach such deliberation or to stigma attached to these deaths and consequent reluctance towards deliberations on self-inflicted manners of death. The ABS has begun to address inaccuracies in official statistics by revising data on suicide starting from the year 2007. Growing awareness of the problem of data reliability has also contributed to the development of the National Committee for Standardised Reporting on Suicide (NCSRS), which aims to achieve cross-jurisdictional, multiparty agreement on standard and operationalised criteria and reporting formats for suicide and related data.

Implications: Suicides are recognised to be subject to under-reporting in official statistics due to cultural (e.g. stigma), legal (e.g. coroners prohibited from using the term ‘suicide’), or systematic reasons. This article summarises issues relation to the recording of suicide in Australia in a straight-forward manner. It provides the reader with a comprehensive understanding of this complex topic, discussing problems in the coronial process and the burden of proof required to assign a death as suicide, as well as issues related to the coding of data¹. Misreporting suicide mortality has implications for both intervention efforts and research on suicide in Australia. Not only does undercounting the number of deaths contribute to the false idea that current prevention strategies have been effective in reducing suicide, it also presents a biased foundation for research on suicide trends and associated risk factors. The ‘way forward’ proposed by the study authors indicates a number of strategies to improve the situation, including the foundation of the NCSRS. The chief aim of this committee is to standardise criteria and formats used for reporting of suicides in all Australian States and Territories. The quality of data used for informing policies tackling this public health problem can only be achieved through joint commitment between coroners, forensic counselling services, agencies reporting national suicide mortality data and, finally, the general populations. The latter component is vital in the light of the fact that widespread underreporting can cease only if the stigma surrounding these questions will be tackled appropriately.

Endnote

- 1 Williams RF, Doessel DP, Svetcic J, De Leo D (2010). Accuracy of official suicide mortality data in Queensland. *Australian & New Zealand Journal of Psychiatry* 44, 815–22.

Suicide prevention programs through community intervention

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Journal of Affective Disorders. Published online: 2 July 2010. doi:10.1016/j.jad.2010.06.009, 2010

Broad general community campaigns were developed to reduce suicide rates. The aim of the current paper was to review such studies in the literature. The MEDLINE search using a combination of the keywords 'suicide', 'education'/'psychoeducation' and 'community' updated through January 10, 2010, returned 424 references and relevant for the current review were 48 with 14 papers reporting results. Although suicide prevention programs through community education are widespread, the reporting of their efficacy is limited. It seems that only long term programs that utilise a commitment of the society at multiple levels and succeed in establishing a community support network that can effectively reduce suicidal rates. The success of most interventions in changing the attitudes and improving the knowledge of the public concerning suicide is restricted at the theoretical-intellectual level; when it comes to action there seems to be no change. Very short duration interventions don't seem to have even this slight effect.

Comment

Main findings: Community psycho-education programs for suicide generally focus on reducing stigma associated with treatment seeking and providing support and guidance for those who are depressed and suicidal. The paper by Fountoulakis and colleagues reviewed evidence on the effectiveness of 22 education campaigns on suicidality in elderly persons, adolescents, ethnic minority groups, the Air Force, and the general population. These interventions were conducted in countries such as Japan, Australia, the United States, England and Canada. Community-based psycho-education focused on raising awareness in the media, schools and teachers, parents, general practitioners (GPs), church leaders, health professionals, and gatekeepers within communities. Among the few studies that published results on the outcomes of campaigns, community interventions appears to be associated with a reduction in elderly suicide in Japan, and a reduction in suicidal gestures in American-Indian adolescents. The strategy implemented by the US Air Force also appears to be associated with a 28% decrease in suicide. A telephone help-line in Italy shows success in reducing suicide in females, while a study from Germany indicates a relationship between a community education campaign about depression and an 18% decrease in suicide attempts. In general, campaigns are shown to be related to an increase in public knowledge about suicide, but there is a limited empirical research on subsequent rates of suicide-related events. Those few campaigns that have been shown to be effective in reducing suicide are long-term and address the issue of suicide at multiple levels of society. However, Fountoulakis and colleagues indicate that many interventions still fail to reach targeted persons at-risk for suicide, and that further research is needed to identify necessary components of effective community interventions.

Implications: The presented review identified two community campaigns for suicide in the Australian context: ‘Mind-Matters’ (a national mental health promotion campaign with suicide prevention in schools) and culturally appropriate interventions for Indigenous persons. As it stands, there is no evidence on the effectiveness of either of these campaigns. An article published in 2007¹ suggested that Australia’s National Youth Suicide Prevention Strategy (NYSPPS) is ‘plausibly’ associated with the decline in suicide rates among young males. However, given the questionable accuracy of data on suicide in Australia during the same time period,² it is likely that decreases are biased by the under-reporting of suicide. A major limitation in published research is the lack of information about the overall effectiveness of campaigns in reducing suicide. This indicates the need for intervention campaigns to have an evaluation framework built into the strategy. This may involve the application of an intervention within a specific area compared against a ‘control’ population/area (as in the Nuremberg Alliance Against Depression³). The intervention should be measured against a standardised baseline for suicide within the ‘intervention’ and ‘control’ area.

Endnotes

- 1 Morrell S, Page A, Taylor R (2007). The decline in Australian young male suicide. *Social Science & Medicine* 64, 747–754.
- 2 De Leo D (2010). Australia Revises its Mortality Data on Suicide. *Crisis* 31, 169-173.
- 3 Hegerl U, Mergl R, Havers I, Schmidtke A, Lehfeld H, Niklewski G, Althaus D (2010). Sustainable effects on suicidality were found for the Nuremberg alliance against depression. *European Archives of Psychiatry & Clinical Neuroscience* 260, 401-406.

Bullying, cyberbullying, and suicide

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Archives of Suicide Research 14, 206-212, 2010

Empirical studies and some high-profile anecdotal cases have demonstrated a link between suicidal ideation and experiences with bullying victimisation or offending. The current study examines the extent to which a nontraditional form of peer aggression-cyberbullying-is also related to suicidal ideation among adolescents. In 2007, a random sample of 1,963 middle-schoolers from one of the largest school districts in the United States completed a survey of Internet use and experiences. Youth who experienced traditional bullying or cyberbullying, as either an offender or a victim, had more suicidal thoughts and were more likely to attempt suicide than those who had not experienced such forms of peer aggression. Also, victimisation was more strongly related to suicidal thoughts and behaviors than offending. The findings provide further evidence that adolescent peer aggression must be taken seriously both at school and at home, and suggest that a suicide prevention and intervention component is essential within comprehensive bullying response programs implemented in schools.

Comment

Main findings: This study was conducted within a sample of nearly 2,000 school students (aged between 10 and 16 years) in 30 schools of the United States. The authors sought to examine the effect of traditional bullying (defined as aggressive behaviour or intentional 'harm doing' by one person or a group, generally carried out repeatedly and over time) and cyber-bullying (wilful and repeated harm inflicted through the use of computers, cell phone, and other electronic devices), from the perspectives of both perpetrators and victims. Results indicated that 20% of total sample of adolescents reported suicide ideation, while 19% reported attempting suicide. The prevalence of cyber-bullying ranged from 9.1% to 23.1% for offending and 5.7% to 18.3% for victimisation. The most common form of cyber-bullying reflected the following statement: 'posted something online about another person to make others laugh' (23.1%), while the most frequent form of victimisation was in a form of receiving 'an upsetting email from someone you know' (18.3%). After controlling for gender, age, and the effect of other types of bullying, the results of a logistic regression indicated that both traditional and cyber-bullying were associated with an increase in suicide ideation and suicide attempts. Compared to those who had not been victims/perpetrators, traditional bullying victims were 1.7 times more likely to have attempted suicide, while bullying offenders were 2.1 times more likely to have attempted suicide. Those who were victims of cyber-bullying were 1.9 more times as likely to have attempted suicide than those who were not cyber-bullying victims. Offenders were 1.5 times more likely to have attempted suicide than those who were not perpetrators of cyber-bullying.

Authors acknowledge that they chose a relatively broad measure of cyber-bullying, including some minor behaviours of 'online harassment', which might have led to an over-representation of identified perpetrators and victims of this type of bullying, and consequently affected the nature of its links with suicidal behaviours. Findings of this study should be interpreted with these considerations in mind.

Implications: Recently, there has been increasing media attention to the adverse impacts of cyber-bullying on mental health in Australia¹ following several high-profile cases involving teenagers taking their own lives as a result (or at least related to the experience) of being harassed or mistreated over the Internet. Compared to the findings by Hinduja & Patchin, a past Australian study found a substantially lower proportion of students identifying themselves as either cyber-bullies (11%) or victims (14%).² However, the Australian study was conducted at least five years ago, and did not explore the consequences of bullying on mental wellbeing and suicide. Given the rapid changes in technology within the past years, it is necessary to re-examine the role of cyber-bullying in Australian schools, with a particular focus on possible consequences on suicidal behaviours. As suggested in a recent review,³ bullying behaviours need to be addressed within a coordinated school-based approach including comprehensive anti-bullying programs. Hinduja and Patchin also suggest that adolescent Internet use needs to be monitored to prevent cyber-bullying. While it is unlikely cyber-bullying by itself leads to youth suicide, it may exacerbate instability and hopelessness in adolescents already affected by stressful life circumstances or mental health problems.

Endnotes

- 1 Chester R. Cyber bullying 'a great threat'. *The Courier-Mail*. 03 March 2010. Available from <http://www.couriermail.com.au/spike/no-bullying/cyber-bullying-a-great-threat/story-fn50ufcf-1225836264523>.
- 2 Campbell MA (2005). Cyber bullying: An old problem in a new guise? *Australian Journal of Guidance and Counselling* 15, 68–76.
- 3 Arseneault L, Bowes L, Shakoor S (2010). Bullying victimization in youths and mental health problems: 'Much ado about nothing'? *Psychological Medicine* 40, 717

Asthma and suicide mortality in young people: A 12-year follow-up study

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Objective: Mortality risk is relatively high in young people with asthma, and the risk may include causes of death other than those directly linked to respiratory disease. The authors investigated the association between asthma and suicide mortality in a large population-based cohort of young people.

Method: A total of 162,766 high school students 11 to 16 years of age living in a catchment area in Taiwan from October 1995 to June 1996 were enrolled in a study of asthma and allergy. Each student and his or her parents completed structured questionnaires. Participants were classified into three groups at baseline: current asthma (symptoms present in the past year), previous asthma (history of asthma but no symptoms in the past year), and no asthma. Participants were followed to December 2007 by record linkage to the national Death Certification System. Cox proportional hazards models were used to study the association between asthma and cause of death.

Results: The incidence rate of suicide mortality in participants with current asthma at baseline was more than twice that of those without asthma (11.0 compared with 4.3 per 100,000 person-years), but there was no significant difference in the incidence of natural deaths. The adjusted hazard ratio for suicide was 2.26 (95% CI=1.43-3.58) in the current asthma group and 1.76 (95% CI=0.90-3.43) in the previous asthma group. Having a greater number of asthma symptoms at baseline was associated with a higher risk of subsequent suicide. The population attributable fraction was 7.0%. **Conclusions:** These results highlight evidence of excess suicide mortality in young people with asthma. There is a need to improve mental health care for young people, particularly those with more severe and persistent asthma symptoms.

Comment

Main findings: Several important methodological features contribute to the high quality of this article, including the large community sample, the longitudinal framework, and the population-controlled study design. These methodological features were facilitated by an identification system that allowed the sample to be linked to a national mortality database. The main finding of this study was that young people (aged between 11 and 16 years of age) with asthma had twice the risk of suicide compared to those without this condition. The analysis controlled for gender, age, allergic rhinitis, cigarette smoking, and smoking by a family member. Results also indicated that young people with a greater number of asthma symptoms at baseline (wheezing when exercising, night cough and severe wheezing) had a higher risk of suicide

mortality. The authors suggest that the relationship between asthma and suicide may be explained by a combination of physical, psychological, and social factors. For example, asthma symptoms may produce greater impairment to daily functioning and a perceived sense of physical burden. These factors may interact with possible psychiatric issues to heighten the likelihood of suicide. Another significant finding of the study was the relationship between suicide mortality and increasingly worsened symptoms of asthma. The authors suggest that this result may provide some evidence of a dose-response relationship, where suicide risk increases with the severity of asthma. Study results indicated a 'population attributable fraction' of 7%, which corresponds to the proportional reduction in suicide that would occur if asthma was reduced in the sample. Sensitivity analysis revealed that depression only had a minimal influence on the relationship between suicide and asthma. However, as acknowledged by the authors, depression may have mediated the relationship between suicide and asthma; a possibility which could not be investigated within the study boundaries.

Implications: In 2003, the Australian Institute of Health and Welfare reported that asthma was the leading cause of burden of disease in Australian children, contributing 17.4% of total DALYs, and constituting the eleventh-leading contributor to the overall burden of disease in Australia.¹ It is predicted that asthma will continue to rank as one of the major causes of disease burden in Australia for the next two decades, particularly among females. There has already been some preliminary confirmation for a relationship between suicide and asthma in an Australian study,² which showed that up to 26% of young suicide attempters (13 to 20 years) admitted to an inner city hospital had a chronic condition such as asthma.² In further analysis that controlled for psychotic disorders, drug/alcohol abuse and sexual abuse, chronic conditions were found to be significantly associated with increased risks for re-attempt within a 12-month period. However, the pathways through which asthma may be related to suicide are still unclear, prompting the need for more research in the area.

Endnotes

- 1 Australian Institute of Health and Welfare, Australian Centre for Asthma Monitoring (2009). *Burden of disease due to asthma in Australia 2003*. Cat. No. ACM 16. Canberra: AIHW.
- 2 Vajda J, Steinbeck K (2000). Factors associated with repeat suicide attempts among adolescents. *Australian & New Zealand Journal of Psychiatry* 34, 437-445.

Role of media reports in completed and prevented suicide: Werther v. Papageno effects

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British Journal of Psychiatry 197, 234-243, 2010

Background: Media reporting of suicide has repeatedly been shown to trigger suicidal behaviour. Few studies have investigated the associations between specific media content and suicide rates. Even less is known about the possible preventive effects of suicide-related media content.

Aims: To test the hypotheses that certain media content is associated with an increase in suicide, suggesting a so-called Werther effect, and that other content is associated with a decrease in suicide, conceptualised as a Papageno effect. Further, to identify classes of media articles with similar reporting profiles and to test for associations between these classes and suicide.

Method: Content analysis and latent class analysis (LCA) of 497 suicide-related print media reports published in Austria between January 1 and June 30, 2005. Ecological study to identify associations between media item content and short-term changes in suicide rates.

Results: Repetitive reporting of the same suicide and the reporting of suicide myths were positively associated with suicide rates. Coverage of individual suicidal ideation not accompanied by suicidal behaviour was negatively associated with suicide rates. The LCA yielded four classes of media reports, of which the mastery of crisis class (articles on individuals who adopted coping strategies other than suicidal behaviour in adverse circumstances) was negatively associated with suicide, whereas the expert opinion class and the epidemiological facts class were positively associated with suicide.

Conclusions: The impact of suicide reporting may not be restricted to harmful effects; rather, coverage of positive coping in adverse circumstances, as covered in media items about suicidal ideation, may have protective effects.

Comment

Main findings: The authors of this study implemented a mixed quantitative-qualitative methodological approach to examine print media reports about suicide during a 6-month period in Austria. Results demonstrated a significant association between several harmful aspects of these news and post-report increases in suicide mortality — such as repetitive reporting of the same suicide, reporting of public myths about suicide and references to a suicide ‘epidemic’. Niederkroenthaler and colleagues provide some support for a ‘dose-response’ relationship between quantity of reporting and subsequent frequency of suicide. Further, results showed that media reports including contacts for support services and background information (provided by suicide research experts) may in

fact lower the number of suicide deaths. Additionally, media items with a main focus on suicidal ideation were found to predict decrease in suicide rates. The findings presented in this article offer the first empirical evidence for the possibility of a suicide protective-effect of media reports.

A particular strength of this article is the detailed description of the content analysis and latent class analysis performed on a large number of identified suicide-related print media reports. The concrete harmful and protective item characteristics, investigated in the study, provide the reader with the opportunity for a truly in-depth understanding of the applied methodology. Of great interest are also the codes for measuring sensationalism, developed by the authors, which highlight features of media reporting with particularly strong potential for negative impacts on most vulnerable individuals.

The authors acknowledge that the ecological design of the study prevents conclusions about the causality of observed phenomena at the individual level. Further, there remains a scarcity of assessments of how various audiences (particularly people at risk) interpret the news and how the context within which the information is received can predict its positive or negative impact. Authors report that 72% of the total Austrian population was exposed to at least one of the newspaper captured by the study; however, they acknowledge that exclusion of news posted on the internet has limited the generalisability of their findings.

Implications: Several Australian and international studies have demonstrated that media reports/portrayals of suicide are strongly linked to imitative suicidal behaviours.^{1,2} Media reports noted as being particularly harmful include those that romanticise or dramatise suicide, and reports on celebrity suicides. However, media do not necessarily have only a negative role in disseminating news regarding suicide — the implementation of responsible media coverage may in fact lead to a decrease in suicide rates, as demonstrated in this study. Potentially protective effects were noted in news reports that used trustworthy expert opinions and epidemiological statistics on suicide mortality. Aligned with international recommendations for responsible media reporting, the study also confirmed the relevance of providing contacts for support services and encouraging help-seeking. In Australia, Pirkis et al.³ have shown a significant improvement of the overall quality of media reports of suicide between the years 2000 and 2007, and suggested their increasing alignment of the recommendations made in Reporting Suicide and Mental Illness (Commonwealth of Australia, 2002) and promoted by the Mindframe National Media Initiative. However, these positive impacts can be sustained only with ongoing collaboration with journalists of both traditional and online news platforms.

There was another finding of this study with potential practical implications for the Australian context: multivariate analysis showed that reporting about suicides by jumping had an independent effect on predicting increases in suicide rates in the following week. Currently there is no Australian-based research comparing the prevalence of media items on suicides by a particular method and

subsequent change in numbers of suicides employing that same method; however, several international studies have confirmed this link and warned against reporting of details about the execution of suicidal acts.¹ In recent years two prominent bridges and one cliff in major Australian cities have been scrutinised by media as suicidal ‘hotspots’. This (albeit unfortunate) media exposure is likely to have contributed to a decision to erect preventative barriers in these locations. Yet, the potential connection between the (in)appropriateness of news stories and suicide remains to be investigated.

Endnotes

- 1 Pirkis J, Blood RW (2001). Suicide and the media: (1) Reportage in nonfictional media. *Crisis* 22, 146–154.
- 2 Stack S (2000). Media impacts on suicide: A quantitative review of 293 findings. *Social Science Quarterly* 81, 957-971.
- 3 Commonwealth of Australia. (2002). *Reporting suicide and mental illness: A resource for media professionals*. Canberra: Commonwealth of Australia.

Personal debt and suicidal ideation

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Psychological Medicine. Published online: 16 June 2010. doi: 10.1017/S0033291710001261, 2010

Background: Personal debt is one of many factors associated with anxiety, depression and suicidality. The aim of this study was to examine the relationship between personal debt and suicidal ideation in the context of sociodemographic factors, employment and income, lifestyle behaviours, and recently experienced traumatic events.

Method: Interviews were conducted with a random probability sample comprising 7,461 respondents for the third national survey of psychiatric morbidity of adults in England. Fieldwork was carried out throughout 2007. The prevalence of suicidal thoughts in the past week, past year and lifetime was assessed and current sources of debt were recorded.

Results: In 2007, 4.3% of adults in England had thought about taking their own life in the past 12 months, ranging from 1.8% of men aged 55 years to 7.0% of women aged 35–54 years. Those in debt were twice as likely to think about suicide after controlling for sociodemographic, economic, social and lifestyle factors. Difficulty in making hire purchase or mail order repayments and paying off credit card debt, in addition to housing-related debt (rent and mortgage arrears), was strongly associated with suicidal thoughts. Feelings of hopelessness partially mediated the relationship between debt and suicidal ideation.

Conclusions: The number of debts, source of the debt and reasons for debt are key correlates of suicidal ideation. Individuals experiencing difficulties in repaying their debts because they are unemployed or have had a relationship breakdown or have heavy caring responsibilities may require psychiatric evaluation in addition to debt counselling.

Comment

Main findings: Financial problems are a well-recognised risk factor for mental health problems, suicidal thoughts, and non-fatal or fatal suicidal acts. The study by Meltzer and colleagues provides a new perspective on the topic by analysing the relationships between particular sources of debt, suicide and hopelessness. The sample originated from a national survey on psychiatric morbidity in England. Multi-stage random probability sampling procedure, with additional weighing of the data to reduce household non-response bias, represents a methodological strength of the study. The final sample consisted of more than 7,000 participants, stratified by socio-economic status.

Results of multivariate analysis showed that after controlling for a variety of confounding economic and lifestyle factors, persons in debt were twice as likely to have reported thinking of taking their own lives in the preceding 12 months. This risk was particularly pronounced in people having debts from

more than one source (falling behind in paying bills related to shopping, housing and/or utilities) in the last year. It was also found that feelings of hopelessness, hypothesised to trigger the experiences of humiliation and entrapment (the latter relating particularly to gamblers), partially mediated these associations. However, results also indicated a direct effect of debt on suicide ideation, even after controlling for hopelessness.

Implications: In recent decades, debt has become an unavoidable component of modern life. Not only is debt an underlying contributor to mental health problems, but the reverse is also true — having mental health problems can also create or exacerbate debt. Many people with mental health problems live in poverty or on very low incomes, with no possibility of improving their financial situation. Findings from this study about the link between debt and mental health could be used to inform national policies, thereby ensuring that the agencies involved in providing loans, managing and recovering debts are more aware of the possible adverse outcome of debt on mental health.

Additional implications of the demonstrated association between debt and suicidal ideation comes from the results of a similar study performed in Hong Kong,¹ which found gambling activity (one of the main causes of debt accumulation) increased individual risk for suicide. While there remains a lack of systematic national research into negative consequences of gambling, a recent Australian hospital study found that 17% of suicidal patients admitted to the one emergency department reported a history of problematic gambling.² Yet, Meltzer and colleagues caution that personal debt, regardless of its source, can only be viewed as a suicide risk-increasing factor when it interacts with a range of other adverse psychological and biological factors. Well coordinated approaches aimed at identifying and providing interventions for those ‘at risk’ are therefore required, particularly in recent times of economic crisis. As it stands, debt advice agencies often do not have the specialist mental health skills needed to support a client who also display symptoms of mental health problems or risk for suicide. And similarly, it is recommended that mental health workers acquire specific ‘debt counselling’ training in supporting the clients who experience difficulties in repaying their housing-related, shopping or other debts.³

Endnotes

- 1 Yip PSF, Yang KCT, Ip BYT, Law YW, Watson R (2007). Financial debt and suicide in Hong Kong SAR. *Journal of Applied Social Psychology* 37, 2788–2799.
- 2 Gambling linked to one in five suicidal patients. *The Age*, 21 April 2010. <http://www.theage.com.au/national/gambling-linked-to-one-in-five-suicidal-patients-20100420-srri.html>.
- 3 Finch C, Chaplin R, Trend C, Collard S (2007). Debt and mental health: The role of psychiatrists. *Advances in Psychiatric Treatment* 13, 194–202.

Who seeks treatment where? Suicidal behaviors and health care: Evidence from a community survey

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The reason why some persons seek help following a suicide attempt while others do not is still insufficiently clarified. Using data from the World Health Organization/SUicide PREvention-Multisite Intervention Study on Suicidal Behavior community survey, this study tried to shed more light on this problem by investigating the type and number of treatments sought by suicide attempters in two major cities of Queensland, Australia. Compared with those who did not attend services ($n = 142$), help-seekers ($n = 257$) had significantly greater odds of overdosing with medications and communicating suicidal thoughts. They also had greater odds of reporting a history of psychological problems, previous attempts, and help-seeking behavior. Those who sought multiple services were more likely to be female and suffer also from physical illness. Non help-seekers were more frequently males, with no history of having previously sought help or communicated intent. They also appeared at greater risk of using more lethal methods (hanging) and less likely to express mental health concerns at the time of the attempt. These findings underline the need to further understand the relationship between lethality, suicide intent, and help-seeking behavior. Improving motivation to seek treatment after a suicide attempt could substantially impact on suicide prevention success efforts.

Comment

Main findings: The sample used for this research comes from a large community survey on suicidal behaviour conducted in two major cities of Australia (Gold Coast and Brisbane). This study advances knowledge on the issue of help-seeking through investigation of data from a general population sample, rather than a clinical sample, as has been commonly used in past research. This is particularly relevant for the issue of suicide, considering that as many as 75% of persons who engage in suicidal behaviours may not seek medical or psychological treatment following the act. The study found clear differences between those who seek treatment following a suicide attempt and those who do not. Help-seekers were more likely to report psychological problems, communicate suicide ideation, to have used drugs as suicide method, and have sought treatment in the past. A greater proportion those not seeking help were males who were found to be less communicative about their suicidality, more reluctant to seek help, and more often used hanging as a suicide method. Multiple treatment seekers were more likely to be female and at greater risk of comorbid physical and mental health problems. As suggested by the authors, variations between those who do and do not seek help for suicide may reflect

gender differences in attitudes to help-seeking. Males are generally recognised to be reluctant to communicate psychological problems or to seek help, possibly because this violates masculine gender norms;¹ whereas females are more ready to 'process' their emotions and ask for help if needed.² Milner and De Leo also report significant differences in those seeking help from hospitals, GPs, mental health professionals, and telephone help lines. Compared to those who did not seek help, those attending hospitals following a suicide attempt reported a higher intention to die, despite using one of the least lethal methods (drug overdose), while those contacting telephone support lines reported the lowest level of intent. Treatment seekers attending GPs reported a greater number of physical symptoms.

Implications: One of the most important implications of this research relates to the identification of persons who do not seek help following a suicide attempt. These persons show a profile similar to those most at risk of death by suicide in Australia (i.e. using hanging as a suicide method and being male). This indicates the need for more attention to be placed on encouraging non-help-seekers to seek treatment before they engage in suicidal acts. As discussed by O'Brien and colleagues,³ the failure of males to attend services may be related to 'hegemonic' attitudes that asking/seeking help is an un-masculine behaviour. However, male help-seeking may be acceptable if this is perceived as a means to preserve or restore another, more valued, enactment of masculinity (e.g. continuing employment or another social role). This suggestion indicates that treatment for suicide should be discussed within the framework of rehabilitation aimed at fulfilling social roles (e.g. worker, husband, and father). A further suggestion is to investigate why some suicide attempters abandon help-seeking after attending only one source of treatment. As a larger number of these persons are males, future research into the reasons and factors that dissuade males from seeking treatment following a suicide attempt is warranted.

Endnotes

- 1 Möller-Leimkühler AM (2002). Barriers to help-seeking by men: A review of sociocultural and clinical literature with particular reference to depression. *Journal of Affective Disorders* 71, 1–9.
- 2 Murphy GE (1998). Why women are less likely than men to commit suicide. *Comprehensive Psychiatry* 39, 165–175.
- 3 O'Brien R, Hunt K, Hart G (2005). 'It's caveman stuff, but that is to a certain extent how guys still operate': Men's accounts of masculinity and help seeking. *Social Science & Medicine* 61, 503–516.

'You feel like you can't live anymore': Suicide from the perspectives of men who experience depression

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Severe depression is a known risk factor for suicide, yet worldwide men's suicide rates continue to outnumber reported rates of men's depression. While acknowledging that the pathways to suicide are diverse, and being mindful of the complex challenges inherent to studying suicide, we interviewed men who experienced depression as a means to better understanding the processes they used to counter and contemplate suicide. This novel qualitative study provides insights on how masculine roles, identities and relations mediate depression-related suicidal ideation in a cohort of 38 men in Canada, ranging in age from 24 to 50 years old. Constant comparative analyses yielded the core category of reconciling despair in which men responded to severe depression and suicidal ideation by following two pathways. To counter suicide actions, connecting with family, peers and health care professionals and/or drawing on religious and moral beliefs were important interim steps for quelling thoughts about suicide and eventually dislocating depression from self-harm. This pathway revealed how connecting with family through masculine protector and father roles enabled men to avoid suicide while positioning help-seeking as a wise, rational action in re-establishing self-control. The other pathway, contemplating escape, rendered men socially isolated and the overuse of alcohol and other drugs were often employed to relieve emotional, mental and physical pain. Rather than providing respite, these risky practices were the gateway to men's heightened vulnerability for nonfatal suicidal behaviour. Men on this pathway embodied solitary and/or risk taker identities synonymous with masculine ideals but juxtaposed nonfatal suicidal behaviours as feminine terrain.

Comment

Main findings: This article presents results of an innovative, qualitative study that aimed to provide insight into the processes and pathways used by men with depression when they contemplate suicide. Thirty-eight Canadian men were interviewed using a semi-structured interview in which participants were encouraged to share aspects of depression most relevant to them. 'Constant comparative method', an analytical method commonly used in qualitative studies seeking to explore social phenomena, was used to identify the basic characteristics underlying men's experiences with depression. Depression has been observed to drive men into two distinct directions. The first direction (a coping strategy) is rather constructive and involves men relying on their social networks in order to counter thoughts of suicide. By contrast, the second mechanism means that men contemplate escape by engaging in solitary practices (withdrawing from social contacts and increasing use of drugs and alcohol) which in turn increased their risk for self-harming behaviours. Experiences of suicidal behaviour in the sample reflected a sense of stoicism and frustration at the inability to communicate pain. Stigma and

negative attitudes about suicide from friends, family and community resulted in a sense of ostracism, and exacerbated feelings of guilt, shame, stress, blame, fear, social isolation, low-self esteem, loss of confidence and negative self-identity. Oliffe and colleagues indicated that these factors may increase the risk of further suicidal behaviours. Male suicide attempters also reported that suicide prevention interventions may be ineffective, stating that when a person decides to suicide, there is little that can be done to save them. A limitation of the study was the small sample size, particularly in the section on non-fatal suicidal behaviours which only included answers from six participants.

Implications: Understanding the diversity and complexity of depression in men and its links to suicide is an essential step toward mobilizing effective suicide prevention strategies. The authors' discussion of the study's findings in the light of men's perceptions of their own masculinity carries several implications for the development of men-centred suicide prevention programs. For example, despite a well-established 'masculine' perception of any emotional expressions as a sign of weakness and femininity, participating men who have overcome their suicidal urges by connecting with families, friends or health professionals, perceived this to be preserving rather than threatening their masculinity. Said another way, they chose to 'put up a fight' rather than 'give in' to suicidal thoughts. An example of a public health campaign that drew on this proposition was developed in the United States (called Real Men, Real Depression). This approach convinced men that it takes courage to ask for help, along with personal accounts by other men about their own experiences with depression.

An additional recommended prevention strategy is to improve the knowledge of (mental) health care professionals about the unique expressions of depression in men. Of particular relevance is the observation of the presented study, which found some men to be distinctively restrained from confiding their suicidal thought to health care providers from fear of punishment or persecution. Therefore, assessments of depression and suicidal ideation in these settings should always include evaluations of relationship difficulties, losses and social isolation, in addition to work- or health-related stressors (all commonly found to be precipitating events to development of depression in men).

Programs that remind men about their important family and social roles, while encouraging them to redefine unhealthy masculine practices (such as denying illness and resisting professional help) can significantly reduce depression and suicide. As confirmed by findings of this study, a supportive partner is often central to the successful management of men's depression. In addition, bringing targeted community-based programs to the attention of men who are experiencing problems with health, isolation, loneliness and depression, can effectively connect men with other men, and reconnect them with work. For example, the Australian Men's Sheds initiative helps connect men with their communities and mainstream society through providing opportunities for regular hands-on activities. There are several other agencies and counselling organisations specialising in men and suicide in Australia; however, to date, their effectiveness has not been yet been systematically evaluated.

Anticonvulsant medications and the risk of suicide, attempted suicide, or violent death

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Context: In 2008, the US Food and Drug Administration mandated warning labeling for anticonvulsant medications regarding the increased risk of suicidal thoughts and behaviors. The decision was based on a meta-analysis not sufficiently large to investigate individual drugs.

Objective: To evaluate the risk of suicidal acts and combined suicidal acts or violent death associated with individual anticonvulsants.

Design: A cohort study of the risk of suicidal acts and combined suicidal acts or violent death in patients beginning use of anticonvulsant medications compared with patients initiating a reference anticonvulsant drug.

Setting and Patients: Patients 15 years and older from the HealthCore Integrated Research Database (HIRD) who began taking an anticonvulsant between July 2001 and December 2006.

Main Outcome Measures: Cox proportional hazards models and propensity score — matched analyses were used to evaluate risk of attempted or completed suicide and combined suicidal acts or violent death, controlling for psychiatric comorbidities and other risk factors, among individual anticonvulsants compared with topiramate and secondarily carbamazepine.

Results: The study identified 26 completed suicides, 801 attempted suicides, and 41 violent deaths in 297 620 new episodes of treatment with an anticonvulsant (overall median follow-up, 60 days). The incidence of the composite outcomes of completed suicides, attempted suicides, and violent deaths for anticonvulsants used in at least 100 treatment episodes ranged from 6.2 per 1000 person-years for primidone to 34.3 per 1000 person-years for oxcarbazepine. The risk of suicidal acts was increased for gabapentin (hazard ratio [HR], 1.42; 95% confidence interval [CI], 1.11-1.80), lamotrigine (HR, 1.84; 95% CI, 1.43-2.37), oxcarbazepine (HR, 2.07; 95% CI, 1.52-2.80), tiagabine (HR, 2.41; 95% CI, 1.65-3.52), and valproate (HR, 1.65; 95% CI, 1.25-2.19), compared with topiramate. The analyses including violent death produced similar results. Gabapentin users had increased risk in subgroups of younger and older patients, patients with mood disorders, and patients with epilepsy or seizure when compared with carbamazepine.

Conclusion: This exploratory analysis suggests that the use of gabapentin, lamotrigine, oxcarbazepine, and tiagabine, compared with the use of topiramate, may be associated with an increased risk of suicidal acts or violent deaths.

Comment

Main findings: Anticonvulsant medications are used in the treatment of a number of psychiatric conditions. The paper by Patorno and colleagues presents an analysis on the risk of suicide attempts and deaths between specified anticonvulsants agents (gabapentin, lamotrigine, levetiracetam, oxcarbazepine and phenobarbital) compared to two reference drugs, both also anticonvulsants (topiramate or carbamazepine). The main source of data was Health-Core Integrated Research Database (HIRD), which contains information on medical and pharmacy claims from 14 states in the United States. The study cohort was defined as persons aged 15 years and over who began taking an anticonvulsant drug between July 2001 and December 2006. Information on eligible participants was followed for 180 days and matched with data from the National Death Index (NDI). The Cox-proportional hazard models used in analysis also adjusted for a range of confounders, including patient characteristics during the 6 months preceding cohort entry. Descriptive analysis indicated differences between those taking the specified anticonvulsants agents (who were more likely to have a diagnosis of epilepsy, neuropathic pain, depression disorders, anxiety, and to have used antidepressants) and those on the reference drug topiramate (who were more likely to be female, have a diagnosis or migraine, to have an ambulatory visit, and to have used the anti-migraine medication in the 6 months prior to the study). These participants also had a lower proportion of epilepsy or seizure disorders. During the study period, there were 801 suicide attempts, 26 suicide deaths, and 41 violent deaths in the sample. Results indicated that the risk of all three outcomes was significantly higher among those prescribed gabapentin, lamotrigine, oxcarbazepine and tiagabine. Gabapentin was associated with greater risk in youth and adults, while the other medications were associated with higher risk for adults only. The results of this case-control study align with those of an earlier meta-analysis on a similar topic.¹

Implications: In addition to the treatment of epilepsy, anticonvulsants are used as medication for bipolar disorder, neuralgia, migraine, neuropathic pain, and a number of other 'off-label' uses.^{2,3} The wide range of conditions for which anticonvulsants are used emphasises the importance of understanding the potential risks associated with these drugs. The authors of this study confirm an earlier meta-analysis by finding that specific medications were associated with a higher risk of suicide attempt and deaths in the sample population. As discussed in this paper, anticonvulsants can be associated with mood and behavioural changes such as aggression, hyperactivity, nervousness and depressed mood, which may provide some explanation for an increased number of suicides in those taking anticonvulsant medications. However, it is important to recognise that this study was 'exploratory' and therefore require validation from other research studies. A future area of research could attempt to explain the possible mechanisms or pathways through which these medications are associated with suicide. Limited

research on the relationship between anticonvulsants and suicide exists in the Australian context.

Endnotes

- 1 Joint meeting of the Peripheral and Central Nervous Drugs Advisory Committee and the Psychopharmacologic Drugs Advisory Committee: Briefing material, July 10, 2008. [http://www.fda.gov/ohrms/dockets.ac.08/briefing/2008-4372b1-00-index.html](http://www.fda.gov/ohrms/dockets/ac.08/briefing/2008-4372b1-00-index.html). Accessed October 16, 2010.
- 2 Ettinger AB, Argoff CE (2007). Use of antiepileptic drugs for nonepileptic conditions. *Neurotherapeutics* 4, 75–83.
- 3 Rosenberg JM, Salzman C (2007). Update: new uses for lithium and anticonvulsants. *CNS Spectrums* 12, 831–841.

Predictors of suicidality across the life span: The Isle of Wight study

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Psychological Medicine 40, 1453-1466, 2010

Background: Data from a representative community sample were used to explore predictors of lifetime suicidality and to examine associations between distal adolescent and more proximal adult risks.

Method: Data are from a midlife follow-up of the Isle of Wight study, an epidemiological sample of adolescents assessed in 1968. Ratings of psychiatric symptoms and disorder, relationships and family functioning and adversity were made in adolescence; adult assessments included lifetime psychiatric history and suicidality, neuroticism and retrospective reports of childhood sexual abuse and harsh parenting.

Results: A wide range of measures of childhood psychopathology, adverse experiences and interpersonal difficulties were associated with adult suicidality; associations were particularly strong for adolescent irritability, worry and depression. In multivariate analyses, substantial proportions of these effects could be explained by their association with adult psychopathology and neuroticism, but additional effects remained for adolescent irritability and worry.

Conclusions: Factors of importance for long-term suicidality risk are evident in adolescence. These include family and experiential adversities as well as psychopathology. In particular, markers of adolescent worry and irritability appeared both potent risks and ones with additional effects beyond associations with adult disorder and adult neuroticism.

Comment

Main findings: The study conducted on Isle of Wight is a longitudinal epidemiological investigation of a wide range of proximal and distal risk factors associated with suicidality and their potential confounding effects. Proximal risks factors represent an immediate vulnerability and often precipitate suicides, while distal factors include background characteristics that put someone at risk for suicide at a later point in their lifetime. To date, only a handful of comparable studies have been performed.

The authors followed a large cohort of adolescents, first assessed in the 1960s, up to their midlife. Results confirmed that suicidality is strongly related to adult psychopathology such as depression, anxiety, substance use, and a personality dimension of neuroticism. Among characteristics assessed in adolescence, childhood psychopathology, interpersonal difficulties (relationships with parents and peers) and adverse early experiences (relating to psychiatric disorders and disputes among parents) were related to higher suicidality. The authors suggest that childhood adversities may lead to the development of maladaptive functioning

in adulthood (e.g. substance use, low educational attainment), which indirectly increases risk for suicidal thoughts and/or behaviours. Other variables that had an independent influence on suicidality included irritability and worry. These symptoms may also interact with depression and increase the sense of hopelessness, or represent a precursor of bipolar disorder.

Implications: Results of this study confirmed several well-known factors for suicidal thoughts or acts, such as depression and substance use disorders. However, additional aspects that warrant more attention in clinical practice are anxiety disorders and symptoms of irritability and worry. Pickles and colleagues suggest that the effects of adolescents' worry and irritability offer valuable opportunities for early cognitive interventions aimed at youngsters exhibiting these traits.

An fMRI study on mental pain and suicidal behaviour

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Journal Affective Disorders 126, 321-325, 2010

Background: Suicide is a poorly understood phenomenon. A clinical model of suicide conceptualises suicidal behavior as a solution to an unbearable state of mind, experienced as mental pain.

Method: In order to investigate the neural correlates of suicidal behavior, we used fMRI during presentation of autobiographical scripts extracted from personal narratives reactivating patients' memories of a recent episode of attempted suicide. Brain activation was measured during three recalled conditions: mental pain, suicide action, and neutral activity.

Results: Recall of suicidal episodes, that is, mental pain plus suicide action, compared to neutral activity, was associated with deactivation in the prefrontal cortex (BA 6, 10, and 46). Recall of suicide action, however, compared to mental pain, was associated with increased activity in the medial prefrontal cortex, the anterior cingulate cortex, and the hippocampus.

Limitations: This is a pilot study with eight female subjects.

Conclusions: Clinical and fMRI data suggest that mental pain triggering suicidal behavior may have the quality of traumatic stress, associated with decreased prefrontal activity. Planning and acting out suicidal impulses in response to mental pain, however, is associated with increased activity in the frontal cortex, suggesting that goal-directed suicidal behavior is associated with a reduction of mental pain.

Comment

Main findings: Reisch and colleagues used the theory of 'modes' to explain the development from 'mental pain' (defined as unbearable states of mind related to the suicide attempt) to 'suicide action' (preparatory behaviours and suicide attempt). Modes are defined as interconnected networks of cognitive, affective, motivational, physiological, and behavioural schemata that are activated simultaneously by relevant environmental events and result in goal-directed behaviour. In terms of the suicidal mode, individuals experience suicide-related cognitions, negative affect, and the motivation to engage in suicidal behavior¹. The central finding of this study was that experiences of mental pain are directly linked to the activities of the prefrontal cortex, a brain region which is involved in planning complex cognitive behaviors, personality expressions, decision making and actions in accordance with internal goals.

This study represents a novel approach to confirming this behavioural concept by measuring neural activities with functional magnetic resonance (fMRI) imaging while presenting subjects with three audio narratives: mental pain, suicide action and neutral sequences (everyday activities). Results from the

presented study indicate similarities between what people experience during a suicidal crisis and acute traumatic states, which is accompanied by levels of dissociation (emotional numbing, detachment from the body and indifference to physical pain), resulting in further facilitation of self-harming behaviour. The authors conclude that suicidal behaviour is a state-based condition stored in neural circuitry that can 'switched on' by the recall of an experience of mental pain.

The main limitation of the study, as acknowledged by the authors, is the fact that the study sample comprised of eight females, seven of whom were receiving pharmacotherapy with antidepressants. Thus, findings need to be interpreted with caution until this pilot study is replicated with larger numbers of subjects.

Implications: This study demonstrated that individuals in suicidal crisis often display goal-achieving determination that drives them towards self-destructive actions by which they aim to end the unbearable emotional suffering. This 'suicidal mode' may impair their ability to access autobiographical memory and narrow problem-solving abilities, thereby leading the individual to unreflected self-harming actions. After the first non-fatal suicidal act, a 'neural circuit' is established that can be quickly switched on by the recall of this experience. In an attempt to break this cycle, clinicians should assist the patient's understanding of the triggering internal and external events as well as the key cognitions that occur at the time of the attempts, thus potentially deactivating the suicide mode and averting self-destructive behaviour.

Additional practical implication of the study is the conclusion that each time the suicidal mode becomes activated, it becomes increasingly accessible in memory and hence requires less triggering stimuli to become activated the next time. This view has been previously confirmed in studies which showed that each succeeding suicide attempt is associated with a greater probability of a subsequent suicide attempt.² Indeed, individuals with a history of suicidal behaviours require most resolute monitoring and improved follow-up strategies to ensure reduction of risks for their repetitive suicidal acts. This particularly applies to multiple attempters who have longer periods of activated suicidal mode in comparison with single attempters.¹ When combined with poor coping skills, these persons are at particularly great risks for future self-harming behaviours.

Endnotes

- 1 Rudd (2000). The suicidal mode: a cognitive-behavioural model of suicidality. *Suicide & Life-Threatening Behaviour* 30, 18–33.
- 2 Oquendo MA, Galfalvy H, Russo S, Ellis SP, Grunebaum ME, Burke A, Mann JJ (2004). Clinical predictors of suicidal acts after major depression: a prospective study. *American Journal of Psychiatry* 161, 1433–1441.

Method of attempted suicide as predictor of subsequent successful suicide: National long-term cohort study

Runeson B, Tidemalm D, Dahlin M, Lichtenstein P, Långström N (Sweden)
British Medical Journal 341, c3222, 2010

Objectives: To study the association between method of attempted suicide and risk of subsequent successful suicide.

Design: Cohort study with follow-up for 21–31 years.

Setting: Swedish national register linkage study.

Participants: 48,649 individuals admitted to hospital in 1973–1982 after attempted suicide.

Main outcome measures: Completed suicide, 1973–2003. Multiple Cox regression modelling was conducted for each method at the index (first) attempt, with poisoning as the reference category. Relative risks were expressed as hazard ratios with 95% confidence intervals.

Results: 5,740 individuals (12%) committed suicide during follow-up. The risk of successful suicide varied substantially according to the method used at the index attempt. Individuals who had attempted suicide by hanging, strangulation, or suffocation had the worst prognosis. In this group, 258 (54%) men and 125 (57%) women later successfully committed suicide (hazard ratio 6.2, 95% confidence interval 5.5 to 6.9, after adjustment for age, sex, education, immigrant status, and co-occurring psychiatric morbidity), and 333 (87%) did so within a year after the index attempt. For other methods (gassing, jumping from a height, using a firearm or explosive, or drowning), risks were significantly lower than for hanging but still raised at 1.8 to 4.0. Cutting, other methods, and late effect of suicide attempt or other self-inflicted harm conferred risks at levels similar to that for the reference category of poisoning (used by 84%). Most of those who successfully committed suicide used the same method as they did at the index attempt—for example, > 90% for hanging in men and women.

Conclusions: The method used at an unsuccessful suicide attempt predicts later completed suicide, after adjustment for sociodemographic confounding and psychiatric disorder. Intensified aftercare is warranted after suicide attempts involving hanging, drowning, firearms or explosives, jumping from a height, or gassing.

Comment

Main findings: It has been consistently proven that a previous suicide attempt constitutes one of the strongest risk factors for subsequent death by suicide, even decades after the index episode.¹ However, to date, many studies have lacked the sample size and a longitudinal methodological design to investigate how these risks differ according to the methods utilised in their first attempts. Runeson and colleagues aimed to fill this gap in knowledge with their landmark nationwide cohort study tracking suicide attempters admitted to Swedish hospitals in the 1970s and early 1980s (i.e. the 'index' suicide attempt). During the 20- to 30-year follow-up, 12% of these patients committed suicide, yet noticeable differences were found among them in regards to methods of past attempts. The risk of completed suicide was highest for persons who attempted suicide by hanging, with over half of these persons later dying by suicide. Even more striking were the results that 69% of males and 68% of females who attempted suicide by hanging and had been diagnosed with a psychotic disorder died of suicide within one year of the index attempt. When compared to those who used poisoning, methods found to have significantly higher risk for later suicide were: gassing, jumping from height, using a firearms and drowning. Many of those participants who later died from suicide used the same method as in the index attempt.

Implications: Results of this study indicate the importance of considering individuals' choice of method when engaging in suicidal behaviour as a strong indicator of their future risk for suicide death. This finding is particularly relevant considering that available knowledge does not allow prediction of suicide with any degree of accuracy, even within such a high-risk sample as psychiatric inpatients². Nevertheless, findings of this study highlighted several subgroups of suicide attempters in most dire need for focused aftercare, particularly in the first few years after admission to the hospital. One such group are persons who attempted suicide by methods of hanging, strangulation or suffocation, and even more so if they had also a diagnosis of a psychotic disorder. Other groups that require intensified monitoring are person utilising methods of drowning, shooting by firearms or jumping from height.

Interestingly, the method of cutting was found to carry the same risk for suicide mortality as poisoning despite the popular belief that cutting is rarely associated with an actual wish to die (as it is the most common method used in acts of self-harming with the aim of emotion regulation). While authors acknowledge the fact that the sample included in the study consisted of suicide attempters whose injuries were serious enough to warrant hospital admission and might therefore represent a biased selection of only most severe self-cutters, these findings suggest relevant clinical implications for treatment and monitoring of suicide risks in people who use cutting.

Finally, findings that majority of people continue to use the same method in their repeated suicidal acts offers valuable insight into individual-level delib-

erations on selection of suicide methods. However, future research is needed to further our understandings of the balance between availability, accessibility, popularity, and socioacceptability as major determinants in the choice of methods. This knowledge may assist in development of targeted interventions aiming to minimise exposure to particular means of suicide for individuals known to have used them in their past suicidal act.

Endnotes

- 1 Jenkins GR, Hale R, Papanastassiou M, Crawford MJ, Tyrer P (2001). Suicide rate 22 years after parasuicide: cohort study. *British Medical Journal* 325, 1155.
- 2 Paris J (2007). *Half in love with death: managing the chronically suicidal patient*. Lawrence Erlbaum Associated: Mahwah, NJ.

Chronic physical conditions and their association with first onset of suicidal behavior in the world mental health surveys

Scott KM, Hwang I, Chiu WT, Kessler RC, Sampson NA, Angermeyer M, Beautrais A, Borges G, Bruffaerts R, de Graaf R, Florescu S, Fukao A, Haro JM, Hu C, Kovess V, Levinson D, Posada-Villa J, Scocco P, Nock MK (New Zealand)

Psychosomatic Medicine 72, 712-719, 2010

Objective: To investigate the association of a range of temporally prior physical conditions with the subsequent first onset of suicidal ideation, plans, and attempts in large, general population, cross-national sample. The associations between physical conditions and suicidal behavior remain unclear due to sparse data and varied methodology.

Methods: Predictive associations between 13 temporally prior physical conditions and first onset of suicidal ideation, plans, and attempts were examined in a 14-country sample ($n = 37,915$) after controlling for demographic, socio-economic, and psychosocial covariates, with and without adjustment for mental disorders.

Results: Most physical conditions were associated with suicidal ideation in the total sample; high blood pressure, heart attack/stroke, arthritis, chronic headache, other chronic pain, and respiratory conditions were associated with attempts in the total sample; epilepsy, cancer, and heart attack/stroke were associated with planned attempts. Epilepsy was the physical condition most strongly associated with the suicidal outcomes. Physical conditions were especially predictive of suicidality if they occurred early in life. As the number of physical conditions increased, the risk of suicidal outcomes also increased, however the added risk conferred was generally smaller with each additional condition. Adjustment for mental disorders made little substantive difference to these results. Physical conditions were equally predictive of suicidality in higher and lower income countries.

Conclusions: The presence of physical conditions is a risk factor for suicidal behavior even in the absence of mental disorder.

Comment

Main findings: This study extends knowledge on the associations between physical conditions with suicidal thoughts, plans and attempts by analysing data derived from the World Mental Health (WMH) survey, conducted in high-, middle- and low-income countries. Participants were selected using stratified multistage probability sampling, yielding a large and representative sample (average response rate was 67.7% across all countries). Lifetime history of mental disorders, suicide, and physical conditions were assessed by trained interviews using a structured interview technique. Survival analysis was used to estimate associations between 13 physical conditions and subsequent development of suicidal behaviour. The authors found several conditions were significantly related to the first onset of suicidal ideation or attempts, even after 'adjusting' the statistical model for the possible contribution of mental disorders. This is suggested to be particularly true for people with epilepsy who, even after adjusting for mental disorder, have more than 4-times higher risk for attempting suicide. Another remarkable finding was that the strengths of these associations were similar among milieus with varied income levels, which increases the universal generalisability of study's findings.

Use of standardised diagnostic measures for mental disorder, and the fact that all interviews were conducted face-to-face by trained interviewers (as opposed to distributing questionnaires by post, as is done in most of comparably large health surveys) represent main methodological strengths of the study. However, retrospective self-reporting of the occurrence of suicidal behaviours and presence of illnesses are limitations that need to be considered when interpreting results.

Implications: The findings of the study by Scott and colleagues suggest that people with chronic physical conditions are at elevated risk for suicidal ideation and attempts, even after controlling for the possible contribution of mental disorders. These results have several relevant practical implications for clinicians. For one, they suggest the need for increased attention towards screening for the aforementioned risk factors in people presenting to medical settings with complaints of physical conditions. This would facilitate early identification of at-risk individuals and the delivery of relevant interventions. Health-care practitioners (e.g., primary-care physicians, nurse practitioners, family-practice physicians, etc.) are the front-line protagonists in prevention of suicides by medically ill people, and should therefore be continuously educated on these issues.

School-based screening for suicide risk: Balancing costs and benefits

Scott M, Wilcox H, Huo Y, Turner JB, Fisher P, Shaffer D (USA)

American Journal of Public Health 100, 1648-1652, 2010

Objectives: We examined the effects of a scoring algorithm change on the burden and sensitivity of a screen for adolescent suicide risk.

Methods: The Columbia Suicide Screen was used to screen 641 high school students for high suicide risk (recent ideation or lifetime attempt and depression, or anxiety, or substance use), determined by subsequent blind assessment with the Diagnostic Interview Schedule for Children. We compared the accuracy of different screen algorithms in identifying high-risk cases.

Results: A screen algorithm comprising recent ideation or lifetime attempt or depression, anxiety, or substance-use problems set at moderate-severity level classed 35% of students as positive and identified 96% of high-risk students. Increasing the algorithm's threshold reduced the proportion identified to 24% and identified 92% of high-risk cases. Asking only about recent suicidal ideation or lifetime suicide attempt identified 17% of the students and 89% of high-risk cases. The proportion of nonsuicidal diagnosis-bearing students found with the 3 algorithms was 62%, 34%, and 12%, respectively.

Conclusions: The Columbia Suicide Screen threshold can be altered to reduce the screen-positive population, saving costs and time while identifying almost all students at high risk for suicide.

Comment

Main findings: The Columbia Suicide Screen (CSS) is a self-report measure that investigates lifetime suicide attempts, suicidal ideation, negative mood and substance abuse issues. It has been widely used in the United States as part of the Columbia University TeenScreen program, which aims to identify students at risk for suicide. While some past studies have identified its good sensitivity and reasonable specificity, concerns about its low positive predictive value (probability that the person who screened positive truly had the condition) have also been raised.¹ As a response to criticism that a great number of falsely identified cases impose a large burden on limited mental health resources within schools, Scott and colleagues explored how varying the items and threshold of this screening instruments affect its accuracy.

Close to 2,000 students, aged on average 15 years, participated in the screening. Approximately one-third of participants reported suicide ideation within the past three months, lifetime history of suicide attempt, or three or more emotional symptoms (e.g., unhappiness/sadness, anxiety, social withdrawal, irritability, or substance use) as 'bad' or 'very bad'. These persons were subsequently classified as 'screen-positive'. The remainder of participants were clas-

sified as 'screen-negative'. A number of these participants (73% of all screen positive and 23% of all screen negative) took part in subsequent diagnostic confirmatory assessments. Results showed that changing the scoring algorithms from low (any suicide ideation, suicide attempt, or three or more emotional items rated as medium, bad, or very bad) to high threshold (any suicide ideation, suicide attempt, or four or more emotional items rated as medium, bad, or very bad) had a positive effect on lowering the proportion of positively rated students (i.e. those who would require further clinical evaluations). At the same time, the CSS remained highly accurate in identifying youth at risk for suicide, defined as those who had suicide ideation, a past suicide attempt, and who met the criteria for a mood, anxiety, or substance-abuse diagnosis. The study authors state that the choice of low or high threshold tests depends on purpose of the screen: if the test seeks to identify emotional problems, the low-threshold algorithm may be more appropriate, whereas the high-threshold more effectively identifies students at high-risk of suicide.

Implications: To date, there remains a debate about the suitability of universal screening approaches that administer tests to general populations, regardless of individual risk factors or symptomatic presentations. Alternative approaches, so-called targeted screening, apply these test only to individuals manifesting particular symptoms or risk factors. However, considering that adolescents often do not exhibit any of the most common 'suicide warning signs' and rarely disclose their suicidal thoughts to parents or peers, let alone school staff or health professionals, recognition of these symptoms may be difficult. Nevertheless, implementation of universal screening has been recommended only when the school system is prepared with a cogent plan to evaluate all positive screens in a timely manner. In the absence of such a program, targeted screening of students at greatest risk (e.g. students who seek help, show symptoms of mental illness, substance or alcohol abuse, self-harm or have a history of suicide attempts) is highly recommended.² Results of Scott and colleagues offers concrete support to administering these tools to large populations of youth in a way that helps minimise associated costs (particularly costs associated with providing unneeded confirmatory evaluations to falsely identified participant during the initial screen).

In Australia, there are currently no nationally coordinated initiatives implemented in schools, despite the national suicide prevention strategy identifying better recognition of suicide risk in youth as one its the chief goals. In international literature, multiple-gate screening has been getting more support as a commonly accepted approach in primary and secondary schools. This method combines screening with teacher nomination, and review of students' records to identify individuals with emotional and behavioural problems.³ However, even the most effective screening techniques are deemed to fail in absence of appropriate referral services for the treatment of at-risk students. Finally, education of parents and school teachers about the importance of recognising and

seeking help for suicidality is recommended to assure provision of help to those recognised to be at elevated risks for suicide.

Endnotes

- 1 Shaffer D, Scott M, Wilcox H, Maslow C, Hicks R, Lucas CP, Garfinkel R, Greenwald S (2004). The Columbia SuicideScreen: validity and reliability of a screen for youth suicide and depression. *Journal of the American Academy of Child and Adolescent Psychiatry* 43, 71–79.
- 2 Horowitz LM, Ballard ED, Pao M (2009). Suicide screening in schools, primary care and emergency departments. *Current Opinions in Paediatrics* 21, 620–627.
- 3 Caldarella P, Young E, Richardson M, Young B, Young R (2008). Validation of the Systematic Screening for Behavior Disorders in middle and junior high school. *Journal of Emotional and Behavioural Disorders* 16, 105–117.

Effect of a barrier at Bloor Street Viaduct on suicide rates in Toronto: Natural experiment

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British Medical Journal 341, c2884, 2010

Objectives: To determine whether rates of suicide changed in Toronto after a barrier was erected at Bloor Street Viaduct, the bridge with the world's second highest annual rate of suicide by jumping after Golden Gate Bridge in San Francisco.

Design: Natural experiment.

Setting: City of Toronto and province of Ontario, Canada; records at the chief coroner's office of Ontario 1993–2001 (nine years before the barrier) and July 2003–June 2007 (four years after the barrier).

Participants: 14,789 people who completed suicide in the city of Toronto and in Ontario.

Main Outcome Measure: Changes in yearly rates of suicide by jumping at Bloor Street Viaduct, other bridges, and buildings, and by other means.

Results: Yearly rates of suicide by jumping in Toronto remained unchanged between the periods before and after the construction of a barrier at Bloor Street Viaduct (56.4 vs. 56.6, $P = .95$). A mean of 9.3 suicides occurred annually at Bloor Street Viaduct before the barrier and none after the barrier ($P < .01$). Yearly rates of suicide by jumping from other bridges and buildings were higher in the period after the barrier although only significant for other bridges (other bridges: 8.7 vs. 14.2, $P = 0.01$; buildings: 38.5 v 42.7, $P = .32$).

Conclusions: Although the barrier prevented suicides at Bloor Street Viaduct, the rate of suicide by jumping in Toronto remained unchanged. This lack of change might have been due to a reciprocal increase in suicides from other bridges and buildings. This finding suggests that Bloor Street Viaduct may not have been a uniquely attractive location for suicide and that barriers on bridges may not alter absolute rates of suicide by jumping when comparable bridges are nearby.

Comment

Main findings: There is strong evidence that erection of physical barriers (in forms of railings, wire fences or glass screens) decreases or eliminates suicides from high places;¹ however, it remains inconclusive whether the reductions affect the overall suicide rates or they lead to a parallel increase of suicides by other methods.² Results of the ‘natural experiment’ study by Sinyor and Levitt, examining the effectiveness of barriers on a bridge that has been a location of more than 400 suicides since its construction, supports the latter option. While in the nine years prior to 2003 (when the barriers were erected) there were on average 9.3 suicides from this bridge and none in the four years after, the overall rate of suicides by jumping remained unchanged, due to an increase in numbers of deaths by jumping off other bridges ($p < .05$). This supports the theory of substitution of methods. Overall, there has been a reduction of total suicide rates in Toronto in those years, but this difference was largely due to a reduction of suicides by methods other than jumping.

Authors hypothesise the observed shift in jumping off other bridges could be a results of the fact that the Bloor Street Viaduct was a relatively weak ‘magnet’ lacking in its aesthetics or not reaching the status of a ‘cultural icon’ often assigned to the Golden Gate Bridge in San Francisco and also the Story Bridge in Brisbane.³ They conclude that because of this, restriction of access to the Bloor Street Viaduct did not deter people with suicidal intent from choosing another comparable bridge or a building. Another significant observation made by the authors concerns an article featured in a prominent local newspapers soon after the barrier’s construction, which reported a shift of suicides by jumping to other neighbouring bridges. It is possible that this article may have influenced people at risk for suicide to consider alternative locations.

Methodological limitations of the study include low absolute numbers of suicide by jumping from this bridge and subsequent low statistical power of obtained results, and a possible influence of numerous uncontrolled variables on the movements of suicide rates before and after the barriers (such as economic and social changes).

Implications: Even though the results of this study suggest that the installation of a barrier at Bloor Street Viaduct has contributed to an increase in jumping-suicides from other bridges, these findings need to be considered in a broader context. To be proven effective, any suicide prevention strategy should involve comprehensive strategies not only restricting access to means of suicide, but also providing education to combat stigma surrounding suicide, while improving accessibility to services for people at risk of suicide. In addition, guidelines for responsible reporting on suicides by jumping from well-known bridges should be rigorously monitored (see also the comment to an article by Niederkrotenthaler et al., 2010).

In Australia, construction of barriers on two bridges known for frequent suicides has been recently announced — West Gate Bridge in Melbourne (to be

finished by 2011) and Story Bridge in Brisbane (construction not yet begun). Time will show whether these interventions will achieve desired effects; however, in judging their effectiveness in reducing overall numbers of suicides it needs to be acknowledged that the low absolute incidence of these deaths often hinders firm (statistical) conclusions. Nevertheless, there are other beneficial outcomes of installing such barriers for community members, particularly in cases when someone jumps off bridges spanning over motorways, which often traumatises people witnessing the act. Sometimes people may be in direct danger of being hit by the falling body. For the future, it is recommended that appropriate solutions are considered at early stages of designing bridges and other tall structures. This should relate not only to outdoors locations but also to high-rise residential buildings and institutions housing vulnerable populations, such as psychiatric patients.

Endnotes

- 1 Beautrais A (2007). Suicide by jumping: A review of research and prevention strategies. *Crisis* 28, 58–63.
- 2 Daigle MS (2005). Suicide prevention through means restriction: Assessing the risk of substitution — a critical review and synthesis. *Accident Analysis and Prevention* 37, 625–632.
- 3 Cantor CH, Hill MA (1990). Suicide from river bridges. *Australian New Zealand Journal of Psychiatry* 24, 377–380.

Cross-national analysis of the associations between traumatic events and suicidal behavior: Findings from the WHO World Mental Health Surveys

Stein DJ, Chiu WT, Hwang I, Kessler RC, Sampson N, Alonso J, Borges G, Bromet E, Bruffaerts R, de Girolamo G, Florescu S, Gureje O, He Y, Kovess-Masfety V, Levinson D, Matschinger H, Mneimneh Z, Nakamura Y, Ormel J, Posada-Villa J, Sagar R, Scott KM, Tomov T, Viana MC, Williams DR, Nock MK (USA)

PLoS One 5, e10574, 2010

Background: Community and clinical data have suggested there is an association between trauma exposure and suicidal behavior (i.e., suicide ideation, plans and attempts). However, few studies have assessed which traumas are uniquely predictive of: the first onset of suicidal behavior, the progression from suicide ideation to plans and attempts, or the persistence of each form of suicidal behavior over time. Moreover, few data are available on such associations in developing countries. The current study addresses each of these issues.

Methodology/Principal Findings: Data on trauma exposure and subsequent first onset of suicidal behavior were collected via structured interviews conducted in the households of 102,245 (age 18+) respondents from 21 countries participating in the WHO World Mental Health Surveys. Bivariate and multivariate survival models tested the relationship between the type and number of traumatic events and subsequent suicidal behavior. A range of traumatic events are associated with suicidal behavior, with sexual and interpersonal violence consistently showing the strongest effects. There is a dose-response relationship between the number of traumatic events and suicide ideation/attempt; however, there is decay in the strength of the association with more events. Although a range of traumatic events are associated with the onset of suicide ideation, fewer events predict which people with suicide ideation progress to suicide plan and attempt, or the persistence of suicidal behavior over time. Associations generally are consistent across high-, middle-, and low-income countries.

Conclusions/Significance: This study provides more detailed information than previously available on the relationship between traumatic events and suicidal behavior and indicates that this association is fairly consistent across developed and developing countries. These data reinforce the importance of psychological trauma as a major public health problem, and highlight the significance of screening for the presence and accumulation of traumatic exposures as a risk factor for suicide ideation and attempt.

Comment

Main findings: There are several aspects of this study which make it important. The study design was set across a large sample of low, middle and high income countries ($n = 21$), which renders the results relevant across a number of cultural contexts. Information on both trauma and suicidality was gathered using the Composite International Diagnostic Interview (CIDI), a standardised interview schedule conducted by trained lay interviewers. The traumatic events assessed in the study included five categories: (1) natural man-made disasters and accidents; (2) combat, war, and refugee experiences; (3) sexual and interpersonal violence; (4) witnessing or perpetrating violence, and; (5) death or trauma of a loved one. An assessment of suicidal behaviour considered its lifetime occurrence, age-of-onset, and age of most recent episode of suicide ideation, plans and attempts. Key findings indicated a strong association between sexual and interpersonal violence with suicide ideation/attempts across countries. As noted by the authors of this study, there may be a number of explanations underpinning this relationship, including disruption of interpersonal and social bonds (both at the time of the incident and future relationships), greater prevalence of psychiatric disorders, and increased impulsivity. The results of this cross-country study also suggested a possible dose-response relationship (in other words, the greater the number of experienced traumatic events, the greater likelihood of developing suicidal ideation or engaging in suicidal behaviours); however, the strength of this association decreased with a growing number of events. As a possible explanation for this relationship, it is suggested that people become immune or habituated to trauma over time, and are therefore less likely to engage in suicidal behaviours. While traumatic events were recognised as related to suicidal outcomes, they were generally less useful in predicting the progression from suicide ideation to attempt. Finally, findings suggest that the relationship between traumatic life experiences and suicide were not mediated by the presence of mental disorders such as post traumatic stress syndrome. Calculation of population attributable risk proportions (PARPS) indicated that the elimination of all traumatic events would lead to a 22% reduction in suicide attempts occurring in the general population.

Implications: There is a need for better understanding of the implications of trauma (particularly sexual and violence trauma) in the general community, particularly as these appear to constitute independent risks for suicide. Therefore, the findings of study by Stein and colleagues may have considerable clinical implications in terms of risk assessment and counselling of trauma victims. However, to date, no research has been conducted to investigate the links between effectiveness of clinical and policy interventions aimed at decreasing the occurrence and impact of traumatic events and subsequent prevalence of suicidality in the general population.

In Australia, one segment of the population that might particularly benefit for such targeted preventative measures are asylum seekers. There is a growing amount of evidence suggesting that these types of migrants may suffer considerable pre-migration trauma, including random and unprovoked harassment, torture and physical assaults, and having been arrested and/or detained under harsh conditions.¹ This possibility highlights the importance of counselling and support of asylum seekers who have experienced trauma.

Endnote

- 1 Steel Z, Siolve DM (2001). The mental health implications of detaining asylum seekers. *Medical Journal of Australia* 175, 596–599.

Accuracy of official suicide mortality data in Queensland

Williams RF, Doessel DP, Svetcic J, De Leo D (Australia)

Australian & New Zealand Journal of Psychiatry 44, 815-22, 2010

Objective: The purpose is to answer the following research question: Are the time-series data published by the Australian Bureau of Statistics for Queensland statistically the same as those of the Queensland Suicide Register?

Method: This question was answered by first modelling statistically, for males and females, the time series suicide data from these two sources for the period of data availability, 1994 to 2007 (14 observations). Fitted values were then derived from the 'best fit' equations, after rigorous diagnostic testing. The outliers in these data sets were addressed with pulse dummy variables. Finally, by applying the Wald test to determine whether or not the fitted values are the same, we determined whether, for males and females, these two data sets are the same or different.

Results: The study showed that the Queensland suicide rate, based on Queensland Suicide Register data, was greater than that based on Australian Bureau of Statistics data. Further statistical testing showed that the differences between the two data sets are statistically significant for 24 of the 28 pair-wise comparisons.

Conclusions: The quality of Australia's official suicide data is affected by various practices in data collection. This study provides a unique test of the accuracy of published suicide data by the Australian Bureau of Statistics. The Queensland Suicide Register's definition of suicide applies a more suicidological, or medical/health, conception of suicide, and applies different practices of coding suicide cases, timing of data collection processes, etc. The study shows that 'difference' between the two data sets predominates, and is statistically significant; thus the extent of the under-reporting of suicide is not trivial. Given that official suicide data are used for many purposes, including policy evaluation of suicide prevention programs, it is suggested that the system used in Queensland should be adopted by the rest of Australia too.

Comment

Main findings: The study performed by Williams and colleagues represents a response to topical debates on the accuracy of suicide statistics in Australia. Authors use the data from the Queensland Suicide Register (QSR), an independent and comprehensive database of suicide mortality which has been previously reported to produce higher incidence of suicide than the official national statistics. Comparison of male and female suicide rates for the period 1994 and 2007 from the QSR to those reported by the Australian Bureau of Statistics (ABS) confirmed a statistically significant and increasing discrepancy.

While issues raised in the paper are discussed in relation to Queensland, they also apply to national suicide statistics. In recent years (between 2002 and 2007), the largest impediment to ABS coding and then reporting of suicide data have been the large numbers of cases for which coronial findings have not been available at time of preparing annual statistics. The states with the lowest level of case closure are Queensland, Western Australia and NSW;² therefore it is reasonable to assume that these States have been most affected by under-reporting. As authors of this article suggest, the establishing of an independent mortality database, similar to the QSR, in other Australian States and Territories, could help gauge the true incidence of suicide nation-wide.

Implications: Implications of (in)accuracy in statistics on suicide mortality are numerous. Firstly, this may directly influence policy-making decisions in mental and public health, the allocation of funding to suicide research, and the development of suicide prevention strategies. Additionally, community awareness and support services depend on reliable reporting, as does efforts directed at combating stigma and addressing the needs of those bereaved by suicide.¹

In 2010, the ABS introduced significant changes aimed at assessing and improving the quality of suicide coding. Concretely this means that, for the first time, all coroner certified deaths are being subjected to a revision process that enables the use of additional case information as it becomes available over time. This was anticipated to lead to a reduction of cases currently assigned to less specific codes, such as 'ill-defined causes of death' or 'deaths of undetermined intent'. The first such revision, released in early 2010, showed an increase in the total Australian suicide rate for the year 2007 by 9.2%;³ data for 2007 will be further scrutinised and released as finalised in early 2011.

Endnotes

- 1 De Leo D (2010). Australia revises its mortality data on suicide. *Crisis* 31, 169–173.
- 2 Australian Bureau of Statistics (2009). *Causes of death, Australia, 2007*. Cat. No. 3303.0. Canberra: Australian Bureau of Statistics.
- 3 Australian Bureau of Statistics (2010). *Causes of death, Australia, 2008*. Cat. No. 3303.0. Canberra: Australian Bureau of Statistics

The support needs and experiences of suicidally bereaved family and friends

Wilson A, Marshall A (Australia)

Death Studies 34, 625-640, 2010

This study aimed to identify what suicidally bereaved person's, particularly close relatives' and loved ones', perceptions of their need for support were and their experiences of support directed at meeting those needs. A total of 166 persons who were bereaved by suicide completed a questionnaire consisting of both closed and open-ended questions. Overall, 94% of participants indicated a need for help to manage their grief, but only 44% received help. Most participants indicated a great or significant need for help. In addition, only 40% of those who received professional support felt satisfied with it. The authors concluded that there is a significant gap between need for support and the quality and provision of professional support services.

Comment

Main findings: There is evidence that people bereaved by suicide suffer qualitative differences in their bereavement compared to those bereaved by loss of a loved one due to other causes. Complications of the grieving process include physical and mental illness, substance abuse, feelings of shame, stigma and self-blame, as well as further suicide.¹ If we accept the often-cited estimate that on average 6–10 people are immediately impacted every suicidal death, then between 12,000 and 20,000 individuals face the aftermaths of suicide every year in Australia.

Authors of this study, conducted in South Australia, investigated the experience with support services by suicide survivors. Participants were recruited through radio and newspaper announcements, resulting in a sample of 166 persons. Results showed that the great majority (95%) reported they needed professional help in their grieving process, and first-degree relatives indicated great or significant levels of needing this support more often than second-degree relatives or non-relatives. However, only half of participant in this study received any professional help. Most common sources of help included counsellors, GPs, funeral parlours and bereavement support groups. Among persons who received professional help, only 40% reported they were satisfied with it or found it beneficial (in comparison, of people that received non-professional help from families, friends and community organisations, 70% were satisfied with it).

Wilson and Marshall's study is the first in Australia to confirm observation from international literature that suicide survivors receive inadequate levels of help. Of particular relevance is the identified gap between perceived needs and provision of quality support services, which poses a significant challenge for policy makers, health professionals and researchers. Authors present several concrete recommendations to be implemented in South Australian context, focusing on establishment of immediate crisis response team, including 24-hour telephone service, organisation of clearly defined pathways to care for

bereaved persons, and strengthening of support groups by providing more resources and strengthening education in specific issues of suicide.

Implications: In Australia, StandBy Response Service offers 24-hour immediate response services to persons bereaved through suicide and currently operates in the following areas: Cairns, Canberra, East Kimberley, North Brisbane, North/North Western Tasmania, Pilbara, Southern Tasmania, Sunshine and Cooloola Coasts and West Kimberley.³ Expansion of these services to the remaining parts of Australia is imperative. From the results of the study by Wilson and Clark,² it remains unclear when and how the reported contacts with support services were established: whether bereaved people had to seek them out themselves, were assisted in doing so by their relatives/friends or whether the contact was initiated by the services. In view of the distressed mental status of the relative following the news of their loved one's death, the latter two options should be used, when possible. To achieve this, strengthening of links with police and ambulance services, funeral parlours and other relevant community agencies would be required.

In line with findings of this study, support services need also to be designed for persons who are not direct relatives of the deceased (such as friends, co-workers or acquaintances), as these groups are often overlooked in provision of help but are also at risk for development of complicated grief and thus need professional help. Further Australian research is needed to establish potentially specific needs following bereavement by suicide in specific groups, such as children, residents in rural areas, socio-economically disadvantaged persons and people from non-English speaking backgrounds (as it has been suggested that grief may be culture-specific).

Recently, one review study aimed to determine the benefits of interventions for people bereaved by suicide, could not find any robust evidence of their efficacy, due to lack of randomised controlled trials on this subject and inconsistencies in outcome measures utilised by available studies (levels of anxiety, depression or post-traumatic stress, etc.).⁴ In this study, authors applied a seemingly simplistic approach by asking the participants about their overall levels of satisfactions with provided help. Yet their answers offer very valuable insight into their personal experiences and particularly their deliberations about particular aspects they found dissatisfactory (such as lack of appropriate training and attitudes of the service provider) should guide future developments of services that will adequately correspond to the needs of this vulnerable population.

Endnotes

- 1 Sveen CA, Walby FA (2008). Suicide survivors' mental health and grief reactions: A systematic review of controlled studies. *Suicide and Life-Threatening Behavior* 38, 13–29.
- 2 Clark S (2001). Bereavement after suicide: How far have we come and where do we need to go? *Crisis* 22, 102–108.
- 3 *StandBy Support Services*. Accessed on 16 October 2010 from: http://www.unitedsynergies.com.au/index.php?option=com_content&view=article&id=40&Itemid=40.
- 4 McDaid C, Trowman R, Golder S, Hawton K, Sowden A (2008). Interventions for people bereaved through suicide: a systematic review. *British Journal of Psychiatry* 193, 438–443.

An outcome evaluation of the sources of strength suicide prevention program delivered by adolescent peer leaders in high schools

Wyman PA, Brown CH, Lomurray M, Schmeelk-Cone K, Petrova M, Yu Q, Walsh E, Tu X, Wang W (USA)

American Journal of Public Health 100, 1653-1661, 2010

Objectives: We examined the effectiveness of the Sources of Strength suicide prevention program in enhancing protective factors among peer leaders trained to conduct schoolwide messaging and among the full population of high school students.

Methods: Eighteen high schools — 6 metropolitan and 12 rural — were randomly assigned to immediate intervention or the wait-list control. Surveys were administered at baseline and 4 months after program implementation to 453 peer leaders in all schools and to 2675 students selected as representative of the 12 rural schools.

Results: Training improved the peer leaders' adaptive norms regarding suicide, their connectedness to adults, and their school engagement, with the largest gains for those entering with the least adaptive norms. Trained peer leaders in larger schools were 4 times as likely as were untrained peer leaders to refer a suicidal friend to an adult. Among students, the intervention increased perceptions of adult support for suicidal youths and the acceptability of seeking help. Perception of adult support increased most in students with a history of suicidal ideation.

Conclusions: Sources of Strength is the first suicide prevention program involving peer leaders to enhance protective factors associated with reducing suicide at the school population level.

Comment

Main findings: The suicide prevention program 'Sources of Strength' was developed based on the observation that norms and beliefs propagated among adolescents can act as strong risk or protection against youth suicide (depending on their substance). Following some recent observations that training adult gatekeepers may not be effective in improving referring of suicidal students to appropriate services,¹ the Sources of Strength intervention involved training youth opinion leaders to conduct school-wide messaging activities (under adult supervision). The program involved the recruitment of students identified to be leaders among their peers in 18 schools from different parts of the United States. Peer leaders were trained to engage in 3 months of school-wide messaging to address negative suicide perceptions and norms, encourage social connectedness, and facilitate help-seeking behaviours by distressed students. Four months after implementation of the program results showed that students' perception of adult support and acceptability of seeking help from

adults significantly increased in schools that participated in the program. Further, schools in which norms about suicide and help-seeking were found to be the least adaptive prior to intervention, were found to benefit most from participation in the program. On an individual level, this was found most true for students with a history of suicidal ideation. These findings indicate that an intervention delivered by adolescent peer leaders was capable in modifying norms associated with suicidal behaviours across school populations.

Methodological limitations of the study include reliance of self-reported measures and the inability to investigate the program's ability to achieve long-term changes in attitudes and behaviours of high school-aged youths.

Implications: The use of peer-leaders has become a state-of-the-art approach in a variety of health interventions such as substance and tobacco use and HIV prevention, but not yet in suicide prevention. This study is the first published account of its effective implementation to lower risks for suicidal ideation and behaviours in a high school population. Furthermore, this study responded to the vast gap identified in the international literature: the need for thorough evaluation of suicide prevention initiatives. While the authors could be criticised as using rather distal measures through which the effectiveness of the program was evaluated, this is a predicament met by practically all suicide research studies measuring the prevalence of events pre- and post- intervention as deaths by suicide and suicidal attempts are, statistically speaking, rare events. Nevertheless, while programs like Sources of Strength target selected measures of suicidality, authors argue that they may be also indirectly associated with reduced risks for school dropouts and substance use problems, thereby offering potential for broad positive effects for high school students.

MindMatters² is an Australian national mental health initiative that uses a whole-school approach to mental health promotion and offers resources to secondary schools across the country. Similar to the paper by Wyman and colleagues, MindMatters also identifies peer support as a possible approach to tackling the issue of suicide in school environments. Yet, to date no systematic evaluations of the effectiveness of these strategies have been published.

Endnotes

- 1 Wyman PA, Brown CH, Inman J, Crossa W, Schmeelk-Conea K, Guob J, Pena JB (2008). Randomized trial of a gatekeeper program for suicide prevention: 1-year impact on secondary school staff. *Journal of Consulting & Clinical Psychology* 76, 104–115.
- 2 Wyn J, Cahill H, Holdsworth R, Rowling L, Carson S (2000). MindMatters, a whole-school approach promoting mental health and wellbeing. *Australian and New Zealand Journal of Psychiatry* 34, 594-601.

Recommended Readings

The association of psychosocial and familial factors with adolescent suicidal ideation: A population-based study

An H, Ahn J-H, Bhang S-Y (Korea)

Psychiatry Research 177, 318-322, 2010

We aimed to compare the influence of various parental factors on adolescent suicidal ideas from a population-based sample of 2965 adolescents between 15 to 18 years old, and their parents. Among the subject variables, gender, satisfaction with one's health, having an illness, and satisfaction with family; and among parental variables, fathers' satisfaction with health; mothers' insufficient sleep; parents' history of suicidal ideation, and satisfaction with family were significantly different in adolescents who reported suicidal ideation compared to those who reported none. Odds ratios indicated increased risk of adolescent suicidal ideation was associated with the subject factors female gender, insufficient sleep, dissatisfaction with one's health, dissatisfaction with family, and with maternal data showing insufficient sleep and a positive history of suicidal impulse. A path analysis model (comparative fit index (CFI) = 0.907; root mean square error of approximation (RMSEA) = 0.047), indicated psychosocial factors ($\beta = 0.232$) had a greater influence on adolescent suicidal ideation than did genetic factors ($\beta = 0.120$). These results show psychosocial factors have an almost twofold greater influence on adolescent suicidal ideation than genetic factors. Assessment and modification of these factors would greatly assist future interventions.

Bullying victimization in youths and mental health problems: 'Much ado about nothing'?

Arseneault L, Bowes L, Shakoor S (UK)

Psychological Medicine 40, 717-729, 2010

Bullying victimisation is a topic of concern for youths, parents, school staff and mental health practitioners. Children and adolescents who are victimised by bullies show signs of distress and adjustment problems. However, it is not clear whether bullying is the source of these difficulties. This paper reviews empirical evidence to determine whether bullying victimisation is a significant risk factor for psychopathology and should be the target of intervention and prevention strategies. Research indicates that being the victim of bullying (1) is not a random event and can be predicted by individual characteristics and family factors; (2) can be stable across ages; (3) is associated with severe symptoms of mental health problems, including self-harm, violent behaviour and psychotic symptoms; (4) has long-lasting effects that can persist until late adolescence; and (5) contributes independently to children's mental health problems. This body of evidence suggests that efforts aimed at reducing bullying victimisation in childhood and adolescence should be strongly supported. In addition, research on explanatory mechanisms involved in the development of mental health problems in bullied youths is needed.

Use of antiepileptic drugs in epilepsy and the risk of self-harm or suicidal behaviour

Andersohn F, Schade R, Willich SN, Garbe E (Germany)

Neurology 9, 75, 335-340, 2010

Background: A recent meta-analysis of randomized trials revealed that antiepileptic drugs (AEDs) as a class increase the risk of suicidal thoughts and behavior. We conducted an observational study with data from the United Kingdom General Practice Research Database to investigate if an increase in risk for different groups of AEDs is also evident in clinical practice.

Methods: This was a nested case-control study in a cohort of 44,300 patients with epilepsy who were treated with AEDs. Patients with self-harm or suicidal behavior were identified by predefined codes. We included 453 cases and 8,962 age-matched and sex-matched controls. AEDs were classified into 4 groups: barbiturates, conventional AEDs, and newer AEDs with low (lamotrigine, gabapentin, pregabalin, oxcarbazepine) or high (levetiracetam, tiagabine, topiramate, vigabatrin) potential of causing depression. Adjusted odds ratios (OR) were calculated using conditional logistic regression.

Results: Current use of newer AEDs with a high potential of causing depression was associated with a 3-fold increased risk of self-harm/suicidal behavior (OR = 3.08; 95% [CI] 1.22-7.77) as compared with no use of AEDs during the last year. Use of barbiturates (OR = 0.66; 95% CI 0.25-1.73), conventional AEDs (OR = 0.74; 95% CI 0.53-1.03), or low-risk newer AEDs (OR = 0.87; 95% CI 0.47-1.59) was not associated with an increased risk.

Conclusions: Newer AEDs with a rather high frequency of depressive symptoms in clinical trials may also increase the risk of self-harm or suicidal behavior in clinical practice. For the most commonly used other groups of AEDs, no increase in risk was observed.

Non-suicidal self-injury, attempted suicide, and suicidal intent among psychiatric inpatients

Andover MS, Gibb BE (USA)

Psychiatry Research 178, 101-105, 2010

Although attempted suicide and non-suicidal self-injury (NSSI) differ in several important ways, a significant number of individuals report histories of both behaviors. The current study further examined the relations between NSSI and attempted suicide among psychiatric inpatients. Self-report questionnaires were administered to 117 psychiatric inpatients at a general hospital ($M = 39.45$ years old, $SD = 12.84$ years, range = 17–73 years). We found that presence and number of NSSI episodes were significantly related to presence and number of suicide attempts. Supporting the importance of NSSI assessment, patients' history of NSSI (presence and frequency) was more strongly associated with history of suicide attempts than were patients' depressive symptoms, hopelessness, and

symptoms of borderline personality disorder, and as strongly associated with suicide attempt history as current levels of suicidal ideation. Finally, among patients with a history of suicide attempts, those with an NSSI history reported significantly greater lethal intent for their most severe attempt, and patients' number of prior NSSI episodes was positively correlated with the level of lethal intent associated with their most severe suicide attempt.

Suicidality in first episode psychosis is associated with insight and negative beliefs about psychosis

Barrett EA, Sundet K, Faerden A, Agartz I, Bratlien U, Romm KL, Mork E, Rossberg JI, Steen NE, Andreassen OA, Melle I (Norway)

Schizophrenia Research. Published online: 2 August 2010. doi:10.1016/j.schres.2010.07.018, 2010

Introduction: Suicidal behaviour is prevalent in psychotic disorders. Insight has been found to be associated with increased risk for suicidal behaviour, but not consistently. A possible explanation for this is that insight has different consequences for patients depending on their beliefs about psychosis. The present study investigated whether a relationship between insight, negative beliefs about psychosis and suicidality was mediated by depressive symptoms, and if negative beliefs about psychosis moderated the relationship between insight and suicidality in patients with a first episode of psychosis (FEP).

Method: One hundred and ninety-four FEP-patients were assessed with a clinical interview for diagnosis, symptoms, functioning, substance use, suicidality, insight, and beliefs about psychosis.

Result: Nearly 46% of the patients were currently suicidal. Depressive symptoms, having a schizophrenia spectrum disorder, insight, and beliefs about negative outcomes for psychosis were independently associated with current suicidality; contradicting a mediating effect of depressive symptoms. Negative beliefs about psychosis did not moderate the effect of insight on current suicidality.

Conclusion: The results indicate that more depressive symptoms, higher insight, and negative beliefs about psychosis increase the risk for suicidality in FEP-patients. The findings imply that monitoring insight should be part of assessing the suicide risk in patients with FEP, and that treating depression and counteracting negative beliefs about psychosis may possibly reduce the risk for suicidality.

Suicidality before and in the early phases of first episode psychosis

Barrett EA, Sundet K, Faerden A, Nesvåg R, Agartz I, Fosse R, Mork E, Steen NE, Andreassen OA, Melle I (Norway)

Schizophrenia Research 119, 11-17, 2010

Introduction: The suicide risk in psychotic disorders is highest in the early phases of illness. Studies have typically focused on suicidality from treatment start rather than actual onset of psychosis. This study explored the prevalence

and characteristics of suicidality in patients with a first episode of psychosis (FEP) in two time intervals: (1) prior to study entry and (2) explicitly in the period of untreated psychosis.

Methods: One hundred seventy FEP-patients were interviewed as soon as possible after treatment start. The interview included assessments of diagnoses, suicidality, symptoms, substance use, and premorbid functioning.

Results: Nearly 26% of the patients attempted suicide prior to study entry and 14% made suicide attempts during the period of untreated psychosis. Of the patients who had been suicidal (i.e. experienced suicidal ideation or attempts), 70% were suicidal during the period of untreated psychosis. Suicide attempts prior to study entry were associated with female gender, more depressive episodes, younger age at psychosis onset, and history of alcohol disorder. Suicide attempts during untreated psychosis were also associated with more depressive episodes and younger age at illness onset, in addition to drug use the last six months and longer duration of untreated psychosis (DUP).

Conclusions: The prevalence of suicidality before and in the early phases of FEP is high, especially during untreated psychosis. As prolonged DUP is associated with suicide attempts during the period of untreated psychosis, reducing the DUP could have the effect of reducing the prevalence of suicide attempts in patients with FEP

Police officer suicide within the New South Wales police force from 1999 to 2008

Barron S (Australia)

Police Practice and Research 11, 371-382, 2010

This paper explores the range of personal, occupational, psychological, and social characteristics of police officers who commit suicide, based on a study conducted in the Australian State of New South Wales. Police officers are drawn from a population where mental and physical illness are minimal, at least at the point of recruitment. Even so, they have higher than anticipated rates of suicide although many agencies fail to keep proper records on the subject because of the stigma involved, possible insurance claims, and allied issues. Police community approaches and supportive clinical care are essential strategies in any attempt to reduce the incidence of suicide among police officers.

Explaining changing suicide rates in Norway 1948–2004: The role of social integration

Barstad A (Norway)

Social Indicators Research 87, 47-64, 2010.

Using Norway 1948–2004 as a case, I test whether changes in variables related to social integration can explain changes in suicide rates. The method is the

Box-Jenkins approach to time-series analysis. Different aspects of family integration contribute significantly to the explanation of Norwegian suicide rates in this period. The estimated effect of separations is stronger than the effect of divorces, both for men and women, probably because separations are closer in time to the 'real' marital breakup. This difference has not been demonstrated in earlier time-series research. Marriages decrease the suicide rates for males. The unemployment estimate for men has a negative sign, contributing to fewer suicides. Both increasing alcohol (beer) consumption and fewer marriages seem to be implicated in the soaring suicide rate for young men since 1970.

Veterinary surgeons and suicide: A structured review of possible influences on increased risk

Bartram DJ, Baldwin DS (USA)

Veterinary Record 166, 458-458, 2010

Veterinary surgeons are known to be at a higher risk of suicide compared with the general population. There has been much speculation regarding possible mechanisms underlying the increased suicide risk in the profession, but little empirical research. A computerised search of published literature on the suicide risk and influences on suicide among veterinarians, with comparison to the risk and influences in other occupational groups and in the general population, was used to develop a structured review. Veterinary surgeons have a proportional mortality ratio (PMR) for suicide approximately four times that of the general population and around twice that of other healthcare professions. A complex interaction of possible mechanisms may occur across the course of a veterinary career to increase the risk of suicide. Possible factors include the characteristics of individuals entering the profession, negative effects during undergraduate training, work-related stressors, ready access to and knowledge of means, stigma associated with mental illness, professional and social isolation, and alcohol or drug misuse (mainly prescription drugs to which the profession has ready access). Contextual effects such as attitudes to death and euthanasia, formed through the profession's routine involvement with euthanasia of companion animals and slaughter of farm animals, and suicide 'contagion' due to direct or indirect exposure to suicide of peers within this small profession are other possible influences.

Body mass index and attempted suicide: Cohort study of 1,133,019 Swedish men

Batty GD, Whitley E, Kivimäki M, Tynelius P, Rasmussen F (Sweden)

American Journal of Epidemiology 172, 890-899, 2010

Associations between body mass index (BMI) and attempted (nonfatal) suicide have recently been reported. However, the few existing studies are relatively small in scale, the majority cross-sectional, and results contradictory. The authors have explored BMI-attempted suicide associations in a large cohort of 1,133,019 Swedish

men born between 1950 and 1976, with BMI measured in early adulthood. During a mean follow-up of 23.9 years, a total of 18,277 (1.6%) men had at least one hospital admission for attempted suicide. After adjustment for confounding factors, there was a stepwise, linear decrease in attempted suicide with increasing BMI across the full BMI range (per standard deviation increase in BMI, hazard ratio = 0.93, 95% confidence interval: 0.91, 0.94). Analyses excluding men with depression at baseline were essentially identical to those based on the complete cohort. In men free from depression at baseline, controlling for subsequent depression slightly attenuated the raised risk of attempted suicide, particularly in lower weight men. This study suggests that lower weight men have an increased risk of attempted suicide and that associations may extend into the 'normal' BMI range.

Risk factors for fatal and nonfatal repetition of suicide attempt: A critical appraisal

Beghi M, Rosenbaum JF (Italy)

Current Opinion in Psychiatry 23, 349-355, 2010

Purpose of review: To perform a critical appraisal of reports on suicide attempts published in 2009, looking for features and predictors of suicidal behavior.

Recent findings: We searched Psychinfo, Embase, and Pubmed in the period from December 1, 2008 to December 31, 2009, looking for papers on suicide attempt. Rates of suicide attempts are in line with previous data and confirm a north-south gradient in the suicide attempt rate. Previous attempts are the strongest risk factors for further attempt. Moreover, we point out the importance of mood disorders (in particular depression) and personality disorders, unemployment, and a medium age as risk factors. In adolescence, the repetition rate seems to overlap that of the adult population, though the samples are very small. Even in this case, the presence of a previous suicide attempt increases the risk for repeated suicide attempt. By contrast, the role of psychiatric and demographic variables is less clear. Studies on personality disorders confirm that having a personality disorder increases the risk for further attempt, but this correlation is significantly less strong for fatal repetition. In depressed patients, the presence of anxiety perhaps acts as a protective factor.

Summary: The risk for a suicide attempt is higher for people who had previously attempted. Having a psychiatric diagnosis and more specifically a mood disorder is also a strong predictor for both fatal and nonfatal suicide attempt.

Prior health care utilisation patterns and suicide among US army soldiers

Bell NS, Harford TC, Amoroso PJ, Hollander IE, Kay AB (USA)

Suicide and Life-Threatening Behaviour 40, 407-415, 2010

Suicides among US Army soldiers are increasing and, in January 2009, out-paced deaths due to combat. For this study, 1,873 army suicides identified

through death, inpatient, and emergency room records were matched with 5,619 controls. In multivariate models, older, male, White, single, and enlisted soldiers with a prior injury (OR = 2.04, 95% CI = 1.64-2.54), alcohol (OR = 3.41, 95% CI = 2.32-4.99), or mental health hospitalisation (OR = 6.62, 95% CI = 4.77-9.20) were at increased risk for suicide. Risk was greatest immediately following diagnoses, but remained elevated even after 5 or more years of follow-up. Most injury hospitalisations were unintentional but, nonetheless, significantly associated with suicide. Interactions indicate soldiers with both mental health and injury history are particularly vulnerable.

Psychosocial assessment and repetition of self-harm: The significance of single and multiple repeat episode analyses

Bergen H, Hawton K, Waters K, Cooper J, Kapur N (UK)

Journal of Affective Disorders. Published online: 29 May 2010. doi:10.1016/j.jad.2010.05.001, 2010

Background: Self-harm is a common reason for presentation to the Emergency Department. An important question is whether psychosocial assessment reduces risk of repeated self-harm. Repetition has been investigated with survival analysis using various models, though many are not appropriate for recurrent events.

Methods: Survival analysis was used to investigate associations between psychosocial assessment following an episode of self-harm and subsequent repetition, including (1) one repeat, and (2) recurrent repetition (≤ 5 repeats) using (a) an independent episodes model, and (b) a stratified episodes model based on a conditional risk set. Data were from the Multicentre Study on Self-harm in England, 2000 to 2007.

Results: Psychosocial assessment following an index episode of self-harm was associated with a 51% (95% CI 42%-58%) decreased risk of a repeat episode in persons with no psychiatric treatment history, and 26% (95% CI 8%-34%) decreased risk in those with a treatment history. For recurrent repetition, assessment was associated with a 57% (95% CI 51%-63%) decreased risk of repetition assuming independent episodes, and 13% (95% CI 1%-24%) decreased risk accounting for ordering and correlation of episodes by the same person (stratified episodes model). All models controlled for age, gender, method, history of self-harm, and centre differences.

Limitations: Some missing data on psychiatric treatment for non-assessed patients.

Conclusions: Psychosocial assessment appeared to be beneficial in reducing the risk of repetition, especially in the short-term. Findings for recurrent repetition were highly dependent on model assumptions. Analyses should fully account for ordering and correlation of episodes by the same person.

Suicide inside: A systematic review of inpatient suicides

Bowers L, Banda T, Nijman H (UK)

Journal of Nervous and Mental Disorders 198, 315-328, 2010

The literature on inpatient suicides was systematically reviewed. English, German, and Dutch articles were identified by means of the electronic databases PsycInfo, Cochrane, Medline, EMBASE psychiatry, CINAHL, and British Nursing Index. In total, 98 articles covering almost 15,000 suicides were reviewed and analysed. Rates and demographic features connected to suicides varied substantially between articles, suggesting distinct subgroups of patients committing suicide (e.g., depressed vs. schizophrenic patients) with their own suicide determinants and patterns. Early in the admission is clearly a high-risk period for suicide, but risk declines more slowly for patients with schizophrenia. Suicide rates were found to be associated with admission numbers, and as expected, previous suicidal behavior was found to be a robust predictor of future suicide. The methods used for suicide are linked to availability of means. Timing and location of suicides seem to be associated with absence of support, supervision, and the presence of family conflict. Although there is a strong notion that suicides cluster in time, clear statistical evidence for this is lacking. For prevention of suicides, staff need to engage with patients' family problems, and reduce absconding without locking the door. Future research should take into account the heterogeneous subgroups of patients who commit suicide, with case-control studies addressing these separately.

Self-reported mental health and its gender differences as a predictor of suicide in the middle-aged

Bramness JG, Walby FA, Hjellvik V, Selmer R, Tverdal A (Norway)

American Journal of Epidemiology 172, 160-166, 2010

Studies of clinical cohorts and retrospective reports have identified psychiatric disorders as paramount risk factors for suicide. Much less is known about how self-reported mental health is related to completed suicide. To study the relation between self-reported mental health and risk of completed suicide, the authors prospectively followed a population-based Norwegian cohort of 61,588 men and 69,774 women aged 39-44 years for an average of 10.4 years between 1994 and 2007. Self-reported mental health was measured using an instrument based on the Hopkins Symptom Checklist and the General Health Questionnaire. Completed suicides were registered in the official Norwegian Cause of Death Registry. Females reported higher levels of mental distress than males. In comparison with persons reporting the fewest mental health symptoms, the adjusted hazard ratio for suicide increased from 1.8 (95% confidence interval (CI): 1.1, 2.9) in the moderately depressed group to 8.9 (95% CI: 4.4, 18.2) in the most depressed group. The risk difference was greatest in males. At

each level of the mental health index, males had double the risk of suicide of females (hazard ratio = 2.3, 95% CI: 1.5, 3.3). This study shows a dose-response effect of self-reported mental health problems on completed suicide and replicates the gender paradox observed in the general population with prospective data.

Childhood adversities as risk factors for onset and persistence of suicidal behaviour

Bruffaerts R, Demyttenaere K, Borges G, Haro JM, Chiu WT, Hwang I, Karam EG, Kessler RC, Sampson N, Alonso J, Andrade LH, Angermeyer M, Benjet C, Bromet E, de Girolamo G, de Graaf R, Florescu S, Gureje O, Horiguchi I, Hu C, Kovess V, Levinson D, Posada-Villa J, Sagar R, Scott K, Tsang A, Vassilev SM, Williams DR, Nock MK (Belgium)
British Journal of Psychiatry 197, 20-27, 2010

Background: Suicide is a leading cause of death worldwide, but the precise effect of childhood adversities as risk factors for the onset and persistence of suicidal behaviour (suicide ideation, plans and attempts) are not well understood.

Aims: To examine the associations between childhood adversities as risk factors for the onset and persistence of suicidal behaviour across 21 countries worldwide.

Method: Respondents from nationally representative samples ($n = 55\,299$) were interviewed regarding childhood adversities that occurred before the age of 18 years and lifetime suicidal behaviour.

Results: Childhood adversities were associated with an increased risk of suicide attempt and ideation in both bivariate and multivariate models (odds ratio range 1.2-5.7). The risk increased with the number of adversities experienced, but at a decreasing rate. Sexual and physical abuse were consistently the strongest risk factors for both the onset and persistence of suicidal behaviour, especially during adolescence. Associations remained similar after additional adjustment for respondents' lifetime mental disorder status.

Conclusions: Childhood adversities (especially intrusive or aggressive adversities) are powerful predictors of the onset and persistence of suicidal behaviours.

Characteristics of medication overdose presentations to the ED: How do they differ from illicit drug overdose and self-harm cases?

Buykx P, Dietze P, Ritter A, Loxley W (Australia)
Emergency Medicine Journal 27, 499-503, 2010

Background: Medication overdose accounts for >80% of hospital presentations for self-harm. Previous research has identified typical characteristics of medication overdose cases; however, these cases have not been well differentiated from other similar presentations, namely (1) illicit drug overdose and (2) self-harm by means other than overdose.

Method: A 12-month audit of medication overdose cases (both intentional and unintentional) attending the emergency department (ED) of a major metropolitan public hospital in Melbourne, Australia was conducted. Comparison was made with patients attending for illicit drug overdose or for self-harm by means other than overdose.

Results: Medication overdose cases ($n = 453$) showed a broadly comparable profile with those found in earlier studies (predominantly female gender, aged in their 30s and referred for psychosocial assessment). A similar though not identical profile was noted for self-harm cases ($n = 545$). In contrast, patients attending for illicit drug overdose ($n = 409$) could be characterised as male, in their 20s and not referred for psychosocial assessment. Illicit drug overdose cases were more likely than either the medication overdose or self-harm cases to be triaged in the most urgent category (19.3, 3.8 and 3.9% respectively), suggesting a high level of acuity in this group. However, the illicit drug overdose group on average spent less time in the ED than medication overdose patients, and were less likely to require hospital admission.

Conclusion: On both demographic and treatment variables, patients attending the ED following a medication overdose more closely resemble those attending for self-harm by means other than overdose than those attending for illicit drug overdose.

Does cannabis use increase the risk of death? Systematic review of epidemiological evidence on adverse effects of cannabis use

Calabria B, Degenhardt L, Hall W, Lynskey M (Australia)
Drug and Alcohol Review 29, 318-330, 2010

Issues: To conduct a comprehensive search of the peer-reviewed literature to assess risk of cannabis-related mortality.

Approach: Systematic peer-reviewed literature searches were conducted in Medline, EMBASE and PsycINFO to identify data on mortality associated with cannabis use. Search strings for cannabis and mortality were used. Searches were limited to human subjects and the publication timeframe of January 1990 to January 2008. Reference lists of review articles and of specific studies deemed important by colleagues were searched to identify additional studies. A list of the selected articles was emailed to experts in the field asking for comment on completeness.

Key Findings: There is insufficient evidence, particularly because of the low number of studies, to assess whether the all-cause mortality rate is elevated among cannabis users in the general population. Case-control studies suggest that some adverse health outcomes may be elevated among heavy cannabis users, namely fatal motor vehicle accidents, and possibly respiratory and brain cancers. The evidence is as yet unclear as to whether regular cannabis use increases the risk of suicide.

Method: There is a need for long-term cohort studies that follow cannabis using individuals into old age, when the likelihood of any detrimental effects of cannabis use are more likely to emerge among those who persist in using cannabis into middle age and older. Case-control studies of cannabis use and various causes of mortality are also needed.

Mortality and causes of death of acute and transient psychotic disorders

Castagnini AC, Bertelsen A (UK)

Social Psychiatry and Psychiatric Epidemiology. Published online: 09 August 2010. doi: 10.1007/s00127-010-0276-1, 2010

Background: Little is known about mortality associated with acute transient psychoses. This paper examines mortality and causes of death of ICD-10 F23 'Acute and transient psychotic disorders' (ATPD).

Method: Data from all subjects aged over 15 years who were enrolled in 1996 in the Danish psychiatric register with a first-admission diagnosis of ATPD were linked to the national register of causes of death. The standardised mortality ratio (SMR) for overall mortality and specific categories were calculated.

Results: Over the period 1996-2001, 87 (17.3%) of 503 patients with ATPD had died, accounting for a mortality rate of 35.3 per 1,000 person/years. The SMR for all causes (2.9), natural causes (2.5), and unnatural causes (9.2) were significantly increased. Suicide had the greatest SMR (30.9).

Conclusions: These findings argue for excess mortality of ATPD particularly from suicide.

Viewing the body after bereavement due to a traumatic death: Qualitative study in the UK

Chapple A, Ziebland S (UK)

British Medical Journal 340, 2032, 2010

Objective: Whether bereaved relatives should be encouraged to view the body after a traumatic death is uncertain. This analysis of narrative interviews interprets people's accounts of why and how they decided whether to view the body and their emotional reactions to this, immediately and at a later stage.

Design: In depth interviews with qualitative analysis.

Participants: A maximum variation sample of 80 people bereaved because of suicide or other traumatic death.

Setting: Most people were interviewed in their homes.

Results: For those who had the option, decisions about seeing the body varied. Some wanted someone else to identify the body, because they feared how it might look or preferred to remember their relative as they had been in life. Those

who had wanted to see the body gave various reasons beyond the need to check identity. Some felt they ought to see the body. Others felt that the body had not lost its social identity, so wanted to make sure the loved one was 'being cared for' or to say goodbye. Some people wanted to touch the body, in privacy, but the coroner sometimes allowed this only after the postmortem examination, which made relatives feel that the body had become police property. Seeing the body brought home the reality of death; it could be shocking or distressing, but, in this sample, few who did so said they regretted it.

Conclusions: Even after a traumatic death, relatives should have the opportunity to view the body, and time to decide which family member, if any, should identify remains. Officials should prepare relatives for what they might see, and explain any legal reasons why the body cannot be touched. Guidelines for professional practice must be sensitive to the needs and preferences of people bereaved by traumatic death. The way that relatives refer to the body can be a strong indication for professionals about whether the person who died retains a social identity for the bereaved.

Youth suicide attempts and the dose-response relationship to parental risk factors: A population-based study

Christiansen E, Goldney RD, Beautrais AL, Agerbo E (Denmark)

Psychological Medicine. Published online: 21 April 2010. doi: 10.1017/S0033291710000747, 2010

Background: There is a lack of specific knowledge about the dose-response effect of multiple parental risk factors for suicide attempts among children and adolescents. The aim of this study was to determine the dose-response effect of multiple parental risk factors on an offspring's risk for suicide attempt.

Method: We designed a population-based two-generation nested case-control study and used Danish register data. A population of 403 431 individuals born between 1983 and 1989 was sampled. Among these, 3465 (0.8%) were registered as having had a suicide attempt. Twenty controls were matched to each case and a link to the offspring's biological parents was established.

Results: There was a dose-response relationship between the number of exposures and the risk of suicide attempts, with the increased risk seeming to be a multiplicative effect. Parental suicide, suicide attempt, psychiatric illness and low level of income were all significant independent risk factors for offspring's suicide attempts.

Conclusions: Knowledge of the effect of multiple risk factors on the likelihood of suicide attempts in children and adolescents is important for risk assessment. Dose-response effects of multiple parental risk factors are multiplicative, but it is rare for children and adolescents to be exposed to multiple parental risk factors simultaneously. Nevertheless, they should be considered along with the offspring's own multiple risk factors in determining the overall risk of a suicide attempt. Further research incorporating both parental and offspring's risk

factors is indicated to determine the overall dose-response effect of multiple risk factors.

Increased risk of suicidal ideation in smokers and former smokers compared to never smokers: Evidence from the Baltimore ECA follow-up study

Clarke DE, Eaton WW, Petronis KR, Ko JY, Chatterjee A, Anthony JC (USA)

Suicide and Life-Threatening Behavior 40, 307-318, 2010

The incidence rate of suicidal ideation among current and former smokers versus never smokers is not known. In this study, the age-adjusted incidence of suicidal ideation was highest among current smokers, followed by former, then never smokers. The adjusted hazard for suicide ideation was 2.22 (95%CI = 1.48, 3.33) and 1.19 (95%CI = 0.78, 1.82) for current and former smokers, respectively, compared to never smokers. Results indicate that current smokers have increased risks of suicidal ideation above and beyond the risk for never and former smokers regardless of age, gender, history of depressive disorder or anxiety symptoms, and alcohol abuse/dependence. Smoking cessation might be beneficial for some suicide prevention efforts.

Suicide attempts and associated factors in older adults with schizophrenia

Cohen CI, Abdallah CG, Diwan S (USA)

Schizophrenia Research 119, 253-257, 2010

Background: Although there have been numerous studies of suicidality in younger populations with schizophrenia, there have been no studies focused on community-dwelling older adults with schizophrenia. This study provides data on the prevalence of suicidality and factors associated with previous suicide attempts among a mixed racial sample of older persons with schizophrenia living in New York City.

Methods: The schizophrenia group consisted of 198 persons aged ≥ 55 years who developed schizophrenia before age 45. A community comparison group ($n = 113$) was recruited using randomly selected block groups. Fifteen predictor variables of lifetime suicide attempts based on a risk model of suicide in schizophrenia were identified.

Results: Persons in the schizophrenia group had a significantly higher prevalence of current and lifetime 'suicidality' (i.e., wants to be dead, suicidal thoughts, or suicide attempts) when compared to the community group (current: 10% versus 2%; lifetime: 56% versus 7%) as well as past suicidal attempts (30% versus 4%). Within the schizophrenia group, in logistic regression analysis, 2 variables were significantly associated with lifetime suicidal attempts: current syndromal depression and higher scores on the Traumatic and Victimization Scale.

Conclusions: The data confirmed that in later life, persons with schizophrenia continue to have a higher prevalence of suicidality than their age peers in the community. Our findings underscore the importance of monitoring for suicidality in this age group. The relative paucity of risk factors means that practitioners can more easily focus their therapeutic efforts on at-risk individuals.

Death knocks, professional practice, and the public good: The media experience of suicide reporting in New Zealand

Collings SC, Kemp CG (New Zealand)

Social Science and Medicine 71, 244-248, 2010

Health, government, and media organisations around the world have responded to research demonstrating the imitative effects of suicide coverage in the news media by developing guidelines to foster responsible reporting. Implementation of these guidelines has encountered some resistance, and little is known about the media perspective on suicide coverage and its effects on guideline use. This qualitative study provides an in-depth appreciation of this perspective by investigating the experiences of journalists covering suicide in New Zealand. Fifteen newspaper, television and radio journalists were interviewed between December 2008 and March 2009 and transcripts were analyzed using a grounded hermeneutic editing approach. Five themes were identified: public responsibility, media framing of suicide, professional practice, personal experience of suicide reporting, and restricted reporting. Participants asserted the role of the media in the protection of the public good. Though this stance aligns them with the goals of health policymakers, it is derived from a set of professional mores at odds with the perceived paternalism of suicide reporting guidelines. Participants were stakeholders in the issue of suicide coverage. We conclude that policymakers must engage with the news media and acknowledge the competing imperatives that provide the context for the application of suicide reporting guidelines by individual journalists. Collaborative guideline development will be vital to effective implementation.

A study of the Irish system of recording suicide deaths

Corcoran P, Arensman E (Ireland)

Crisis 31, 174-182, 2010

Background: Many studies have examined the reliability of national suicide statistics. **Aims:** To examine the Irish system of certifying suicide deaths and data collected by it.

Methods: Data were recorded from a police form (Form 104) completed and sent to the Irish Central Statistics Office (CSO) after all inquested deaths that occurred in Ireland in 2002.

Results: Of the approximately 1,800 inquested deaths, 6% (and 4% of suicides) were not included in routine mortality statistics because of late registration. Of the 495 deaths thought by the police to be suicide, 485 (98%) were so recorded by the CSO. Information relating to medical history and contributory factors was provided in just 54% and 34% of suicides, respectively. Suicide deaths showed significant variation by weekday (excess on Mondays) and calendar month (summer peak). The peak suicide rate (35 per 100,000) was among men aged 25-34 years. Persons separated, living alone, and unemployed had significantly elevated suicide rates.

Conclusions: There is a need for a better understanding of national suicide recording systems, as this study has provided for Ireland. Such systems may routinely provide data relating to sociodemographic factors but not relating to medical and psychosocial factors.

Suicide ideation in older adults: Relationship to mental health problems and service use

Corna LM, Cairney J, Streiner DL (Canada)

Gerontologist. Published online: 21 June 2010. doi: 10.1093/geront/gnq048, 2010

Purpose: To assess the prevalence of suicide ideation among community-dwelling older adults and the relationship between suicide ideation, major psychiatric disorder, and mental health service use.

Design and methods: We use data from the Canadian Community Health Survey 1.2: Mental Health and Well-being (CCHS 1.2). We estimate the prevalence of suicide ideation and the prevalence of major psychiatric disorder and service use among ideators versus nonideators. In multivariate models, we consider the sociodemographic, social, and mental health correlates of suicide ideation and mental health care use.

Results: In our sample, more than 2% of older adults reported suicide ideation in the past year and more than two thirds of these respondents did not meet the criteria for any of the *Diagnostic and Statistical Manual of Mental Disorders*, (Fourth Edition) disorders assessed in the CCHS 1.2. In multivariate models, being male, younger, or widowed, reporting lower social support and higher psychological distress increased the likelihood of suicide ideation. More than 50% of the respondents who reported suicidal thoughts did not access any type of mental health care use.

Implications: Although suicide ideation is associated with depression and anxiety disorders, many older adults with suicidal thoughts do not meet the criteria for these clinical disorders. The low prevalence of service use among older adults with suicide ideation suggests the need for further inquiry into the factors associated with discussing mental health concerns with health care providers, particularly among older adults who do not meet the criteria for clinical disorder.

Emergency department contact prior to suicide in mental health patients

Da Cruz D, Pearson A, Saini P, Miles C, While D, Swinson N, Williams A, Shaw J, Appleby L, Kapur N (UK)

Emergency Medicine Journal. Published online: 26 July 2010. doi:10.1136/emj.2009.081869, 2010

Objectives: To describe attendance at emergency departments (EDs) in the year prior to suicide for a sample of mental health patients. To examine the characteristics of those who attended (particularly those who attended frequently) prior to suicide.

Design: Case review of ED records for 286 individuals who died within 12 months of mental health contact in North West England (2003-2005).

Method: Cases identified through the National Confidential Inquiry into Suicide were checked against regional EDs to establish attendance in the year prior to death. Records were examined to establish the number of attendances, reason for the final, non-fatal attendance, treatment offered and outcome.

Results: One hundred and twenty-four (43%) individuals had attended the ED at least once in the year prior to their death, and of these, 35 (28%) had attended the ED on more than three occasions. These frequent attenders died by suicide significantly sooner after their final, non-fatal attendance than other attenders. A clinical history of alcohol misuse was also associated with early death following ED attendance.

Conclusions: Over 40% of our clinical sample attended an ED in the year prior to death, and some individuals attended particularly frequently. EDs may therefore represent an important additional setting for suicide prevention in mental health patients. The majority of attendances prior to suicide were for self-harm or to request psychiatric help. Clinicians should be alert to the risk associated with such presentations and to the possible association between frequent attendance and suicide.

The WHO/START Study: Promoting suicide prevention for a diverse range of cultural contexts

De Leo D, Milner A (Australia)

Suicide and Life Threatening Behavior 40, 99-106, 2010

The WHO/Start Study is introduced and described in its four main components. The study originated as a response to growing concerns about trends of suicide, the prevalence of which in the Western Pacific Region of the World Health Organization is the highest among the six regions of the WHO. So far, nineteen centers have joined the study. This ambitious project is expected to provide important transcultural perspectives on both fatal and nonfatal suicidal behaviors, together with increased awareness for these phenomena and the growth of culture-sensitive prevention programs.

Suicides in psychiatric in-patients: What are we doing wrong?

De Leo D, Svetcic J (Australia)

Epidemiologia e Psichiatria Sociale 19, 8-15.

Given the uncontested role of psychiatric illnesses in both fatal and non-fatal suicidal behaviours, efforts are continuously made in improving mental health care provision. In cases of severe mental disorder, when intensified treatment protocols and continuous supervision are required due to individual's impaired emotional, cognitive and social functioning (including danger to self and others), psychiatric hospitalisation is warranted. However, to date there is no convincing evidence that in-patient care prevents suicide. In fact, quite paradoxically, both admissions to a psychiatric ward and recent discharge from it have been found to increase risk for suicidal behaviours. What elements in the chain of well-intentioned approaches to treating psychiatric illness and suicidality fail to protect this vulnerable population is still unclear. The same holds true for the identifications of factors that may increase the risk for suicide. This editorial discusses current knowledge on this subject, proposing strategies that might improve prevention.

Jumping, lying, wandering: Analysis of suicidal behaviour patterns in 1,004 suicidal acts on the German railway net

Dinkel A, Baumert J, Erazo N, Ladwig K-H (Germany)

Journal of Psychiatric Research. Published online: 10 June 2010. doi:10.1016/j.jpsychires.2010.05.005, 2010

Current knowledge on behavioural patterns and personal characteristics of subjects who choose the railway as means of suicide is sparse. The aim of this study was to determine the frequency of three distinct behaviour patterns (jumping, lying, wandering) in railway suicides and to explore associated variables. Cases were derived from the National Central Registry of person accidents on the German railway net covering the period from 2002 to 2006. A retrospective analysis of registry protocols of all 4127 suicidal acts allowed classification of behaviour patterns in 1004 cases. Types of suicidal behaviour occurred with nearly equal frequencies; jumping in 32.2%, lying in 32.6% and wandering in 34.2% of cases. Age and sex were not associated with type of suicidal behaviour. The proportion of jumping was highest during 9:01 am to 6:00 pm while at night, lying was used most frequently. Jumping predominated in the station area, while lying and wandering on the open track. Fatality was highest in liers and lowest in jumpers. The frequency of jumping decreased during the study period by 12.6% ($p < .05$). These findings may help to elucidate differential risk features of this highly lethal suicide method..

Changes in the inequality of mental health: Suicide in Australia, 1907-2003

Doessel DP, Williams RFG, Robertson JR (Australia)

Health Economics, Policy and Law. Published online: 21 April 2010. doi: 10.1017/S1744133110000101, 2010

Rising suicide rates have been identified as a social problem in several Western countries. The application of a Welfare Economics argument justifies a role for policy that reduces the welfare impact of suicide, whereas the measurement of that impact can inform policy making. Two dimensions of the concept can be measured: the social loss from suicide, and the inequality in the distribution of that loss. In this study, an alternative measure of suicide to the conventional suicide headcount, viz. the potential years of life lost (PYLL), is employed. The PYLL measure is a proxy measure of the social impact of suicide, and involves the concept of 'premature' loss of life. The PYLL also lends itself to inequality measurement. We apply the approach to inequality measurement of health phenomena that was pioneered in the 1980s by Jacques Silber and Julian Le Grand, in a literature now described as measuring health inequality per se. The empirical part of the paper statistically estimates equations on Australian suicide data for the period 1907-2003 and determines the trends in the social loss from suicide and the inequality of its age distribution. Some illustrative examples assist in interpreting the welfare impact of suicide measured both ways, by the headcount rate and the PYLL rate.

Health-care staff attitudes towards self-harm patients

Gibb SJ, Beautrais AL, Surgenor LJ (New Zealand)

Australian and New Zealand Journal of Psychiatry 44, 713-720, 2010

Objective: To examine attitudes towards self-harm patients and need for training about self-harm amongst health-care staff in Christchurch, New Zealand.

Methods: Health-care staff from a general and a psychiatric hospital completed a questionnaire about their attitudes towards self-harm patients and their need for training about self-harm.

Results: A total of 195 staff members completed the questionnaire (response rate 64.4%). Overall, health-care staff had both positive and negative attitudes towards self-harm patients. Staff believed that their contact was helpful to self-harm patients, that they were patient and understanding, and were optimistic about patients' outcomes. However, staff did not feel confident working with self-harm patients and believed that their training in this area was inadequate. Attitudes were not significantly associated with age, gender, or experience. However, more negative attitudes were significantly associated with higher levels of burnout (through high emotional exhaustion ($p < .0002$) and low personal accomplishment ($p < .003$)). Staff comments indicated that their greatest difficulties working with self-harm patients included repetitive self-harm, frustrating

and difficult patient behaviour, communication difficulties, and time pressure. Staff suggestions for improvement included more training, provision of a hand-book or guidelines, and greater flexibility with patient allocations.

Conclusions: Overall, health-care staff had positive attitudes towards self-harm patients, and a strong desire to help such patients. However, staff did not feel confident working with self-harm patients and had a strong desire for additional training in this area. Additional staff training in working with self-harm patients could have the potential to increase staff confidence and attitudes and enhance patient care.

Acute stress reaction and completed suicide

Gradus JL, Qin P, Lincoln AK, Miller M, Lawler E, Sørensen HT, Lash TL (Denmark)

International Journal of Epidemiology. Published online: 12 July 2010. doi: 10.1093/ije/dyq112, 2010

Background: Acute stress reaction is a diagnosis given immediately following the experience of an exceptional mental or physical stressor. To the best of our knowledge, no study has examined the association between acute stress reaction diagnosis and suicide. The current study examined this association in a population-based sample. In addition, we examined comorbid psychiatric diagnoses as modifiers of this association.

Methods: Data for the current study were obtained from the nationwide Danish health and administrative registries, which include data for all 5.4 million residents of Denmark. All suicides between 1 January 1994 and 31 December 2006 were included and controls were selected from a sample of all Danish residents. Using this nested case-control design, we examined 9612 suicide cases and 199 306 controls matched to cases with respect to gender, date of birth and time.

Results: In total, 95 cases (0.99%) and 165 controls (0.08%) had a diagnosis of acute stress reaction. Those diagnosed with acute stress reaction had 10 times the rate of completed suicide compared with those without this diagnosis, adjusting for the control to case matching, depression and marital status (95% confidence interval 7.7-14). Additionally, persons with acute stress reaction and depression, or acute stress reaction and substance abuse, had a greater rate of suicide than expected based on their independent effects.

Conclusions: Acute stress reaction is a risk factor for completed suicide.

Explained factors of suicide attempts in major depression

Hantouche E, Angst J, Azorin J-M (France)

Journal of Affective Disorders. Published online: 27 May 2010. doi:10.1016/j.jad.2010.04.032, 2010

Objective: The aim of this study is to identify risk factors for suicide attempts including bipolarity.

Method: The paper presents the most recent data on suicide attempts and depression with or without hypomanic features from three French ‘Bipolar’, studies including 2249 patients with recurrent or resistant depression. Hypomania and BP-II disorder were defined by a score of 10 or more on the Hypomania Checklist-20. Attempters and non-attempters were compared, and multivariate logistic regression analyses were performed on all the significant variables obtained in univariate tests.

Results: Rates of suicide attempts and of a family history of suicide were higher in BP-II disorder. Suicide attempts were best explained by a family history of suicide and mood disorders, recurrence of depression, the ‘irritable-risk-taking’ dimension of hypomania, substance abuse, and need of psychiatric treatment. Limitations: The study does not deal with DSM-IV BP-II disorder.

Conclusion: Clinicians need to be familiarised with these risk factors.

Incidence and predictors of suicide attempts in DSM-IV major depressive disorder: A five-year prospective study

Holma KM, Melartin TK, Haukka J, Holma IA, Sokero TP, Isometsa ET (Finland)
American Journal of Psychiatry 167, 801-808, 2010

Objective: Prospective long-term studies of risk factors for suicide attempts among patients with major depressive disorder have not investigated the course of illness and state at the time of the act. Therefore, the importance of state factors, particularly time spent in risk states, for overall risk remains unknown.

Method: In the Vantaa Depression Study, a longitudinal 5-year evaluation of psychiatric patients with major depressive disorder, prospective information on 249 patients (92.6%) was available. Time spent in depressive states and the timing of suicide attempts were investigated with life charts.

Results: During the follow-up assessment period, there were 106 suicide attempts per 1,018 patient-years. The incidence rate per 1,000 patient-years during major depressive episodes was 21-fold ($N = 332$ [95% confidence interval [CI] = 258.6–419.2]), and it was fourfold during partial remission ($N = 62$ [95% CI = 34.6–92.4]) compared with full remission ($N = 16$ [95% CI = 11.2–40.2]). In the Cox proportional hazards model, suicide attempts were predicted by the months spent in a major depressive episode (hazard ratio = 7.74 [95% CI = 3.40–17.6]) or in partial remission (hazard ratio = 4.20 [95% CI = 1.71–10.3]), history of suicide attempts (hazard ratio = 4.39 [95% CI = 1.78–10.8]), age (hazard ratio = 0.94 [95% CI = 0.91–0.98]), lack of a partner (hazard ratio = 2.33 [95% CI = 0.97–5.56]), and low perceived social support (hazard ratio = 3.57 [95% CI = 1.09–11.1]). The adjusted population attributable fraction of the time spent depressed for suicide attempts was 78%.

Conclusions: The present findings have documented several similarities and differences between suicide attempters and suicide completers. Future research may help to clarify the key warning signs that reflect the risk of completed suicide in adults who have been diagnosed with a major depressive disorder.

Adolescents in mental health crisis: The role of routine follow-up calls after emergency department visits

Hopper SM, Pangestu I, Cations J, Stewart C, Sharwood LN, Babl FE (Australia)

Emergency Medicine Journal. Published online: 15 September 2010. doi:10.1136/emj.2008.062745, 2010

To improve care of adolescents in mental health crisis, the role of routine follow-up calls in discharged patients with referral plans after emergency department (ED) presentation to a children's hospital was explored. Main outcome measure was patient attendance at referral sites. In 113 mental health patients with follow-up appointments, either patient/carers or corresponding referral services could be contacted. Median age was 14 years, 77% were girls, and most presentations were after self-harm/depression (61%). Eighty-three per cent (95% CI 75% to 90%) were compliant with the discharge plan without prompting from the ED staff. Fourteen per cent (95% CI 8% to 22%) did not comply after being called by ED staff, and only 3% (95% CI 1% to 7%) were persuaded to attend their outpatient care after being prompted by ED staff. Routine follow-up calls for adolescent mental health patients after ED care are not warranted in all settings.

Alcohol consumption predicts the EU suicide rates in young women aged 15-29 years but not in men: Analysis of trends and differences among early and new EU countries since 2004

Innamorati M, Lester D, Amore M, Girardi P, Tatarelli R, Pompili M (Italy)

Alcohol 44, 463-469, 2010

The aims of this study were to study suicide rates in youths aged 15-29 years in the European Union (EU), to identify differences between early members and new members to the EU since 2004, and to evaluate the association between alcohol-related variables and suicide rates, while controlling for indicators of social stress. We explored temporal trends in age-adjusted suicide rates for youths aged 15-29 years resident in EU nations since 1980. Social changes in EU nations were associated with increased inequalities between the countries in suicide, especially in male youths (new/early EU members: relative risk = 1.55; 95% confidence interval: 1.48/1.61). Pure alcohol consumption predicts suicide rates in female youths, whereas social stress related to violence against youths predicts suicide rates in male youths. EU political and health agencies should devise policies to prevent youth suicide with a focus on alcohol misuse and societal stress associated with violence against youths.

Restrictive emotionality, depressive symptoms, and suicidal thoughts and behaviors among high school students

Jacobson CM, Marrocco F, Kleinman M, Gould MS (USA)

Journal of Youth and Adolescence. Published online: 27 July 2010. doi: 10.1007/s10964-010-9573-y.

Depression and suicidal thoughts and behaviors are prevalent among youth today. The current study sought to further our understanding of the correlates of depression and suicidality by assessing the relationship between restrictive emotionality (difficulty understanding and expressing emotions) and depressive symptoms and suicidal ideation and attempts among adolescents. A large group of high school students ($n = 2189$, 58.3% male; 13-18 years of age) completed a self-report survey as part of a 2-stage suicide screening project. Logistic regression analyses were used to assess the association between restrictive emotionality and depressive symptoms, suicidal ideation, and suicide attempts. Those reporting high restrictive emotionality were 11 times more likely to have elevated depressive symptom scores, 3 times more likely to report serious suicidal ideation (after controlling for depressive symptoms), and more than twice as likely to report a suicide attempt (after controlling for depressive symptoms) than those reporting low restrictive emotionality. Restrictive emotionality partially mediated the relationship between depressive symptoms and suicidal ideation and behavior. The pattern of association between restrictive emotionality and the outcome variables was similar for boys and girls. Restrictive emotionality is highly associated with elevated depressive symptoms and suicidal thoughts and behaviors among high school students, and may be a useful specific target in prevention and treatment efforts.

Awareness effects of a youth suicide prevention media campaign in Louisiana

Jenner E, Jenner LW, Matthews-Sterling M, Butts JK, Williams TE (USA)

Suicide and Life-Threatening Behavior 40, 394-406, 2010

Research on the efficacy of mediated suicide awareness campaigns is limited. The impacts of a state-wide media campaign on call volumes to a national hotline were analysed to determine if the advertisements have raised awareness of the hotline. We use a quasi-experimental design to compare call volumes from ZIP codes where and when the campaign is active with those where and when the campaign is not active. Multilevel model estimates suggest that the campaign appears to have significantly and substantially increased calls to the hotline. Results from this study add evidence to the growing public health literature that suggests that mediated campaigns can be an effective tool for raising audience awareness.

Unplanned versus planned suicide attempters, precipitants, methods, and an association with mental disorders in a Korea-based community sample

Jeon HJ, Lee J-Y, Lee YM, Hong JP, Won S-H, Cho S-J, Kim J-Y, Chang SM, Lee HW, Cho MJ (Korea)

Journal of Affective Disorders. Published online: 28 June 2010. doi:10.1016/j.jad.2010.05.027, 2010

Background: Studies have consistently reported that a considerable proportion of suicidal attempts are unplanned. We have performed the first direct comparison between planned and unplanned attempts including associated methods and precipitants.

Method: A total of 6,510 adults, who had been randomly selected through a one-person-per-household method, completed interviews (response rate 81.7%). All were interviewed using the K-CIDI and a questionnaire for suicide.

Results: Two hundred and eight subjects reported a suicide attempt in their lifetime, one-third of which had been unplanned. These individuals exhibited a lower level of education; however, no significant differences were found with regard to age, gender, marital and economic status. Further, 84.0% of unplanned attempters experienced previous suicidal ideation, experiencing their first attempt 1.9 years before ideation. Additionally, 94.4% of unplanned attempters had precipitants for attempts such as familial conflict and it was also found that methods such as the use of chemical agents or falling were three times more common in unplanned than planned attempters. With respect to unplanned attempters, they exhibited a significant association with alcohol use disorder, major depressive disorder, posttraumatic stress disorder, and bipolar disorder. In particular, bipolar disorder was found to be 3.5 times higher in these individuals.

Conclusions: Although dementia specialists have long recognised the importance of a sensitive approach to conveying bad news to patients and families and the possibility of depressive reactions, suicidal behavior has not been regarded as a likely outcome. Such preconceptions will need to change, and protocols to monitor and manage suicide risk will need to be developed for this population.

Karolinska interpersonal violence scale predicts suicide in suicide attempters

Jokinen J, Forslund K, Ahnemark E, Gustavsson JP, Nordstrom P, Asberg M (Sweden)

Journal of Clinical Psychiatry 71, 1025-1032, 2010

Background: Both childhood trauma and violent behavior are important risk factors for suicidal behavior. The aim of the present study was to construct and validate a clinical rating scale that could measure both the exposure to and the expression of violence in childhood and during adult life and to study the

ability of the Karolinska Interpersonal Violence Scale (KIVS) to predict ultimate suicide in suicide attempters.

Methods: A total of 161 suicide attempters and 95 healthy volunteers were assessed with the KIVS measuring exposure to violence and expressed violent behavior in childhood (between 6-14 years of age) and during adult life (15 years or older). The Buss-Durkee Hostility Inventory (BDHI), 'Urge to act out hostility' subscale from the Hostility and Direction of Hostility Questionnaire (HDHQ), and the Early Experience Questionnaire (EEQ) were used for validation. All patients were followed up for cause of death and a minimum of 4 years from entering in the study.

Results: Five patients who committed suicide within 4 years had significantly higher scores in exposure to violence as a child, in expressed violent behavior as an adult, and in KIVS total score compared to survivors. Suicide attempters scored significantly higher compared to healthy volunteers in 3 of the 4 KIVS subscales. There were significant correlations between the subscales measuring exposure to and expression of violent behavior during the life cycle. BDHI, Urge to act out hostility, and EEQ validated the KIVS.

Conclusions: Exposure to violence in childhood and violent behavior in adulthood are risk factors for completed suicide in suicide attempters. Behavioral dysregulation of aggression is important to assess in clinical work. The KIVS is a valuable new tool for case detection and long-term clinical suicide prevention.

Mortality and causes of death among drugged drivers

Karjalainen K, Lintonen T, Impinen A, Makela P, Rahkonen O, Lillsunde P, Ostamo A (Finland) *Journal of Epidemiology and Community Health* 64, 506-512, 2010

Background: Studying drugged drivers gives complementary information about mortality of drug users, which mainly has been studied among opioid abusers. The aim of this study was to analyse mortality rates and causes of death among drivers under the influence of drugs (DUID) in Finland and compare them with the general Finnish population during 1993–2006.

Methods: Register data from 5832 DUID suspects apprehended by the police were studied, with reference group ($n = 74,809$) drawn from the general Finnish population. Deaths were traced from the National Death Register. Survival and differences in mortality hazards were estimated using Kaplan–Meier plots and Cox regression models.

Results: The hazard of death was higher among male (HR 9.6, CI 8.7 to 10.6) and female (HR 9.1, CI 6.4 to 12.8) DUID suspects compared to the reference population. Among male DUID suspects, cause-specific hazards were highest for poisoning/overdose, violence and suicide. 24% of DUID suspects and 8% of reference subjects were under the influence of drugs/alcohol at the time of death. Poly-drug findings indicated excess in mortality among drugged drivers. Hazard

of death was higher among male DUID suspects who had findings for benzodiazepines only (HR 10.0, CI 8.4 to 11.9) or benzodiazepines with alcohol (HR 9.6, CI 8.2 to 11.2), than with findings for amphetamines (HR 4.6, CI 2.7 to 7.6).

Conclusion: DUID suspects had an increased risk of death in all observed causes of death. Findings for benzodiazepines indicated excessive mortality over findings for amphetamines. Preventive actions should be aimed especially at DUID subgroups using benzodiazepines.

Young men's intimate partner violence and relationship functioning: Long-term outcomes associated with suicide attempt and aggression in adolescence

Kerr DCR, Capaldi DM (USA)

Psychological Medicine. Published online: 14 June 2010. doi: 10.1017/S0033291710001182, 2010

Background: Longitudinal research supports that suicidal thoughts and behaviors in adolescence predict maladjustment in young adulthood. Prior research supports links between suicide attempt and aggression, perhaps because of a propensity for impulsive behavior in states of high negative affect that underlies both problems. Such vulnerability may increase risk for intimate partner violence and generally poor young adulthood relational adjustment.

Method: A total of 153 men participated in annual assessments from ages 10-32 years and with a romantic partner at three assessments from ages 18-25 years. Multi-method/multi-informant constructs were formed for parent/family risk factors, adolescent psychopathology (e.g., suicide-attempt history, mother-, father-, teacher- and self-reported physical aggression) and young adulthood relational distress (jealousy and low relationship satisfaction) and maladaptive relationship behavior (observed, self- and partner-reported physical and psychological aggression toward a partner, partner-reported injury, official domestic violence arrest records and relationship instability).

Results: Across informants, adolescent aggression was correlated with suicide-attempt history. With few exceptions, aggression and a suicide attempt in adolescence each predicted negative romantic relationship outcomes after controlling for measured confounds. Adolescent aggression predicted young adulthood aggression toward a partner, in part, via relationship dissatisfaction.

Conclusion: Boys' aggression and suicide-attempt history in adolescence each predict poor relationship outcomes, including partner violence, in young adulthood. Findings are consistent with the theory of a trait-like vulnerability, such as impulsive aggression, that undermines adaptation across multiple domains in adolescence and young adulthood. Prevention and intervention approaches can target common causes of diverse public health problems.

Association between daily environmental temperature and suicide mortality in Korea (2001-2005)

Kim Y, Kim H, Kim D-S (Republic of Korea)

Psychiatry Research. Published online: 15 September 2010. doi:10.1016/j.psychres.2010.08.006, 2010

Little attention has been paid to whether temperature is associated with suicide and to whether suicide seasonality appears in Asian countries as shown in Western countries, even though suicide rates in Korea have increased steadily. The goal of the present study was to examine the association between daily temperature and daily suicide rate in Korea, taking gender, age, and education level into account. Data were analysed using a generalised additive model, adjusting for confounding factors such as sunshine, relative humidity, holidays, and long-term trends. Suicide rates were higher in spring and summer than other seasons. We observed a 1.4% increase (95% confidence interval = 1.0-1.7%) in suicide with each 1°C-increase in daily mean temperature. The suicide risks related to the temperature for males, elderly people, and those with less education were higher than for females, younger people, and those with more education, respectively. These findings have confirmed that temperature is associated with suicide in Korea and further our understanding of more susceptible groups, the effects of gender, age, and education level. Therefore, temperature, one of the meteorological factors, is an important risk factor on suicide.

The association of suicide and bullying in childhood to young adulthood: A review of cross-sectional and longitudinal research findings

Klomek BA, Sourander A, Gould M (Israel)

Canadian Journal of Psychiatry 55, 282-288, 2010

Objective: To review the research addressing the association of suicide and bullying, from childhood to young adulthood, including cross-sectional and longitudinal research findings.

Method: Relevant publications were identified via electronic searches of PsycNet and MEDLINE without date specification, in addition to perusing the reference lists of relevant articles.

Results: Cross-sectional findings indicate that there is an increased risk of suicidal ideation and (or) suicide attempts associated with bullying behaviour and cyberbullying. The few longitudinal findings available indicate that bullying and peer victimisation lead to suicidality but that this association varies by sex. Discrepancies between the studies available may be due to differences in the studies' participants and methods.

Conclusions: Bullying and peer victimisation constitute more than correlates of suicidality. Future research with long-term follow-up should continue to identify specific causal paths between bullying and suicide.

The US Air Force Suicide Prevention Program: Implications for public health policy

Knox KL, Pflanz S, Talcott GW, Campise RL, Lavigne JE, Bajorska A, Tu X, Caine ED (USA)
American Journal of Public Health. Published online: 13 May 2010. doi: 10.2105/AJPH.2009.159871, 2010

Objectives: We evaluated the effectiveness of the US Air Force Suicide Prevention Program (AFSPP) in reducing suicide, and we measured the extent to which air force installations implemented the program.

Methods: We determined the AFSPP's impact on suicide rates in the air force by applying an intervention regression model to data from 1981 through 2008, providing 16 years of data before the program's 1997 launch and 11 years of data after launch. Also, we measured implementation of program components at 2 points in time: during a 2004 increase in suicide rates, and 2 years afterward.

Results: Suicide rates in the air force were significantly lower after the AFSPP was launched than before, except during 2004. We also determined that the program was being implemented less rigorously in 2004.

Conclusions: The AFSPP effectively prevented suicides in the US Air Force. The long-term effectiveness of this program depends upon extensive implementation and effective monitoring of implementation. Suicides can be reduced through a multilayered, overlapping approach that encompasses key prevention domains and tracks implementation of program activities.

Suicide with psychiatric diagnosis and without utilisation of psychiatric service

Law YW, Wong PW, Yip PS (Hong Kong)
BMC Public Health 10, 431, 2010

Background: Considerable attention has been focused on the study of suicides among those who have received help from healthcare providers. However, little is known about the profiles of suicide deceased who had psychiatric illnesses but made no contact with psychiatric services prior to their death. Behavioural model of health service use is applied to identify factors associated with the utilisation of psychiatric service among the suicide deceased.

Methods: With respect to completed suicide cases, who were diagnosed with a mental disorder, a comparison study was made between those who had

(contact group; $n = 52$; 43.7%) and those who had not made any contact (non-contact group; $n = 67$; 56.3%) with a psychiatrist during the final six months prior to death. A sample of 119 deceased cases aged between 15 and 59 with at least one psychiatric diagnosis assessed by the Structured Clinical Interview for DSM-IV-TR (SCID I) were selected from a psychological autopsy study in Hong Kong.

Results: The contact and non-contact group could be well distinguished from each other by 'predisposing' variables: age group & gender, and most of the 'enabling', and 'need' variables tested in this study. Multiple logistic regression analysis has found four factors which are statistically significantly associated with non-contact suicide deceased: (1) having non-psychotic disorders (OR = 13.5, 95% CI:2.9-62.9), (2) unmanageable debts (OR = 10.5, CI:2.4-45.3), (3) being full/partially/self employed at the time of death (OR = 10.0, CI:1.6-64.1) and (4) having higher levels of social problem-solving ability (SPSI) (OR=2.0, CI:1.1-3.6).

Conclusion: The non-contact group was clearly different from the contact group and actually comprised a larger proportion of the suicide population that they could hardly be reached by usual individual-based suicide prevention efforts. For this reason, both universal and strategic suicide prevention measures need to be developed specifically in non-medical settings to reach out to this non-contact group in order to achieve better suicide prevention results.

The use of alcohol and drugs to self-medicate symptoms of posttraumatic stress disorder

Leeies M, Pagura J, Sareen J, Bolton JM (Canada)

Depression and Anxiety 27, 731-736, 2010

Background: Self-medication has been proposed as an explanation for the high rates of comorbidity between posttraumatic stress disorder (PTSD) and substance use disorders; however, knowledge of self-medication in PTSD is scarce. We describe the prevalence and correlates of self-medication in PTSD in the general population.

Methods: Data came from the National Epidemiologic Survey on Alcohol and Related Conditions Wave 2 ($N = 34,653$; response rate: 70.2%), a nationally representative survey of mental illness in community-dwelling adults. Self-medication was assessed separately for alcohol and drugs. Prevalence rates were determined for self-medication among individuals with DSM-IV PTSD. Regression analyses determined associations between self-medication and a variety of correlates, including sociodemographic factors, comorbid mental disorders, suicide attempts, and quality of life.

Results: Approximately 20% of individuals with PTSD used substances in an attempt to relieve their symptoms. Men were significantly more likely than

women to engage in self-medication behavior. In adjusted models, using illicit drugs or misusing prescription medications to control PTSD symptoms was associated with a substantially higher likelihood of dysthymia and borderline personality disorder. After controlling for mental disorder comorbidity, self-medication was independently associated with higher odds of suicide attempts (adjusted odds ratio = 2.46; 95% confidence interval 1.53-3.97) and lower mental health-related quality of life.

Conclusions: Self-medication is a common behavior among people with PTSD in the community, yet has potentially hazardous consequences. Health care practitioners should assess reasons for substance use among people with PTSD to identify a subgroup with higher psychiatric morbidity.

Participation in sports activities and suicide prevention

Lester D, Battuello M, Innamorati M, Falcone I, De Simoni E, Del Bono SD, Tatarelli R, Pompili M (USA)

International Journal of Sports Psychology 41, 58-72, 2010

The aim of the present article is to review research on the link between physical activity and involvement in sports and suicidality. This review of the literature indicated that physical activity and sports participation may have a beneficial impact on suicidality, at least in boys and men and in some ethnic groups. However, it is not clear whether physical activity acts directly on suicidality (e.g. affecting the serotonergic system in the central nervous system) or through a mediating variable such as depression or higher self-esteem. Furthermore, the review has identified some inconsistency in the results, and methodological problems with the research have been identified.

Homicide followed by suicide: A comparison with homicide and suicide

Liem M, Nieuwbeerta P (The Netherlands)

Suicide and Life Threatening Behavior 40, 133-145, 2010

Homicide-suicides are a rare yet very serious form of lethal violence which mainly occurs in partnerships and families. The extent to which homicide-suicide can be understood as being primarily a homicide or a suicide event, or rather a category of its own is examined. In total, 103 homicide-suicides were compared to 3,203 homicides and 17,751 suicides. These are all events that took place in the Netherlands in the period 1992 to 2006. Logistic regression analyses show that homicide-suicides significantly differ from both homicides and suicides with regard to sociodemographic and event characteristics. The findings suggest that homicide-suicide might be considered as a distinct phenomenon from both homicide and suicide.

Contributing factors in self-poisoning leading to hospital admission in adolescents in northern Finland

Liisanantti JH, Ala-Kokko TI, Dunder TS, Ebeling HE (Finland)

Substance Use and Misuse 45, 1340-1350, 2010

Aim: To evaluate the frequencies of different agents used in self-poisonings and acute factors contributing to intoxication of patients aged 12-18 years in northern Finland.

Material: Retrospective medical record review of all hospitalised patients during the period from January 1, 1991 to December 31, 2006.

Outcome measures: Cause of the admission, contributing factors, readmissions within one year.

Results: There were 309 admissions during the period, 54% were females. The leading cause of admission was alcohol, in 222 cases (71.8%). Hospitalisations related to alcohol consumption were associated with accidental poisoning in recreational use. There were no acute contributing factors in the majority of all patients. Over one-third of all intoxications were intentional self-harm, although previously diagnosed psychiatric diseases were rare.

Conclusions: It is crucial to recognise adolescent psychiatric disorders in time and consult child and adolescent psychiatrist in case of poisoning.

Immigration and suicidality in the young

Lipsicas BC, Henrik Makinen I (Israel)

Canadian Journal of Psychiatry 55, 274-281, 2010

Objective: Little research has focused on the relation of immigration and suicidal behaviour in youth. Nevertheless, the impact of migration on the mental health of youth is an issue of increasing societal importance. This review aimed to present studies on the prevalence of suicidal behaviour in immigrant youth in various countries and to provide possible explanations for suicidal behaviour in immigrant youth, especially regarding acculturation.

Methods: The review included a literature search to locate articles on the subject of suicidal behaviour in immigrant youth in the context of acculturation.

Results: Studies on suicidal behaviour in culturally diverse youth are few and most of the existing research does not differentiate ethnic minorities from immigrants. Studies on epidemiology and on specific risk factors were found regarding various immigrant youth including Hispanics in the United States, Asians in North America and Europe, as well as comparative studies between different immigrant groups in specific countries.

Conclusions: The relation between immigration status and suicidal behaviours in youth appears to vary by ethnicity and country of settlement. Time spent in the new country as well as intergenerational communication and conflicts

with parents have, in many of the studies, been related to suicidality in immigrant youth. Summing up, there is a clear and urgent need to further pursue the work in this field, to develop targeted public health interventions as well as psychosocial treatment for preventing suicide in these youth.

The effect of parental remarriage following parental divorce on offspring suicide attempt

Lizardi DM, Thompson RG, Keyes KM, Hasin DS (USA)

Families in Society 91, 186-192, 2010

Parental divorce during childhood is associated with an increased risk of suicide attempts for male but not female offspring. This study examines whether parental remarriage has a differential effect on suicide risk for male and female adult offspring. Using the 2001-2002 National Epidemiologic Survey on Alcohol and Related Conditions (NESARC), the sample consists of respondents who experienced parental divorce ($N = 6,436$). Multivariable regressions were estimated. Females who lived with a stepparent were significantly more likely to report a lifetime suicide attempt compared with females who had not. Clinicians should note that female depressed patients who have a history of childhood parental divorce and remarriage may be at more risk for suicide attempt than previously recognised.

Understanding boys: Thinking through boys, masculinity and suicide

Mac An Ghail M, Haywood C (UK)

Social Science and Medicine. Published online: 26 August 2010. doi:10.1016/j.socscimed.2010.07.036, 2010

In the UK, the media are reporting increasing rates of childhood suicide, while highlighting that increasing numbers of pre-adolescent boys (in relation to girls) are diagnosed as mentally ill. In response, academic, professional and political commentators are explaining this as a consequence of gender. One way of doing this has been to apply adult defined understandings of men and masculinities to the attitudes and behaviours of pre-adolescent boys. As a consequence, explanations of these trends point to either 'too much' masculinity, such as an inability to express feelings and seek help, or 'not enough' masculinity that results in isolation and rejection from significant others, such as peer groups. Using a discourse analysis of semi-structured interviews with 28 children aged 9-13 (12 male, 16 females) and 12 school staff at a school in North East England, this article questions the viability of using normative models of masculinity as an explanatory tool for explaining boys' behaviours and suggests that researchers in the field of gender and suicide consider how boys' genders may be constituted differently. We develop this argument in three ways. First, it is argued that studies that use masculinity tend to reduce

the formation of gender to the articulation of power across and between men and other men and women. Second, we argue that approaches to understanding boys' behaviours are simplistically grafting masculinity as a conceptual frame onto boys' attitudes and behaviours. In response, we suggest that it is important to re-think how we gender younger boys. The final section focuses specifically on the ways that boys engage in friendships. The significance of this section is that we need to question how notions of communication, integration and isolation, key features of suicide behaviours, are framed through the local production of friendships.

Health outcomes associated with methamphetamine use among young people: A systematic review

Marshall BDL, Werb D (Canada)

Addiction 105, 991-1002, 2010

Objectives: Methamphetamine (MA) use among young people is of significant social, economic and public health concern to affected communities and policy makers. While responses have focused upon various perceived severe harms of MA use, effective public health interventions require a strong scientific evidence base.

Methods: We conducted a systematic review to identify scientific studies investigating health outcomes associated with MA use among young people aged 10-24 years. The International Classification of Diseases (ICD-10) was used to categorise outcomes and determine the level of evidence for each series of harms.

Results: We identified 47 eligible studies for review. Consistent associations were observed between MA use and several mental health outcomes, including depression, suicidal ideation and psychosis. Suicide and overdose appear to be significant sources of morbidity and mortality among young MA users. Evidence for a strong association between MA use and increased risk of human immunodeficiency virus (HIV) and other sexually transmitted infections is equivocal. Finally, we identified only weak evidence of an association between MA use and dental diseases among young people.

Conclusions: The results support the concept that insomnia may be a useful indicator for suicidal ideation and now extend this idea into clinical trials. Insomnia remains an independent indicator of suicidal ideation, even taking into account the core symptoms of depression such as depressed mood and anhedonia. The complaint of insomnia during a depression clinical trial might indicate that more direct questioning about suicide is warranted.

Insomnia severity is an indicator of suicidal ideation during a depression clinical trial

McCall WV, Blocker JN, D'Agostino R, Kimball J, Boggs N, Lasater B, Rosenquist PB (USA)
Sleep Medicine 11, 822-827, 2010

Objective: Insomnia has been linked to suicidal ideas and suicide death in cross-sectional and longitudinal population-based studies. A link between insomnia and suicide has not been previously examined in the setting of a clinical trial. Herein we describe the relationship between insomnia and suicidal thinking during the course of a clinical trial for depression with insomnia.

Methods: Sixty patients aged 41.5 ± 12.5 years (2/3 women) with major depressive episode and symptoms of insomnia received open-label fluoxetine for 9 weeks and also received blinded, randomised eszopiclone 3 mg or placebo at bedtime after the first week of fluoxetine. Insomnia symptoms were assessed with the Insomnia Severity Index (ISI), and suicidal ideation was assessed with The Scale for Suicide Ideation (SSI). Depression symptoms were assessed with the depressed mood item and the anhedonia item from the Hamilton Rating Scale for Depression-24 (HRSD24), as well as a sum score for all non-sleep and non-suicide items from the HRSD (HRSD20). Measurements were taken at baseline and weeks 1, 2, 4, 6, and 8. SSI was examined by generalized linear mixed models for repeated measures as the outcome of interest for all 60 participants with ISI and various mood symptoms as independent variables, with adjustment for age, gender, treatment assignment, and baseline SSI.

Results: Higher levels of insomnia corresponded to significantly greater intensity of suicidal thinking ($p < .01$). The depressed mood item of the HRSD, and the sum of the HRSD20, both corresponded to greater suicidal thinking ($p < .001$). The anhedonia item did not correspond with suicidal thinking. When both ISI and the depressed mood item, or ISI and the anhedonia item, were included together in the same model, the ISI remained an independent predictor of suicidal thinking.

Conclusions: The results support the concept that insomnia may be a useful indicator for suicidal ideation and now extend this idea into clinical trials. Insomnia remains an independent indicator of suicidal ideation, even taking into account the core symptoms of depression such as depressed mood and anhedonia. The complaint of insomnia during a depression clinical trial might indicate that more direct questioning about suicide is warranted.

Growing up in violent communities: Do family conflict and gender moderate impacts on adolescents' psychosocial development?

McKelvey LM, Whiteside-Mansell L, Bradley RH, Casey PH, Conners-Burrow NA, Barrett KW (USA)

Journal of Abnormal Child Psychology. Published online: 7 August 2010. doi: 10.1007/s10802-010-9448-4, 2010

This study examined the moderating effects of family conflict and gender on the relationship between community violence and psychosocial development at age 18. The study sample consisted of 728 children and families who were part of the Infant Health and Development Program study of low-birth-weight, pre-term infants. In this sample, adolescent psychosocial outcomes were predicted by community violence differently for male and female children and based on their experiences of conflict at home. For male children, being in a high conflict family as a child exacerbated the negative effects of community violence such that internalising problems (depression and anxiety) and risk-taking behaviors increased as community violence increased, while being in a low conflict family protected the child against the negative impacts of the community. For female adolescents, there were no moderating effects of family conflict on the relationship between community violence and externalizing problems. Moderating effects for internalising problems demonstrated that being in low conflict families did not serve as protection against community violence for girls as was demonstrated for boys. These findings demonstrate the long-term effects of community violence on child development, highlighting the importance of gender and family context in the development of internalizing and externalising problems.

Bullying victimisation, self-harm and associated factors in Irish adolescent boys

McMahon EM, Reulbach U, Keeley H, Perry IJ, Arensman E (Ireland)

Social Science & Medicine. Published online: 15 July 2010. doi:10.1016/j.socscimed.2010.06.034, 2010

School bullying victimisation is associated with poor mental health and self harm. However, little is known about the lifestyle factors and negative life events associated with victimisation, or the factors associated with self harm among boys who experience bullying. The objectives of the study were to examine the prevalence of bullying in Irish adolescent boys, the association between bullying and a broad range of risk factors among boys, and factors associated with self harm among bullied boys and their non-bullied peers. Analyses were based on the data of the Irish centre of the Child and Adolescent Self Harm in Europe (CASE) study (boys $n = 1870$). Information was obtained on demographic factors, school bullying, deliberate self harm and psychological and lifestyle factors including negative life events. In total 363 boys

(19.4%) reported having been a victim of school bullying at some point in their lives. The odds ratio of lifetime self-harm was four times higher for boys who had been bullied than those without this experience. The factors that remained in the multivariate logistic regression model for lifetime history of bullying victimisation among boys were serious physical abuse and self-esteem. Factors associated with self harm among bullied boys included psychological factors, problems with schoolwork, worries about sexual orientation and physical abuse, while family support was protective against self harm. Our findings highlight the mental health problems associated with victimisation, underlining the importance of anti-bullying policies in schools. Factors associated with self harm among boys who have been bullied should be taken into account in the identification of boys at risk of self-harm.

Quality of psychosocial care of suicide attempters at general hospitals in Norway a longitudinal nationwide study

Mehlum L, Mork E, Reinholdt NP, Fadum EA, Rossow I (Norway)

Archives of Suicide Research 14, 146-157, 2010

The objective of this study was to identify predictors of a high level of quality of care for suicide attempters at general hospital emergency departments in Norway. Structured interviews with key informants covering the quality of care of patients admitted following attempted suicide were conducted in 1999 and 2006 at 87% of all general hospitals. Hospitals having implemented a chain of care program for suicide attempters in 1999 maintained significantly higher levels on quality of care indicators 7 years later. Predictors of a high quality of care level were training of staff in management and care of suicide attempters and to have written guidelines for the care.

The prevalence of previous self-harm amongst self-poisoning patients in Sri Lanka

Mohamed F, Perera A, Wijayaweera K, Kularatne K, Jayamanne S, Eddleston M, Dawson A, Konradsen F, Gunnell D (Sri Lanka)

Social Psychiatry and Psychiatric Epidemiology. Published online: 7 April 2010. doi: 10.1007/s00127-010-0217-z, 2010

Background: One of the most important components of suicide prevention strategies is to target people who repeat self-harm as they are a high risk group. However, there is some evidence that the incidence of repeat self-harm is lower in Asia than in the West. The objective of this study was to investigate the prevalence of previous self-harm among a consecutive series of self-harm patients presenting to hospitals in rural Sri Lanka.

Method: Six hundred and ninety-eight self-poisoning patients presenting to medical wards at two hospitals in Sri Lanka were interviewed about their previous episodes of self-harm.

Results: Sixty-one (8.7%, 95% CI 6.7-11%) patients reported at least one previous episode of self-harm [37 (10.7%) male, 24 (6.8%) female]; only 19 (2.7%, 95% CI 1.6-4.2%) patients had made more than one previous attempt.

Conclusion: The low prevalence of previous self-harm is consistent with previous Asian research and is considerably lower than that seen in the West. Explanations for these low levels of repeat self-harm require investigation. Our data indicate that a focus on the aftercare of those who attempt suicide in Sri Lanka may have a smaller impact on suicide incidence than may be possible in the West.

Associations between abortion, mental disorders, and suicidal behaviour in a nationally representative sample

Mota NP, Burnett M, Sareen J (USA)

Canadian Journal of Psychiatry 55, 239-247, 2010

Objective: Most previous studies that have investigated the relation between abortion and mental illness have presented mixed findings. We examined the relation between abortion, mental disorders, and suicidality using a US nationally representative sample.

Methods: Data came from the National Comorbidity Survey Replication (n = 3310 women, aged 18 years and older). The World Health Organization-Composite International Diagnostic Interview was used to assess mental disorders based on the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, criteria and lifetime abortion in women. Multiple logistic regression analyses were employed to examine associations between abortion and lifetime mood, anxiety, substance use, eating, and disruptive behaviour disorders, as well as suicidal ideation and suicide attempts. We calculated the percentage of respondents whose mental disorder came after the first abortion. The role of violence was also explored. Population attributable fractions were calculated for significant associations between abortion and mental disorders.

Results: After adjusting for sociodemographics, abortion was associated with an increased likelihood of several mental disorders-mood disorders (adjusted odds ratio [AOR] ranging from 1.75 to 1.91), anxiety disorders (AOR ranging from 1.87 to 1.91), substance use disorders (AOR ranging from 3.14 to 4.99), as well as suicidal ideation and suicide attempts (AOR ranging from 1.97 to 2.18). Adjusting for violence weakened some of these associations. For all disorders examined, less than one-half of women reported that their mental disorder had begun after the first abortion. Population attributable fractions ranged from 5.8% (suicidal ideation) to 24.7% (drug abuse).

Conclusion: Our study confirms a strong association between abortion and mental disorders. Possible mechanisms of this relation are discussed.

Suicidality in epilepsy and possible effects of antiepileptic drugs

Mula M, Bell GS, Sander JW (Italy)

Current Neurology and Neuroscience Reports 10, 327-332, 2010

Suicide is an important cause of premature death, and people with epilepsy are thought to be at increased risk for suicide. Antiepileptic drugs (AEDs) continue to be the mainstay of epilepsy treatment, but the benefits of seizure control must be balanced with their psychotropic potential. In recent years, suicidality has been recognised as a complication of several groups of drugs and, most recently, AEDs were implicated in an alert by the US Food and Drug Administration. The risk of suicidal ideation and behavior as side effects of AED treatment is low, and in people with epilepsy, such a risk must be balanced against the risk of not treating the seizures.

Lithium reduces pathological aggression and suicidality: A mini-review

Muller-Oerlinghausen B, Lewitzka U (Germany)

Neuropsychobiology 62, 43-49, 2010

From a practical point of view, the well-proven antisuicidal and anti-aggressive effects of lithium are of utmost importance for a rational, safe and economical treatment of patients with affective disorders. Regular lithium long-term treatment reduces the otherwise 2- to 3-fold increased mortality of untreated patients with severe affective disorders down to the level of the general population. This is mainly due to the reduced suicide risk. Many international studies have confirmed this fascinating property of lithium which so far has not been demonstrated with comparable evidence for any other psychotropic compound. The antisuicidal effects of lithium might possibly be related to its anti-aggressive effects which have been shown in various species, populations and settings, such as animals, inhabitants of nursing homes for the elderly, mentally handicapped subjects, children and adolescents with hyperactive, hostile and aggressive behavior, and particularly in hyperaggressive inmates of correction units and prisons.

Untangling a complex web: How non-suicidal self-injury and suicide attempts differ

Muehlenkamp JJ, Kerr PL (USA)

Prevention Researcher 17, 8-10, 2010

Practitioners, physicians, school personnel, parents, and many others are starting to see more and more teenagers engage in acts of self-inflicted injuries, such as cutting or burning of the skin. These types of behaviors are referred to as non-suicidal self-injury (NSSI) and are creating a surge of concern about how teens are coping with the stressors they face. Current estimates of the lifetime prevalence of NSSI in high school students tends to average 20%, although rates vary widely across specific samples and can be as high as 46% (e.g., Heath, Schaub, Holly, & Nixon, 2009). Also of concern are the high rates of suicide attempts among adolescents. Suicide remains the third leading cause of death for adolescents, and studies find that the yearly suicide attempt rate in adolescents is around 8.5% (Center for Disease Control, 2009). The high rates of both NSSI and suicide attempts in adolescents warrants considerable focus for prevention initiatives, especially given findings that many adolescents who attempt suicide have also engaged in NSSI at some point in their life, and those who engage in NSSI are at elevated risk for a future suicide attempt. The relationship between NSSI and suicidal behavior is complex and often difficult to untangle. While most self-injurers never exhibit suicidality, there is evidence of a correlation between suicidality and NSSI. Empirical research has found that approximately 28-55% of self injurers experience suicidal thoughts during episodes of NSSI (Favazza, 1996). Researchers have also estimated that as many as 70% of individuals with a history of repetitive NSSI will attempt suicide at some point during their life (Nock et al., 2006). Furthermore, these two behaviors share many correlates of potential risk such as conflicted interpersonal relationships, poor problem-solving skills, childhood abuse histories, high levels of self-criticism, and psychiatric diagnoses (e.g., Skegg, 2005). Thus, there is clearly an overlap of risk between these behaviors, and it becomes important to both prevention and intervention efforts to understand the primary differences between them. While NSSI is not a suicide attempt, it is an indicator that something is not right in the life of the person engaging in the behavior and needs to be taken seriously. One way to enhance the likelihood someone with NSSI will seek help is by educating professionals about the key ways in which NSSI and suicide differ so that inappropriate 'over-reactions' to the NSSI can be minimised and effective treatment (e.g., Muehlenkamp, 2006) can occur. The goal of this article is to describe the primary differences between NSSI and suicide.

Abuse subtypes and nonsuicidal self-injury: Preliminary evidence of complex emotion regulation patterns

Muehlenkamp JJ, Kerr PL, Bradley AR, Larsen MA (USA)

Journal of Nervous and Mental Disease 198, 258-263, 2010

Research has identified complex relationships between abuse experiences, emotion regulation, and nonsuicidal self-injury (NSSI). Data generally indicate that individuals with an abuse experience, or those with NSSI, have difficulties with emotion regulation. However, it is unknown whether there are specific patterns of emotion regulation difficulties across abuse subtypes that are uniquely associated with engaging in NSSI. Using a sample of 2238 college students ($n = 419$; 18.1% with NSSI histories), the present study examined differences in emotion regulation difficulties across specific abuse types between those with and without a history of NSSI. Results indicate significantly greater difficulties with emotion regulation among abused and self-injuring participants as well as significant differences on specific emotion regulation problems between self-injuring and noninjuring participants within the physical abuse and combination physical/sexual abuse subtypes. Possible explanations and implications of these findings are discussed.

Suicide attempts by jumping and psychotic illness

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Australian and New Zealand Journal of Psychiatry 44, 568-573, 2010

Background: Several recent studies have reported that serious violence towards self and others is more common in the first episode of psychosis than after treatment.

Aim: To estimate the proportion of survivors of suicide attempts during psychotic illness by jumping from a height who had not previously received treatment with antipsychotic medication.

Methods: An audit of the medical records of patients admitted to nine designated trauma centres in New South Wales, Australia, after surviving a jump of more than 3 m. Jumping was defined using routine hospital ascribed International Classification of Diseases (ICD) codes. The height of the jump and all clinical data were extracted from case notes.

Results: The files of 160 survivors of jumps of more than 3 m were examined, which included 70 who were diagnosed with a psychotic illness (44%). Thirty-one of the 70 diagnosed with a psychotic illness (44%, 95% confidence interval CI. 32-56%) had never received treatment for psychosis and hence were in the first episode of psychosis. One in five (19.4%) of all survivors of a suicide attempt by jumping had an undiagnosed and untreated psychosis that was often characterised by frightening delusional beliefs.

Conclusions: A large proportion of the survivors of suicide attempts by jumping were diagnosed with a psychotic illness, which confirms an association between psychosis and suicide by jumping. Some suicides might not have been linked to psychosis had the patient not survived the suicide attempt, suggesting that the contribution of schizophrenia to suicide mortality might have been underestimated in psychological autopsy studies. The finding that nearly half of the survivors diagnosed to have a psychotic illness had never received treatment with antipsychotic medication indicates a greatly increased risk of suicide by jumping in the first episode of psychosis when compared to the annual risk after treatment.

Measuring the suicidal mind: Implicit cognition predicts suicidal behaviour

Nock MK, Park JM, Finn CT, Deliberto TL, Dour HJ, Banaji MR (USA)

Psychological Science 21, 511-517, 2010

Suicide is difficult to predict and prevent because people who consider killing themselves often are unwilling or unable to report their intentions. Advances in the measurement of implicit cognition provide an opportunity to test whether automatic associations of self with death can provide a behavioral marker for suicide risk. We measured implicit associations about death/suicide in 157 people seeking treatment at a psychiatric emergency department. Results confirmed that people who have attempted suicide hold a significantly stronger implicit association between death/suicide and self than do psychiatrically distressed individuals who have not attempted suicide. Moreover, the implicit association of death/suicide with self was associated with an approximately 6-fold increase in the odds of making a suicide attempt in the next 6 months, exceeding the predictive validity of known risk factors (e.g., depression, suicide-attempt history) and both patients' and clinicians' predictions. These results provide the first evidence of a behavioral marker for suicidal behavior and suggest that measures of implicit cognition may be useful for detecting and predicting sensitive clinical behaviors that are unlikely to be reported.

Community-based survey and screening for depression in the elderly

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Crisis 31, 100-108, 2010

Background: In addition to implementing a depression screening program, conducting a survey beforehand might contribute to suicide risk reduction for the elderly.

Aims: This study evaluates outcomes of a community-based program to prevent suicide among individuals aged 60 and over, using a quasiexperimental design with an intervention region (41,337 residents, 35.1% aged 60 and over) and a neighboring reference region.

Methods: Our 2-year intervention program included an anonymous survey by random sample in the entire intervention region and, in the second year, a depression screening with follow-up by a psychiatrist in the higher-risk districts. Changes in the risk of completed suicide were estimated by the incidence-rate ratio (IRR).

Results: The risk for men in the intervention region was reduced by 61% (age-adjusted IRR = 0.39; 90% CI = 0.18–0.87), whereas there was a (statistically insignificant) 51% risk reduction for women in the intervention region, and no risk reduction for either men or women in the reference region. The ratio of the crude IRR for elderly men in the intervention region to that for all elderly men in Japan was estimated at 0.42 (90% CI = 0.18–0.92), showing that the risk reduction was greater than the national change.

Conclusions: The management of depression through a combination of an initial survey and subsequent screening holds clear promise for prompt effectiveness in the prevention of suicide for elderly men, and potentially for women.

Prevalence, clinical correlations, comorbidities, and suicidal tendencies in pathological Korean gamblers: Results from the Korean Epidemiologic Catchment Area Study

Park SM, Cho M, Jeon H, Lee H, Bae J, Park J, Sohn J, Lee Y, Lee J, Hong J (Korea)
Social Psychiatry and Psychiatric Epidemiology 45, 621–620, 2010

Based on the National Epidemiological Survey of Psychiatric Disorders in South Korea conducted in 2006, we examined the prevalence, clinical correlations, comorbidities, and suicidal tendencies of pathological gamblers in the community. Of the 6,510 participants who completed the Korean version of the Composite International Diagnostic Interview (K-CIDI) administered by trained lay interviewers, 5,333 subjects fully completed the Diagnostic Interview Schedule (DIS) exploring pathological gambling. The DIS has 13 items mapping to 10 criteria. Endorsement of five DSM-IV criteria was considered to reflect pathological gambling, and we considered endorsement of one to four criteria to indicate problem gambling. The frequencies of psychiatric disorders and suicidal tendency were analysed among pathological/problem gamblers in comparison with controls; both odds ratios and significance levels were calculated. The lifetime prevalence rates of pathological gambling and problem gambling were 0.8% and 3.0%, respectively. Of pathological gamblers, 79.1% had at least one psychiatric illness in comparison to the control level of 28.1%, and 62.0% of problem gamblers also had psychiatric condi-

tions. Associations between pathological/problem gambling and alcohol use disorder, nicotine dependence, mood disorder, anxiety disorder, and suicidality were overwhelmingly positive and significant ($p < .05$), even after controlling for age and gender. Male gender, divorced/separated/widowed marital status, and urban living were all associated with increased risks of pathological and problem gambling ($p < .05$). Pathological/problem gambling is highly associated with substance abuse, mood and anxiety disorders, and suicidality, suggesting that clinicians should carefully evaluate and treat such psychiatric disorders in gamblers.

Factors associated with suicidal ideation: Role of emotional and instrumental support

Park S-M, Cho S-I, Moon S-S (Korea)

Journal of Psychosomatic Research 5, 362-369, 2010

Self-harm may have several reasons, and these reasons may have corresponding implied goals. The current study examined reasons for self-harm and whether the a priori goals intended by these reasons were achieved. Fifty-seven individuals with a history of self-harm were recruited online and volunteered their time to complete a series of online questionnaires assessing past self-harm frequency, self-harm reasons, whether the goal associated with these reasons was achieved, and future self-harm intent. Reasons to reduce tension and dissociation associated with more past self-harm, a higher intent to self-harm again, and it was reported that the goals associated with reasons were achieved (i.e., these internal states were extinguished). Achievement of these goals (i.e., reported reductions in tension and dissociation) mediated the relation between corresponding self-harm reasons and intent to self-harm in the future. Findings support the view that self-harm is a maladaptive coping strategy and the reinforcement component of the experiential avoidance model of self-harm. Results have clinical implications and heuristic value for future research, which are discussed.

Unimaginable loss: Contingent suicidal ideation in family members of oncology patients

Peteet JR, Maytal G, Rokni H (USA)

Psychosomatics 51, 166-170, 2010

Background: Family members of patients with cancer may reveal to the medical team that they are considering suicide after their loved one dies. No literature is available indicating how to assess risk and to intervene with these individuals.

Objective: The authors describe various alerting signs and seek to improve awareness and approaches to suicide prevention.

Results: The weighted prevalence of SI was 2.84% in the past week, 5.50% in the past year, and 18.49% during a lifetime. Significant risk factors for SI in the last week included presence of SI over the past year [odds ratio (OR) = 1763.6], SI during the lifetime (OR = 267.6), psychiatric morbidity (OR = 30.3), depression (OR = 26.1), inferiority (OR = 11.2), hostility (OR = 10.9), anxiety (OR = 10.5), insomnia (OR = 6.7), history of seeking help for psychological distress (OR = 7.9), divorce (OR = 6.4), unemployment (OR = 5.0) and having suicidal behavior in relatives or friends (OR = 3.8). Stepwise multiple regression analysis demonstrated that the five symptom items of BSRS-5 and unemployment significantly predicted 25.3% of the variance of SI. Using the BSRS-5 score 3 or 4 as a cut-off to predict SI, the rate of accurate classification was 85.88%, with sensitivity of 0.83 and specificity of 0.86.

Method: The authors present five cases of potential contingent suicide.

Results: Family members struggling with anticipatory grief challenge the clinical team at several points of decision-making.

Conclusion: Close coordination among members of the patient's treatment team and psychiatric consultants is crucial for helping vulnerable family members move safely into adequately supported bereavement.

Understanding recent changes in suicide rates among the middle-aged: Period or cohort effects?

Phillips JA, Robin AV, Nugent CN, Idler EL (USA)

Public Health Reports 125, 680-688, 2010

Objective: We examined trends in suicide rates for U.S. residents aged 40 to 59 years from 1979 to 2005 and explored alternative explanations for the notable increase in such deaths from 1999 to 2005.

Methods: We obtained information on suicide deaths from the National Center for Health Statistics and population data from the U.S. Census Bureau. Age- and gender-specific suicide rates were computed and trends therein analysed using linear regression techniques.

Results: Following a period of stability or decline, suicide rates have climbed since 1988 for males aged 40-49 years, and since 1999 for females aged 40-59 years and males aged 50-59 years. A crossover in rates for 40- to 49-year-old vs. 50- to 59-year-old males and females occurred in the early 1990s, and the younger groups now have higher suicide rates. The post-1999 increase has been particularly dramatic for those who are unmarried and those without a college degree.

Conclusions: The timing of the post-1999 increase coincides with the complete replacement of the U.S. population's middle-age strata by the postwar baby boom cohorts, whose youngest members turned 40 years of age by 2005. These cohorts, born between 1945 and 1964, also had notably high suicide rates

during their adolescent years. Cohort replacement may explain the crossover in rates among the younger and older middle-aged groups. However, there is evidence for a period effect operating between 1999 and 2005, one that was apparently specific to less-protected members of the baby boom cohort.

Suicidal behavior and alcohol abuse

Pompili M, Serafini G, Innamorati M, Dominici G, Ferracuti S, Kotzalidis GD, Serra G, Girard P, Janiri L, Tatarelli R, Sher L, Lester, D (Italy)

International Journal of Environmental Research and Public Health 7, 1392-1431, 2010

Suicide is an escalating public health problem, and alcohol use has consistently been implicated in the precipitation of suicidal behavior. Alcohol abuse may lead to suicidality through disinhibition, impulsiveness and impaired judgment, but it may also be used as a means to ease the distress associated with committing an act of suicide. We reviewed evidence of the relationship between alcohol use and suicide through a search of MedLine and PsychInfo electronic databases. Multiple genetically-related intermediate phenotypes might influence the relationship between alcohol and suicide. Psychiatric disorders, including psychosis, mood disorders and anxiety disorders, as well as susceptibility to stress, might increase the risk of suicidal behavior, but may also have reciprocal influences with alcohol drinking patterns. Increased suicide risk may be heralded by social withdrawal, breakdown of social bonds, and social marginalisation, which are common outcomes of untreated alcohol abuse and dependence. People with alcohol dependence or depression should be screened for other psychiatric symptoms and for suicidality. Programs for suicide prevention must take into account drinking habits and should reinforce healthy behavioral patterns.

Long chain n-3 fatty acids intake, fish consumption and suicide in a cohort of Japanese men and women: The Japan Public Health Center-based (JPHC) Prospective Study

Poudel-Tandukar K, Nanri A, Iwasaki M, Mizoue T, Matsushita Y, Takahashi Y, Noda M, Inoue M, Tsugane S (Japan)

Journal of Affective Disorders. Published online: 9 August 2010. doi:10.1016/j.jad.2010.07.014, 2010

Objective: Eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) have been implicated as protective against suicide. However, it is uncertain whether a higher intake of EPA and DHA or of fish, a major source of these nutrients, lowers suicidal risk among Japanese, whose fish consumption and suicide rate are both high. This study prospectively examined the relation between fish, EPA, or DHA intake and suicide among Japanese men and women.

Method: Subjects were 47,351 men and 54,156 women aged 40-69 years who participated in the JPHC Study, completed a food frequency questionnaire in 1995-1999, and were followed for death through December 2005. We used the Cox proportional hazards regression model to estimate the hazard ratio (HR) and 95% confidence interval (CI) for suicide by quintile of intake.

Results: A total of 213 and 85 deaths from suicide were recorded during 403,019 and 473,351 person-years of follow-up for men and women, respectively. Higher intakes of fish, EPA, or DHA were not associated with a lower risk of suicide. Multivariate HRs (95% CI) of suicide death for the highest versus lowest quintile of fish consumption were 0.95 (0.60-1.49) and 1.20 (0.58-2.47) for men and women, respectively. A significantly increased risk of suicidal death was observed among women with very low intake of fish, with HRs (95% CI) for those in 0-5th percentile versus middle quintile of 3.41 (1.36-8.51).

Conclusions: Our overall result does not support a protective role of higher intake of fish, EPA, or DHA against suicide in Japanese men and women.

Diagnostic profile and suicide risk in schizophrenia spectrum disorder

Reutfors J, Bahmanyar S, Jonsson EG, Ekblom A, Nordstrom P, Brandt L, Osby U (Sweden) *Schizophrenia Research*. Published online: 7 August 2010. doi:10.1016/j.schres.2010.07.014, 2010

Background: Earlier studies of patients with schizophrenia have investigated suicide risk in relation to specific psychiatric symptoms, but it remains to be better understood how suicide risk relates to the diagnostic profile in these patients.

Methods: We identified all patients with a first clinical ICD-diagnosis of schizophrenia, schizophreniform or schizoaffective disorder in Stockholm County between 1984 and 2000. Patients who died by suicide within five years from diagnosis were defined as cases ($n = 84$) and were individually matched with a similar number of living controls from the same population. Sociodemographic and clinical variables were retrieved from hospital records through a blind process. DSM-IV lifetime diagnoses for cases and controls were derived using the OPCRIT algorithm.

Results: A schizophrenia spectrum diagnosis (i.e. schizophrenia, schizophreniform or schizoaffective disorder) was assigned by OPCRIT to 50% of the suicide cases and 62% of the controls. Criteria for schizophrenia were met by 41% of the cases and 51% of the controls; for schizoaffective disorder by 8% of the cases and 10% of the controls; for other psychosis by 23% of the cases and 25% of the controls; and for mood disorder by 26% of the cases and 12% of the controls. Using the schizophrenia diagnosis as a reference, suicide risk was significantly higher in patients meeting criteria for a mood disorder diagnosis with an adjusted odds ratio of 3.3 (95% CI 1.2-9.0).

Conclusion: In patients with a clinical schizophrenia spectrum diagnosis, a DSM-IV mood disorder diagnosis increases the suicide risk more than three-fold.

Patients' own statements of their future risk for violent and self-harm behaviour: A prospective inpatient and post-discharge follow-up study in an acute psychiatric unit

Roaldset JO, Bjorkly S (Norway)

Psychiatry Research 178, 153-159, 2010

Recently patients' responsibility for and ownership of their own treatment have been emphasised. A literature search on patients' structured self-reported assessment of future risk of violent, suicidal or self mutilating behaviour failed to disclose any published empirical research. The present prospective naturalistic study comprised all involuntary and voluntary acutely admitted patients ($n = 489$) to a psychiatric hospital during one year. Patients' self-reported risks of violence and self-harm at admission and at discharge were compared with episodes recorded during hospital stay and 3 months post-discharge. Patients' predictions were significant concerning violent, suicidal and self-injurious behaviour, with AUC values of 0.73 (95%CI = 0.61-0.85), 0.92 (95%CI = 0.88-0.96) and 0.82 (95%CI = 0.67-0.98) for hospital stay, and 0.67 (95%CI = 0.58-0.76), 0.63 (95%CI = 0.55-0.72) and 0.66 (95%CI = 0.57-0.76) after 3 months, respectively. Moderate or higher risk predictions remained significant in multivariate analysis, and risk of violence even after gender stratification. Self-harm predictions were significant for women. Moderate or higher risk scores remained significant predictors of violence one year post-discharge. Controlling for readmissions the results remained the same. Low sensitivity limits the clinical value, but relatively high positive predictive values might be clinically important. Still future research is recommended to explore if self prediction is a valid adjuvant method to established risk assessment procedures.

Race/ethnicity and potential suicide misclassification: Window on a minority suicide paradox?

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BMC Psychiatry 10, 35, 2010

Background: Suicide officially kills approximately 30,000 annually in the United States. Analysis of this leading public health problem is complicated by undercounting. Despite persisting socioeconomic and health disparities, non-Hispanic Blacks and Hispanics register suicide rates less than half that of non-Hispanic Whites.

Methods: This cross-sectional study uses multiple cause-of-death data from the US National Center for Health Statistics to assess whether race/ethnicity,

psychiatric comorbidity documentation, and other decedent characteristics were associated with differential potential for suicide misclassification. Subjects were 105,946 White, Black, and Hispanic residents aged 15 years and older, dying in the US between 2003 and 2005, whose manner of death was recorded as suicide or injury of undetermined intent. The main outcome measure was the relative odds of potential suicide misclassification, a binary measure of manner of death: injury of undetermined intent (includes misclassified suicides) versus suicide.

Results: Blacks (adjusted odds ratio [AOR], 2.38; 95% confidence interval [CI], 2.22–2.57) and Hispanics (1.17, 1.07–1.28) manifested excess potential suicide misclassification relative to Whites. Decedents aged 35–54 (AOR, 0.88; 95% CI, 0.84–0.93), 55–74 (0.52, 0.49–0.57), and 75+ years (0.51, 0.46–0.57) showed diminished misclassification potential relative to decedents aged 15–34, while decedents with 0–8 years (1.82, 1.75–1.90) and 9–12 years of education (1.43, 1.40–1.46) showed excess potential relative to the most educated (13+ years). Excess potential suicide misclassification was also apparent for decedents without (AOR, 3.12; 95% CI, 2.78–3.51) versus those with psychiatric comorbidity documented on their death certificates, and for decedents whose mode of injury was ‘less active’ (46.33; 43.32–49.55) versus ‘more active’.

Conclusions: Data disparities might explain much of the Black-White suicide rate gap, if not the Hispanic-White gap. Ameliorative action would extend from training in death certification to routine use of psychological autopsies in equivocal-manner-of-death cases.

Rural-urban differences in suicide rates for current patients of a Public Mental Health Service in Australia

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Suicide and Life-Threatening Behavior 40, 376–382, 2010

Rural versus urban rates of suicide in current patients of a large area mental health service in Australia were compared. Suicide deaths were identified from compulsory root cause analyses of deaths, 2003–2007. Age-standardised rates of suicide were calculated for rural versus urban mental health service and compared using variance of age-standardised rates with 95% confidence intervals. There were 44 suicides and the majority (62%) were rural. Only urban patients used jumping from heights as a method of suicide (4/17; $p = .02$). Rural patients had 2.7 times higher rates of suicide, similar to findings for rural versus urban community suicides and may reflect the underlying community rates, differences in mental health service delivery, or socioeconomic disadvantage.

Suicide intervention skills and related factors in community and health professionals

Scheerder G, Reynders A, Andriessen K, Van Audenhove C (The Netherland)
Suicide and Life Threatening Behavior 40, 115-124, 2010

Health and community professionals have considerable exposure to suicidal people and need to be well skilled to deal with them. We assessed suicide intervention skills with a Dutch version of the SIRI in 980 health and community professionals and psychology students. Suicide intervention skills clearly differed among professional groups and were strongly related to experience, especially suicide-specific experience. Some community professionals scored below acceptable levels on their ability to respond appropriately to suicidal people they encounter, and tended to overestimate their skills level. Training is therefore indicated for these groups, and may be useful to more highly experienced groups too.

Comparative safety of antidepressant agents for children and adolescents regarding suicidal acts

Schneeweiss S, Patrick AR, Solomon DH, Dormuth CR, Miller M, Mehta J, Lee JC, Wang PS (USA)
Pediatrics 125, 876-888, 2010

Objective: The objective of this study was to assess the risk of suicide attempts and suicides after initiation of antidepressant medication use by children and adolescents, for individual agents.

Methods: We conducted a 9-year cohort study by using populationwide data from British Columbia. We identified new users of antidepressants who were 10 to 18 years of age with a recorded diagnosis of depression. Study outcomes were hospitalisation attributable to intentional self-harm and suicide death.

Results: Of 20 906 children who initiated antidepressant therapy, 16,774 (80%) had no previous antidepressant use. During the first year of use, we observed 266 attempted and 3 completed suicides, which yielded an event rate of 27.04 suicidal acts per 1000 person-years (95% confidence interval [CI]: 23.9–30.5 suicidal acts per 1000 person-years). There were no meaningful differences in the rate ratios (RRs) comparing fluoxetine with citalopram (RR: 0.97 [95% CI: 0.54–1.76]), fluvoxamine (RR: 1.05 [95% CI: 0.46–2.43]), paroxetine (RR: 0.80 [95% CI: 0.47–1.37]), and sertraline (RR: 1.02 [95% CI: 0.56–1.84]). Tricyclic agents showed risks similar to those of selective serotonin reuptake inhibitors (RR: 0.92 [95% CI: 0.43–2.00]).

Conclusion: Our finding of equal event rates among antidepressant agents supports the decision of the Food and Drug Administration to include all antidepressants in the black box warning regarding potentially increased suicidal risk for children and adolescents beginning use of antidepressants.

Variation in the risk of suicide attempts and completed suicides by antidepressant agent in adults: A propensity score-adjusted analysis of 9 years' data

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Archives of General Psychiatry 67, 497-506, 2010

Context: A US Food and Drug Administration advisory has warned that antidepressants may be associated with an increased risk of suicidal thoughts and behaviors in adolescents. This prompted a meta-analysis of trials in adults that found no overall increase in risk, but individual agents could not be studied.

Objective: To assess the risk of suicide and suicide attempts associated with individual antidepressant agents.

Design: Cohort study of incident users of antidepressant agents. Setting: Population-based health care utilisation data of all residents of British Columbia, Canada, aged 18 years and older between January 1, 1997, and December 31, 2005. Patients: British Columbia residents who had antidepressant therapy initiated and had a recorded diagnosis of depression.

Intervention: Initiation of various antidepressant medications.

Main Outcome Measures: Combined suicide death or hospitalisation due to self-harm.

Results: In a population of 287 543 adults aged 18 years and older with antidepressant therapy initiated, we observed outcome rates ranging from 4.41/1000 person-years to 9.09/1000 person-years. Most events occurred in the first 6 months after treatment initiation. After extensive propensity score adjustment, we found no clinically meaningful variation in the risk of suicide and suicide attempt between antidepressant agents compared with fluoxetine hydrochloride initiation: citalopram hydrobromide, hazard ratio=1.00 (95% confidence interval, 0.63-1.57); fluvoxamine maleate, hazard ratio=0.98 (95% confidence interval, 0.63-1.51); paroxetine hydrochloride, hazard ratio=1.02 (95% confidence interval, 0.77-1.35); and sertraline hydrochloride, hazard ratio=0.75 (95% confidence interval, 0.53-1.05). Compared with selective serotonin reuptake inhibitors as a drug class, other classes including serotonin-norepinephrine reuptake inhibitors, tricyclic agents, and other newer and atypical agents had a similar risk. Restriction to patients with no antidepressant use in the past 3 years further reduced apparent differences between groups.

Conclusions: Our finding of equal event rates across antidepressant agents supports the US Food and Drug Administration's decision to treat all antidepressants alike in their advisory. Treatment decisions should be based on efficacy, and clinicians should be vigilant in monitoring after initiating therapy with any antidepressant agent.

The effect of risky alcohol use and smoking on suicide risk: Findings from the German MONICA/KORA-Augsburg Cohort Study

Schneider B, Baumert J, Schneider A, Marten-Mittag B, Meisinger C, Erazo N, Hammer GP, Ladwig KH (Germany)

Social Psychiatry and Psychiatric Epidemiology. Published online: 20 September 2010. doi: 10.1007/s00127-010-0287-y, 2010

Background: Smoking and heavy alcohol use predicts suicidal behaviour. Whether the simultaneous presentation of both conditions induces an amplified effect on risk prediction has not been investigated so far.

Methods: In a community-based cohort study, a total of 12,888 subjects (6,456 men, 6,432 women; age range of 25-74 years at assessment) from three independent population-based cross-sectional MONICA surveys (conducted in 1984/85, 1989/90, and 1994/95), representative for the Southern German population, was followed up until 31 December 2002. Standardised mortality ratios (SMR) for deaths from suicide using German population rates were calculated for smoking and high alcohol consumption.

Results: After a mean follow-up time of 12.0 (*SD* 4.4) years and 154,275 person-years at risk, a total of 1,449 persons had died from all causes and 38 of them from suicide. Compared to the general population, mortality from suicide was increased for risky alcohol consumption (SMR = 2.37; 95% CI 1.14-4.37) and for smoking (SMR = 2.30; 95% CI 1.36-3.63). A substantial increase in suicide mortality (SMR = 4.80; 95% CI 2.07-9.46) was observed for smokers with risky alcohol consumption.

Conclusions: The approximately fourfold increased relative risk for completed suicide in subjects with smoking and risky alcohol consumption indicates a synergistic effect which deserves an increased alertness.

Habitual starvation and provocative behaviors: Two potential routes to extreme suicidal behavior in anorexia nervosa

Selby EA, Smith AR, Bulik CM, Olmsted MP, Thornton L, McFarlane TL, Berrettini WH, Brandt HA, Crawford S, Fichter MM, Halmi KA, Jacoby GE, Johnson CL, Jones I, Kaplan AS, Mitchell JE, Nutzinger DO, Strober M, Treasure J, Woodside DB, Kaye WH, Joiner TE (USA)
Behaviour Research and Therapy 48, 634-645, 2010

Anorexia nervosa (AN) is perhaps the most lethal mental disorder, in part due to starvation-related health problems, but especially because of high suicide rates. One potential reason for high suicide rates in AN may be that those affected face pain and provocation on many fronts, which may in turn reduce their fear of pain and thereby increase risk for death by suicide. The purpose of the following studies was to explore whether repetitive exposure to painful and destructive behaviors such as vomiting, laxative use, and non-suicidal self-injury (NSSI) was a mechanism that linked AN-binge-purging (ANBP)

subtype, as opposed to AN-restricting subtype (ANR), to extreme suicidal behavior. Study 1 utilised a sample of 787 individuals diagnosed with one or the other subtype of AN, and structural equation modeling results supported provocative behaviors as a mechanism linking ANBP to suicidal behavior. A second, unexpected mechanism emerged linking ANR to suicidal behavior via restricting. Study 2, which used a sample of 249 AN patients, replicated these findings, including the second mechanism linking ANR to suicide attempts. Two potential routes to suicidal behavior in AN appear to have been identified: one route through repetitive experience with provocative behaviors for ANBP, and a second for exposure to pain through the starvation of restricting in ANR.

Suicide by occupation: Does access to means increase the risk?

Skegg K, Firth H, Gray A, Cox B (New Zealand)

Australian and New Zealand Journal of Psychiatry 44, 429-434, 2010

Objective: To examine suicide by identified occupational groups in New Zealand over a period of 30 years, focusing on groups predicted to have high suicide rates because of access to and familiarity with particular methods of suicide.

Method: Suicide data (including open verdicts) for the period 1973-2004 were examined, excluding 1996 and 1997 for which occupational data were not available. Occupational groups of interest were dentists, doctors, farmers (including farm workers), hunters and cullers, military personnel, nurses, pharmacists, police and veterinarians. Crude mortality rates were calculated based on numbers in each occupational group at each quinquennial census, 1976-2001. Standardised mortality ratios were calculated using suicide rates in all employed groups (the standard population).

Results: Few of the occupations investigated had high risks of suicide as assessed by standardised mortality ratios, and some were at lower risk than the total employed population. Standardised mortality ratios were elevated for male nurses (1.7; 95% CI: 1.22.5), female nurses (1.3; 95% CI: 1.01.6), male hunters and cullers (3.0; 95% CI: 1.74.8), and female pharmacists (2.5; 95% CI: 0.85. 9). Doctors, farmers and veterinarians were not at high risk, and men in the police and armed forces were at low risk. Access to means appeared to have influenced the method chosen. Nurses, doctors and pharmacists were more likely to use poisoning than were other employed people (3, 4 and 5 times respectively, compared with all others employed). Farmers and hunters and cullers were more than twice as likely as all others employed to use firearms.

Conclusions: Access to means may be less important in some circumstances than in others, perhaps because of the presence of other factors that confer protection. Nevertheless, among the groups we studied with access to lethal

means were three groups whose risk of suicide has so far received little attention in New Zealand: nurses, female pharmacists, and hunters and cullers.

Attempted suicide in mental disorders in young adulthood

Suokas JT, Suominen K, Heila H, Ostamo A, Aalto-Setälä T, Perala J, Saarni S, Lonnqvist J, Suvisaari JM (Finland)

Social Psychiatry and Psychiatric Epidemiology. Published online: 24 July 2010. doi: 10.1007/s00127-010-0272-5, 2010

Background: Nationwide general population study establishes the prevalence of suicide attempts in different mental disorders among young adults and their sociodemographic correlates. Current psychiatric symptoms are also examined.

Methods: A random sample of 1,894 young Finnish adults aged 20–34 years were approached to participate in a questionnaire containing several screens for mental health interviews. All screen positives and random sample of screen negatives were invited to an SCID interview. Altogether 546 subjects participated in the interview. Diagnostic assessment and lifetime history of suicide attempts were based on all available systematically evaluated information from the questionnaire, the interview and/or case records.

Results: The lifetime prevalence of suicide attempts was 5.6% in men and 6.9% in women. Both mental disorders and poor educational and occupational functioning were associated with lifetime suicide attempts. Lifetime history of suicide attempts was associated with current psychological distress, problems related to substance use and other psychiatric symptoms, even after taking current Axis I disorder into account. Suicide attempts were most common in persons with psychotic disorders (41%).

Conclusions: These results suggest that continued efforts are needed to outreach and treat effectively young adults with serious mental disorders. Young people who make a suicide attempt should be offered treatment. It seems also important to prevent psychosocial alienation of young people by providing them with adequate education and work possibilities.

Outpatient psychotherapy practice with adolescents following psychiatric hospitalisation for suicide ideation or a suicide attempt

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Clinical Child Psychology and Psychiatry. Published online: 19 April 2010. doi: 10.1177/1359104509352893, 2010

Outpatient treatment is standard care for adolescents discharged following a psychiatric hospitalisation. There is little research, however, on the amount and types of psychotherapy these clients receive in the community. We examined therapy attendance and therapist report of outpatient therapy practice

with adolescents discharged from psychiatric hospitalisation following either a suicide attempt or severe suicidal ideation in the Northeastern USA. Therapists ($n = 84$) completed a packet of self-report questionnaires regarding treatment of these adolescents in the first six months after discharge from the hospital. Information on number of sessions attended, primary presenting problem, therapist orientation, therapy techniques, and therapeutic relationship was collected. The findings indicated that therapists met their clients in both private and community outpatient settings. The most common modality of treatment was individual therapy, but almost all types of therapeutic techniques were endorsed. Adolescents attended an average of 8.1 therapy sessions ($SD = 4.7$), with 18% terminating treatment against therapist advice within the first three months. Psychologists, psychiatrists, and social workers used cognitive-behavioral, psychodynamic, and family system techniques about equally. Social workers used humanistic techniques more than their counterparts. The variability in number of therapy sessions attended suggests that many adolescents discharged after a psychiatric hospitalisation will not receive adequate care. Short-term therapy protocols designed for community practice emphasising cognitive techniques may be useful to test in future community-based research trials based on the high percentage of adolescents attending relatively few sessions.

Impact of coronial investigations on manner and cause of death determinations in Australia

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Medical Journal of Australia 192, 444-447, 2010

Objective: To evaluate the changes in the understanding of the manner and cause of death occurring during the course of coronial investigations.

Design: Retrospective analysis of deaths reported to coroners in Australia between 1 July 2000 and 31 December 2007, using the National Coroners Information System.

Main Outcome Measures: (1) Manner of death (natural, external, unknown); (2) intent classification (eg, unintentional injury, suicide, assault) among deaths with external causes; and, (3) changes in the manner of death and intent classification between the presumption made at case notification and the coroner's final determination.

Results: The coronial investigation changed the presumption about manner of death or intent classification in 5.2% (6222/120 452) of cases in which a presumption was made. Among deaths with a change in attribution from natural causes to external causes, unintentional falls (442/1891) and pharmaceutical poisoning (427/1891) each accounted for 23%. Among deaths with attribution changing from external causes to natural causes, the leading

medical causes of death were cardiovascular compromise (551/842; 65%) and infection (124/842; 15%). Of deaths understood correctly at notification to be due to external causes, but the wrong external cause, 34% (206/600) were ultimately judged to be unintentional injuries, and 22% (133/600) were judged to be suicides.

Conclusions: Coronial investigations transform basic understanding of cause of death in only a small minority of cases. However, the benefits to families and society of accurate cause-of-death determinations in these difficult cases may be considerable.

Memory specificity as a risk factor for suicidality in non-affective psychosis: The ability to recall specific autobiographical memories is related to greater suicidality

Taylor PJ, Gooding PA, Wood AM, Tarrrier N (UK)

Behaviour Research and Therapy 48, 52-59, 2010

A difficulty in recalling specific autobiographical memories has been noted as a risk factor for suicidal behaviour. However, the relationship between memory specificity and suicide has not previously been investigated in those with non-affective psychosis. It was predicted that in this group, more specific memory recall would be associated with an increased risk of suicide. This is because such specific memories are likely to be associated with greater levels of distress and negative affect than less specific memories. This prediction contradicts the prevailing belief that lower memory specificity is associated with greater suicidality. Sixty participants with schizophrenia spectrum disorders were recruited, 40 of whom reported past suicide attempts. Analyses showed suicide attempters recalled a greater proportion of specific memories, whilst controlling for trait anxiety and depressive symptoms. These results supported the main hypothesis, and suggest non-specific memory may have adaptive qualities in individuals with psychosis.

Adolescent same-sex attraction and mental health: The role of stress and support

Teasdale B, Bradley-Engen MS (USA)

Journal of Homosexuality 57, 287-309, 2010

This study draws on the social stress model from the sociology of mental health to examine the impact of same-sex attraction on depressed mood and suicidal tendencies. Specifically, we hypothesise that across multiple contexts, adolescents with same-sex attractions are likely to experience more social stress and less social support than heterosexual adolescents. In turn, these experiences increase the likelihood of negative mental health outcomes. Using data from the National Longitudinal Study of Adolescent Health ($n = 11,911$), we find that adolescents with

same-sex attraction are more likely than their heterosexual counterparts to report depressed mood and suicidal tendencies. Moreover, stress and social support were found to mediate a substantial part of the relationship between same-sex attraction and depressed mood. In addition, stress and social support mediated about one third of the relationship between same-sex attraction and suicidal tendencies. These findings give strong support for the social stress model. We conclude with a discussion of the role that alienation plays in same-sex-attracted adolescent mental health.

Suicide in England and Wales 1861-2007: A time-trends analysis

Thomas K, Gunnell D (UK)

International Journal of Epidemiology. Published online: 2 June 2010. doi: 10.1093/ije/dyq094, 2010

Background: Suicide is one of the leading causes of premature mortality worldwide. Few studies have assessed long-term trends or sex differences in its incidence over time. We have investigated the age-, sex- and method-specific trends in suicide in England and Wales from 1861 to 2007.

Methods: Overall age-standardised suicide rates using the European Standard Population and age-, sex- and method-specific rates were calculated for ages \geq 15 years from 1861 to 2007.

Results: Rates in males were consistently higher than females throughout the 19th and 20th centuries, although the male-to-female sex ratio fluctuated from 4: 1 in the 1880s to 1.5: 1 in the 1960s. Suicide rates increased in all age groups in the 1930s, coinciding with the Great Depression. The highest male rates (30.3 per 100,000) were recorded in 1905 and 1934 and have since been declining. Female rates peaked in the 1960s (11.8 per 100,000), declining afterwards. In both sexes the lowest recorded rates were in the 21st century. There was a rapid rise in the use of domestic gas as a method of suicide in both sexes following its introduction at the end of the 19th century. There was no evidence that this rise was accompanied by a decline in the use of other methods. Self-poisoning also increased in popularity from the 1860s (5% of suicides) to the 1990s (22% of suicides).

Conclusions: The epidemiology of suicide in England and Wales has changed markedly over the past 146 years. The rapid rise in gas suicide deaths in the 1920s highlights how quickly a new method of suicide can be established in a population when it is easily available. The increase in suicides during the Great Depression has implications in relation to the current economic crisis. Changes in the acceptability and lethality of various suicide methods may account for the large variations in sex ratios over time.

The interpersonal theory of suicide

Van Orden KA, Witte TK, Cukrowicz KC, Braithwaite SR, Selby EA, Joiner TE (USA)
Psychological Review 117, 575-600, 2010

Suicidal behavior is a major problem worldwide and, at the same time, has received relatively little empirical attention. This relative lack of empirical attention may be due in part to a relative absence of theory development regarding suicidal behavior. The current article presents the interpersonal theory of suicidal behavior. We propose that the most dangerous form of suicidal desire is caused by the simultaneous presence of two interpersonal constructs-thwarted belongingness and perceived burdensomeness (and hopelessness about these states)-and further that the capability to engage in suicidal behavior is separate from the desire to engage in suicidal behavior. According to the theory, the capability for suicidal behavior emerges, via habituation and opponent processes, in response to repeated exposure to physically painful and/or fear-inducing experiences. In the current article, the theory's hypotheses are more precisely delineated than in previous presentations (Joiner, 2005), with the aim of inviting scientific inquiry and potential falsification of the theory's hypotheses.

Suicide registration in eight European countries: A qualitative analysis of procedures and practices

Värnik P, Sisask M, Värnik A, Laido Z, Meise U, Ibelshäuser A, Van Audenhove C, Reynders A, Kocalevent RD, Kopp M, Dosa A, Arensman E, Coffey C, van der Feltz-Cornelis CM, Gusmão R, Hegerl U (Estonia)
Forensic Science International 202, 86-92, 2010

Objective: To compare suicide registration in eight European countries and provide recommendations for quality improvement.

Method: Qualitative data were collected from country experts using a structured questionnaire.

Results: Suicide registration was based on the medico-legal system in six countries and the coronial system in two. Differences not only between, but also within these two systems emerged. Several elements crucial to the consistency of suicide registration were identified.

Conclusion: A precise model for recording suicides should include: an accurate legal inquiry and clarification of suicidal intent; obligatory forensic autopsy for injury deaths; reciprocal communication among authorities; electronic data transmission; final decision-makers' access to information; trained coders.

Familial factors and suicide: An adoption study in a Swedish national cohort

von Borczyskowski A, Lindblad F, Vinnerljung B, Reintjes R, Hjern A (Sweden)

Psychological Medicine. Published online: 7 July 2010. doi: 10.1017/S0033291710001315, 2010

Background: Parental characteristics influence the risk of offspring suicide. In this study we wanted to separate the hereditary from the environmental influence of such factors by comparing their effects in the adopted versus non-adopted.

Method: A register study was conducted in a national cohort of 2,471,496 individuals born between 1946 and 1968, including 27,600 national adoptees, followed-up for suicide during 1987-2001. Cox regression was used to calculate hazard ratios (HR) for suicide of socio-economic indicators of the childhood household and biological parents' suicide, alcohol abuse and psychiatric morbidity separately in the adopted and non-adopted. Differences in effects were tested in interaction analyses.

Results: Suicide and indicators of severe psychiatric disorder in the biological parents had similar effects on offspring suicide in the non-adopted and adopted (HR 1.5-2.3). Biological parents' alcohol abuse was a risk factor for suicide in the non-adopted group only (HR 1.8 v. 0.8, interaction effect: $p = .03$). The effects of childhood household socio-economic factors on suicide were similar in adopted and non-adopted individuals, with growing up in a single parent household [HR 1.5 (95% confidence interval 1.4-1.5)] as the most important socio-economic risk factor for the non-adopted.

Conclusions: The main familial effects of parental suicide and psychiatric morbidity on offspring suicide are not mediated by the post-natal environment or imitation, in contrast to effects of parental alcohol abuse that are primarily mediated by the post-natal environment. Social drift over generations because of psychiatric disorders does not seem likely to explain the association of socio-economic living conditions in childhood to suicide.

Train suicides in the Netherlands

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Journal of Affective Disorders. Published online: 25 June 2010. doi:10.1016/j.jad.2010.06.005, 2010

Background: Little is known about train suicide and factors influencing its prevalence. This study tests the hypotheses that railway density, railway transportation volume, familiarity with railway transportation and population density contribute to train suicide. It also tests the relationship between train suicide and general population suicide and examines the prevalence and the characteristics of high-risk locations and their contribution to the grand total of train suicides.

Methods: Trends in train suicides were compared with trends in railway track length, train kilometres, passenger kilometres and national suicide figures over the period 1950–2007. The geographical distribution over the national network over the period 1980–2007 was studied. Data were obtained from The Netherlands Railways, Prorail and Statistics Netherlands.

Results: 1. The incidence of train suicides is unrelated to railway parameters. 2. Being familiar with railway transportation as a passenger is not a contributory factor. 3. Train suicide rates are unrelated to regional population density. 4. The incidence of train suicides parallels that of general population suicides. 5. Half of the train suicides took place at a limited number of locations, the most important of which were situated within a village or town and were close to a psychiatric hospital. Limitations: Most conclusions are based on correlational relationships between variables.

Conclusions: 1. Train suicide trends reflect trends in general population suicides. 2. Increased train transportation does not lead to more train suicides. 3. The prevention of train suicide at high-risk locations (HRLs) in built-up areas and near psychiatric hospitals deserves first priority.

Engaging Australian Aboriginal youth in mental health services

Westerman T (Australia)

Australian Psychologist 45, 212–222, 2010

It is currently estimated that up to 40% of Aboriginal youth (aged 13–17) will experience some form of mental health problem within their lifetime. Of greater concern is the evidence that indicates that Aboriginal youth fail to access mental health services commensurate with this need. This is due, in part, to the characteristically monocultural nature of service delivery of existing services. This paper overviews a model that has been developed specifically for the engagement of Aboriginal youth (aged 13–17 years) in mental health settings. Importantly, a mix of urban ($N = 43$) and rural ($N = 68$) Aboriginal youth were represented within the sample to determine its efficacy across different language and tribal groups. The model proved to be effective in engaging 97% of Aboriginal youth ($n = 108$), with only a small number not effectively engaged ($n = 3$). The model provides a foundation for the further development of evidence-based models of best practice that have so far provided to be elusive within this complex field.

Nonresident suicides in England: A national study

Windfuhr K, Bickley H, While D, Williams A, Hunt IM, Appleby L, Kapur N (UK)

Suicide and Life Threatening Behavior 40, 151-158, 2010

Little is known about the numbers and characteristics of people who travel away from home before dying by suicide. Therefore, this study attempted to identify the sociodemographic characteristics, location, and method of suicide in people who died distant from home, in a national sample. Data were collected on all English suicides and a patient population; nonresident suicides resided in one Health Authority but died in a different one. Twelve percent of suicides were nonresident and features of these included: young age, social adversity, and severe mental illness. In conclusion, both individual- and area-based factors are likely to contribute to suicide away from home.

Standardised screening for suicidal adolescents in primary care

Wintersteen MB (USA)

Pediatrics 125, 938-944, 2010

Objective: To determine if brief standardised screening for suicide risk in pediatric primary care practices will increase detection rates of suicidal youth, maintain increased detection and referral rates, and be replicated in other practices.

Patients and Methods: Physicians in 3 primary care practices received brief training in suicide risk, and 2 standardised questions were inserted into their existing electronic medical chart psychosocial interview. The questions automatically populated for all adolescents aged 12.0 to 17.9 years. Deidentified data were extracted during both intervention trials and for the same dates of the previous year. Referral rates were extracted from social work records.

Results: The rates of inquiry about suicide risk increased 219% (clinic A odds ratio [OR]: 2.04 [95% confidence interval (CI): 1.56-2.51]; clinic B OR: 3.20 [95% CI: 2.69-3.71]; clinic C OR: 1.85 [95% CI: 1.38-2.31]). The rate of case detection increased in clinic A (OR: 4.99 [95% CI: 4.20-5.79]), was maintained over 6 months after the intervention began (OR: 4.38 [95% CI: 3.74-5.02]), and was replicated in both clinic B (OR: 5.46 [95% CI: 3.36-7.56]) and clinic C (OR: 3.42 [95% CI: 2.33-4.52]). The increase in case detection was 392% across all 3 clinics. Referral rates of suicidal youth to outpatient behavioral health care centers increased at a rate equal to that of the detection rates.

Conclusions: Standardised screening for suicide risk in primary care can detect youth with suicidal ideation and prompt a referral to a behavioral health care center before a fatal or serious suicide attempt is made.

A comparative follow-up study of aftercare and compliance of suicide attempters following standardised psychosocial assessment

Wittouck C, De Munck S, Portzky G, Van Rijsselberghe L, Van Autreve S, van Heeringen K (Belgium)

Archives of Suicide Research 14, 135-145, 2010

This comparative longitudinal study investigated aftercare and compliance of attempted suicide patients after standardised psychosocial assessment. Structured interviews were conducted 1 month (FU1) and 6 months (FU2) after an index suicide attempt. Assessment was associated with more frequent discussion of treatment options with the patient at the hospital and a shorter interval between discharge and contacting the general practitioner (GP). A near significant effect was found for discussing the suicide attempt with the GP more frequently and with start or change of the medication scheme after the index attempt. The current findings support the use of a standardised tool for the assessment of suicide attempters and are in line with the chain of care model for suicide attempters.

Has adolescent suicidality decreased in the United States? Data from two national samples of adolescents interviewed in 1995 and 2005

Wolitzky-Taylor KB, Ruggiero KJ, McCart MR, Smith DW, Hanson RF, Resnick HS, de Arelano MA, Saunders BE, Kilpatrick DG (USA)

Journal of Clinical Child and Adolescent Psychology 39, 64-76, 2010

We compared the prevalence and correlates of adolescent suicidal ideation and attempts in two nationally representative probability samples of adolescents interviewed in 1995 (National Survey of Adolescents; $N = 4,023$) and 2005 (National Survey of Adolescents-Replication; $N = 3,614$). Participants in both samples completed a telephone survey that assessed major depressive episode (MDE), post-traumatic stress disorder, suicidal ideation and attempts, violence exposure, and substance use. Results demonstrated that the lifetime prevalence of suicidal ideation among adolescents was lower in 2005 than 1995, whereas the prevalence of suicide attempts remained stable. MDE was the strongest predictor of suicidality in both samples. In addition, several demographic, substance use, and violence exposure variables were significantly associated with increased risk of suicidal ideation and attempts in both samples, with female gender, nonexperimental drug use, and direct violence exposure being consistent risk factors in both samples.

Comparing subgroups of suicidal homeless adolescents: Multiple attempters, single attempters and ideators

Yoder KA, Whitbeck LB, Hoyt DR (USA)

Vulnerable Children and Youth Studies 5, 151-162, 2010

This study compared multiple attempters, single attempters, ideators and non-suicidal homeless adolescents from the Midwestern United States. The data were collected in 1999–2000 from youths aged 16–19 years. More than one-quarter (26.7%) of the 405 participants made multiple lifetime attempts, 9.8% attempted suicide once, 48.9% thought about — but did not attempt — suicide and 14.6% never attempted or thought about suicide. Multiple attempters, relative to all other youths, evidenced more family, street, psychological and psychiatric problems. Single attempters reported more suicidal ideation than did ideators, and single attempters endured more family problems and were more likely to meet criteria for post-traumatic stress disorder (PTSD) than were non-suicidal participants. Finally, both single attempters and ideators experienced more psychological problems and number of psychiatric diagnoses than did non-suicidal youths.

The relationship between sales of SSRI, TCA and suicide rates in the Nordic countries

Zahl PH, De Leo D, Ekeberg O, Hjelmeland H, Dieserud G (Norway)

BMC Psychiatry 10, 62, 2010

Background: In the period 1990-2006, strong and almost equivalent increases in sales figures of selective serotonin re-uptake inhibitors (SSRIs) were observed in all Nordic countries. The sales figures of tricyclic antidepressants (TCAs) dropped in Norway and Sweden in the nineties. After 2000, sales figures of TCAs have been almost constant in all Nordic countries. The potentially toxic effect of TCAs in overdose was an important reason for replacing TCAs with SSRIs when treating depression. We studied whether the rapid increase in sales of SSRIs and the corresponding decline in TCAs in the period 1990-98 were associated with a decline in suicide rates.

Methods: Aggregated suicide rates for the period 1975–2006 in four Nordic countries (Denmark, Finland, Norway and Sweden) were obtained from the national causes-of-death registries. The sales figures of antidepressants were provided from the wholesale registers in each of the Nordic countries. Data were analysed using Fisher's exact test and Pearson's correlation coefficient.

Results: There was no statistical association ($P = 1.0$) between the increase of sales figures of SSRIs and the decline in suicide rates. There was no statistical association ($P = 1.0$) between the decrease in the sale figures of TCAs and changes in suicide rates either.

Conclusions: We found no evidence for the rapid increase in use of SSRIs and the corresponding decline in sales of TCAs being associated with a decline in the suicide rates in the Nordic countries in the period 1990-98. We did not find any inverse relationship between the increase in sales of SSRIs and declining suicide rates in four Nordic countries.

Mental disorders and suicide among young rural Chinese: A case-control psychological autopsy study

Zhang J, Xiao S, Zhou L (China)

American Journal of Psychiatry 167, 773-781, 2010

Objective: The authors examined the prevalence and distribution of mental disorders in rural Chinese 15-34 years of age who committed suicide. They hypothesised that mental illness is a risk factor for suicide in this population and that the prevalence of mental illness is lower in females than in males.

Method: In this case-control psychological autopsy study, face-to-face interviews were conducted to collect information from proxy informants for 392 suicide victims and 416 living comparison subjects. Five categories of DSM-IV mental disorders (mood disorders, schizophrenia and other psychotic disorders, substance use disorders, anxiety disorders, and other axis I disorders) at the time of death or interview were assessed using the Chinese version of the Structured Clinical Interview for DSM-IV. Sociodemographic variables, social support, and life events were also assessed.

Results: The prevalence of current mental illness was 48.0% for suicide victims and 3.8% for comparison subjects. Among suicide victims, mental illness was more prevalent in males than in females (55.1% compared with 39.3%). A strong association between mental illness and suicide was observed after adjustment for sociodemographic characteristics. Other risk factors included having a lower education level, not being currently married, having a lower level of social support, and having a history of recent and long-term life events. Additive interactions were observed between mental illness and lower level of social support.

Conclusions: Although mental illness is a strong risk factor for suicide, it is less prevalent among rural Chinese young people who committed suicide, particularly females, in comparison with other populations in China and in the West.

Citation List

FATAL SUICIDAL BEHAVIOUR

Epidemiology

- Ajdacic-Gross V, Bopp M, Ring M, Gutzwiller F, Rossler W (2010). Seasonality in suicide — A review and search of new concepts for explaining the heterogeneous phenomena. *Social Science and Medicine* 71, 657-666.
- Akar T, Sayin A, Bakaloglu Z, Cabuk DK, Kucukyildirim S, Demirel B, Candansayar S, Ozsoy ED, Mergen H (2010). Investigation of serotonin transporter gene promoter (5-HTTLPR) and intron 2 (variable number of tandem repeats) polymorphisms with suicidal behavior in a Turkish population. *DNA and Cell Biology* 29, 429-434.
- Aldrich T, Seidu D, Bahr D, Freitas S, Brion G, Tollerud D (2010). Time-period mortality patterns in a Gaseous Diffusion Plant workforce. *International Journal of Occupational Medicine and Environmental Health* 23, 145-151.
- Apter A (2010). Suicidal behaviour in adolescence. *Canadian Journal of Psychiatry* 55, 271-273.
- Aydin B, Kartal M (2010). Suicide cases in a Province (Samsun) of Blacksea Region of Turkey between 1999-2003. *Turkiye Klinikleri Tip Bilimleri Dergisi* 30, 1067-1072.
- Bandara V, Weinstein SA, White J, Eddleston M (2010). A review of the natural history, toxicology, diagnosis and clinical management of Nerium oleander (common oleander) and Thevetia peruviana (yellow oleander) poisoning. *Toxicon* 56, 273-281.
- Bell CC, McBride DF (2010). Commentary: Homicide-suicide in older adults — Cultural and contextual perspectives. *Journal of the American Academy of Psychiatry and the Law* 38, 312-317.
- Belmont Jr PJ, Goodman GP, Waterman B, DeZee K, Burks R, Owens BD (2010). Disease and nonbattle injuries sustained by a U.S. army brigade combat team during operation Iraqi freedom. *Military Medicine* 175, 469-476.
- Bjornaas MA, Teige B, Hovda KE, Ekeberg O, Heyerdahl F, Jacobsen D (2010). Fatal poisonings in Oslo: A one-year observational study. *BMC Emergency Medicine* 10, 13.
- Bourget D, Gagne P, Whitehurst L (2010). Domestic homicide and homicide-suicide: The older offender. *Journal of the American Academy of Psychiatry and the Law* 38, 305-311.
- Bradley CE, Harrison JE, Elnour A (2010). Appearances may deceive: What's going on with Australian suicide statistics? *Medical Journal of Australia* 192, 428-429.
- Bridges FS, Lester D (2010). Homicide-suicide in the United States, 1968-1975. *Forensic Science International*. Published online: 31 August 2010. doi:10.1016/j.forsciint.2010.08.003.
- Brzozowski FS, Soares GB, Benedet J, Boing AF, Peres MA (2010). Suicide time trends in Brazil from 1980 to 2005. *Cadernos de Saúde Pública* 26, 1293-302.
- Calabria B, Doran CM, Vos T, Shakeshaft AP, Hall W (2010). Epidemiology of alcohol-related burden of disease among Indigenous Australians. *Australian and New Zealand Journal of Public Health* 34, S47-S51.
- Cantrell FL, Nordt S, McIntyre I, Schneir A (2010). Death on the doorstep of a border community - intentional self-poisoning with veterinary pentobarbital. *Clinical Toxicology*. Published online: 25 August 2010. doi:10.3109/15563650.2010.512562.
- Chapman S (2010). Firearm deaths in Australia after law reform. *Medicine, Science and the Law* 50, 53-53.
- Chen YY, Lee MB, Chang CM, Liao SC (2010). Methods of suicide in different psychiatric diagnostic groups. *Journal of Affective Disorders* 118, 196-200.
- Chia BH, Chia A, Yee NW, Choo TB (2010). Suicide trends in Singapore: 1955-2004. *Archives of Suicide Research* 14, 276-283.

- Chien WU-C, Pai L, Chu C-M, Kao S, Tsai S-H (2010). Trends in child and adolescent injury mortality in Taiwan, 1986-2006. *Taiwan Journal of Public Health* 29, 22-32.
- Chung KH, Lin HC (2010). Methods of suicide among cancer patients: A nationwide population-based study. *Suicide and Life-Threatening Behaviour* 40, 107-114.
- Claassen CA, Yip PS, Corcoran P, Bossarte RM, Lawrence BA, Currier GW (2010). National suicide rates a century after Durkheim: Do we know enough to estimate error? *Suicide & Life-Threatening Behavior* 40, 193-223.
- Corcoran P, Arensman E (2010). A study of the Irish system of recording suicide deaths. *Crisis* 31, 174-82.
- De Leo D (2010). Australia revises its mortality data on suicide. *Crisis* 31, 169-173.
- Doessel DP, Williams RFG, Robertson JR (2010). Changes in the inequality of mental health: Suicide in Australia, 1907-2003. *Health Economics, Policy and Law*. Published online: 21 April 2010. doi: 10.1017/S1744133110000101.
- Durkin A, Connolly S, O'Reilly D (2010). Quantifying alcohol-related mortality: Should alcohol-related contributory causes of death be included? *Alcohol & Alcoholism* 45, 374-378.
- Fajkic A, Lepara O, Voracek M, Kapusta ND, Niederkrotenthaler T, Amiri L, Sonneck G, Dervic K (2010). Child and adolescent suicides in Bosnia and Herzegovina before and after the war (1992-1995). *Crisis* 31, 160-164.
- Felice E (2010). Notes on the determinants of suicide rates in Italy's regions: A reply to Voracek (2009). *Psychological Reports* 106, 731-736.
- Forsström E, Hakko H, Nordström T, Rasanen P, Mainio A (2010). Suicide in patients with stroke: A population-based study of suicide victims during the years 1988-2007 in northern Finland. *Journal of Neuropsychiatry and Clinical Neurosciences* 22, 182-187.
- Galta K, Olsen SL, Wik G (2010). Murder followed by suicide: Norwegian data and international literature. *Nordic Journal of Psychiatry*. Published online: 9 April 2010. doi:10.3109/08039481003759201.
- Ginter E, Simko V (2010). Health of Europeans twenty years after the fall of Berlin wall. *Bratislava Medical Journal — Bratislavské Lekárske Listy* 111, 398-403.
- Innamorati M, Tamburello A, Lester D, Amore M, Girardi P, Tatarelli R, Pompili M (2010). Inequalities in suicide rates in the European Union's elderly: Trends and impact of macro-socioeconomic factors between 1980 and 2006. *Canadian Journal of Psychiatry* 55, 229-238.
- Jones AW, Kugelberg FC, Holmgren A, Ahlner J (2010). Drug poisoning deaths in Sweden show a predominance of ethanol in mono-intoxications, adverse drug-alcohol interactions and poly-drug use. *Forensic Science International*. Published online: 12 July 2010. doi:10.1016/j.forsciint.2010.06.015.
- Kanchan T, Menezes RG, Mohan Kumar TS, Bakkannavar SM, Bukelo MJ, Sharma PS, Rasquinha JM, Suresh Kumar Shetty B (2010). Toxicoepidemiology of fatal poisonings in Southern India. *Journal of Forensic and Legal Medicine* 7, 344-347.
- Karch DL, Dahlberg LL, Patel N (2010). Surveillance for violent deaths — National Violent Death Reporting System, 16 States, 2007. *Morbidity and Mortality Weekly Report* 59, 1-50.
- Kulkarni R, Chauhan S, Shah B, Menon G (2010). Cause of death among reproductive age group women in Maharashtra, India. *Indian Journal of Medical Research* 132, 150-154.
- Large MM, Nielssen OB (2010). Suicide in Australia: Meta-analysis of rates and methods of suicide between 1988 and 2007. *Medical Journal of Australia* 192, 432-437.
- Lederer W (2010). Job conflicts and suicide among physicians. *European Psychiatry*. Published online: 31 August 2010. doi:10.1016/j.eurpsy.2010.06.001.

- Lin JJ, Chang SS, Lu TH (2010). The leading methods of suicide in Taiwan, 2002-2008. *BMC Public Health* 10, 480.
- Liu IC, Liao SF, Lee WC, Kao CY, Jenkins R, Cheng AT (2010). A cross-ethnic comparison on incidence of suicide. *Psychological Medicine*. Published online: 5 August 2010. doi:10.1016/j.eurpsy.2010.06.001.
- Lollis SS, Valdes PA, Li Z, Ball PA, Roberts DW (2010). Cause-specific mortality among neurosurgeons. *Journal of Neurosurgery* 113, 474-478.
- Lunevicius R, Stevens KA, Puvanachandra P, Hyder AA (2010). The epidemiology of injury in the Republic of Lithuania. *Scandinavian Journal of Public Health* 38, 386-394.
- Majumder MI, Hoque MM, Wahid Ahmed BUM, Walliur Rahman AHM, Noor-E-Alam SM, Faiz MA (2010). Fatal deliberate self harm with paraquat. *Journal of Medicine* 11, 176-179.
- Marja-Liisa S, Matti H, Irina E, Eero P (2010). Causes of death among patients with multiple sclerosis. *Multiple Sclerosis*. Published online: 10 September 2010. doi: 10.1177/1352458510379244.
- Martín Arias LH, Lobato CT, Ortega S, Velasco A, Carvajal A, Del Pozo JG (2010). Trends in the consumption of antidepressants in Castilla y León (Spain). Association between suicide rates and antidepressant drug consumption. *Pharmacoepidemiology and Drug Safety* 19, 895-900.
- Minino A (2010). Mortality among teenagers aged 12-19 years: United States, 1999-2006. *National Center for Health Statistics Data Brief* 37, 1-8.
- Mustard CA, Bielecky A, Etches J, Wilkins R, Tjepkema M, Amick BC, Smith PM, Gnam WH, Aronson KJ (2010). Suicide mortality by occupation in Canada, 1991-2001. *Canadian Journal of Psychiatry* 55, 369-376.
- Nance ML, Carr BG, Kallan MJ, Branas CC, Wiebe DJ (2010). Variation in pediatric and adolescent firearm mortality rates in rural and urban US Counties. *Pediatrics* 125, 1112-1118.
- Norström T, Miller T, Holder H, Osterberg E, Ramstedt M, Rossow I, Stockwell T (2010). Potential consequences of replacing a retail alcohol monopoly with a private licence system: Results from Sweden. *Addiction*. Published online: 1 September 2010. doi: 10.1111/j.1360-0443.2010.03091.x.
- O'Dowd A (2010). Numbers of homicides and suicides among mentally ill patients have stopped rising. *British Medical Journal* 341, 3698.
- Pakis I, Yayci N, Karapirli M, Yildiz N, Gunce E, Yilmaz R, Polat O (2010). Childhood deaths due to suicide. *Australian Journal of Forensic Sciences* 42, 191-197.
- Palaniappan L, Mukherjee A, Holland A, Ivey SL (2010). Leading causes of mortality of Asian Indians in California. *Ethnicity and Disease* 20, 53-57.
- Phillips JA, Robin AV, Nugent CN, Idler EL (2010). Understanding recent changes in suicide rates among the middle-aged: Period or cohort effects? *Public Health Reports* 125, 680-688.
- Platt B, Hawton K, Simkin S, Mellanby RJ (2010). Systematic review of the prevalence of suicide in veterinary surgeons. *Occupational Medicine*. Published online: June 30 2010. doi: 10.1093/occmed/kqq044.
- Quader M, Rahman MH, Kamal M, Ahmed AU, Saha SK (2010). Post mortem outcome of organophosphorus compound poisoning cases at Mymensingh medical college. *Mymensingh Medical Journal* 19, 170-172.
- Rahim M, Das TC (2010). Mortuary profile for unnatural deaths at forensic medicine department of Dhaka medical college. *Bangladesh Medical Journal* 38, 44-47.
- Retheesh Babu G (2010). Suicide: A disturbing factor in the 'development model' of Kerala, India. *Journal of Public Health* 18, 483-487.

- Richardson EG, Hemenway D (2010). Homicide, suicide, and unintentional firearm fatality: comparing the United States with other high-income countries, 2003. *Journal of Trauma*. Published online: 21 June 2010. doi: 10.1097/TA.0b013e3181dbaddf.
- Saberi Anary SH, Sheikhzadi A, Ghadyani MH (2010). Epidemiology of drowning in mazandaran province, north of Iran. *American Journal of Forensic Medicine and Pathology* 31, 236-242.
- Sankaranarayanan A, Carter G, Lewin T (2010). Rural-urban differences in suicide rates for current patients of a Public Mental Health Service in Australia. *Suicide and Life-Threatening Behavior* 40, 376-382.
- Santic Z, Ostojic L, Hrabac B, Prlic J, Beslic J (2010). Suicide frequency in West-Herzegovina Canton for the period 1984-2008. *Medicinski Arhiv* 64, 168-170.
- Sarma K, Kola S (2010). Firearms, hanging, and drowning suicides in the Republic of Ireland. *Crisis* 31, 69-75.
- Sarma K, Kola S (2010). The socio-demographic profile of hanging suicides in Ireland from 1980 to 2005. *Journal of Forensic and Legal Medicine* 17, 374-377.
- Shah A, Chandia M (2010). The relationship between suicide and Islam: A cross-national study. *Journal of Injury and Violence Research* 2, 93-97.
- Shah A, Zarate-Escudero S, Somayaji M (2010). The relationship between elderly suicide rates and telephone use: A cross-national study. *International Psychogeriatrics* 22: 1191-1192.
- Shetty AK (2010). Incidence of suicides in Belgaum, Karnataka. *Medico-Legal Update* 10, 19-20.
- Simmons M, Meador-Woodruff JH, Sodhi MS (2010). Increased cortical expression of an RNA editing enzyme occurs in major depressive suicide victims. *Neuroreport* 21, 993-997.
- Spiller HA, Appana S, Brock GN (2010). Epidemiological trends of suicide and attempted suicide by poisoning in the US: 2000-2008. *Legal Medicine* 12, 177-183.
- Thomas K, Gunnell D (2010). Suicide in England and Wales 1861-2007: A time-trends analysis. *International Journal of Epidemiology*. Published online: 2 June 2010. doi: 10.1093/ije/dyq094.
- Tiesman HM, Hendricks SA, Bell JL, Amandus HA (2010). Eleven years of occupational mortality in law enforcement: The Census of Fatal Occupational Injuries, 1992-2002. *American Journal of Industrial Medicine* 53, 940-949.
- Tindle HA, Omalu B, Courcoulas A, Marcus M, Hammers J, Kuller LH (2010). Risk of suicide after long-term follow-up from bariatric surgery. *American Journal of Medicine*. Published online: 14 September 2010. doi:10.1016/j.amjmed.2010.06.016.
- Toprak S, Sam B, Akgul E, Silan C, Baysal E (2010). Psychoactive drug related traumatic deaths in Istanbul between 1990-2000. *Romanian Journal of Legal Medicine* 18, 69-74.
- Tsai JF, Cho W (2010). Re-examination of the seasonality of suicide in Taiwan during 1991-2008: A population-based study. *Psychiatry Research*. Published online: 30 August 2010. doi:10.1016/j.psychres.2010.07.043.
- Van Houwelingen CAJ, Kerkhof AJFM, Beersma DGM (2010). Train suicides in the Netherlands. *Journal of Affective Disorders*. Published online: 25 June 2010. doi: 10.1016/j.jad.2010.06.005.
- Vaughan M (2010). Suicide in late colonial Africa: The evidence of inquests from Nyasaland. *American Historical Review* 115, 385-404.
- Warren SC, Zinn CL (2010). Review of completed suicides in a community hospice. *Journal of Palliative Medicine* 13, 937-938.
- Whitt HP (2010). The civilizing process and its discontents: Suicide and crimes against persons in France, 1825-1830. *American Journal of Sociology* 116, 130-186.

- Williams RF, Doessel DP, Sveticic J, De Leo D (2010). Accuracy of official suicide mortality data in Queensland. *Australian & New Zealand Journal of Psychiatry* 44, 815-22.
- Wolitzky-Taylor KB, Ruggiero KJ, McCart MR, Smith DW, Hanson RE, Resnick HS, de Arellano MA, Saunders BE, Kilpatrick DG (2010). Has adolescent suicidality decreased in the United States? Data from two national samples of adolescents interviewed in 1995 and 2005. *Journal of Clinical Child and Adolescent Psychology* 39, 64-76.
- Wu W-C, Cheng H-P (2010). Symmetric mortality and asymmetric suicide cycles. *Social Science and Medicine* 70, 1974-1981.
- Yip P, Pitt D, Wang Y, Wu X, Watson R, Huggins R, Xu Y (2010). Assessing the impact of suicide exclusion periods on life insurance. *Crisis* 31, 217-223.
- Zhang L, Su TP, Choi K, Maree W, Li CT, Chung MY, Chen YS, Bai YM, Chou YH, Barker JL, Barrett JE, Li XX, Li H, Benedek DM, Ursano R (2010). P11 (S100A10) as a potential biomarker of psychiatric patients at risk of suicide. *Journal of Psychiatric Research*. Published online: 21 September 2010. doi: 10.1016/j.jpsychires.2010.08.012.
- Zhao YJ, Condon JR, Guthridge S, You JQ (2010). Living longer with a greater health burden - Changes in the burden of disease and injury in the Northern Territory Indigenous population between 1994-1998 and 1999-2003. *Australian and New Zealand Journal of Public Health* 34, S93-s98.
- Zhjeqi V, Ramadani N, Gashi S, Mucaj S, Berisha M, Neziri L, Krasniqi S, Shahini M (2010). Suicide prevalence in Kosova for the period 2007-2008. *Medicinski Arhiv* 64, 44-47.

Risk and protective factors

- Agrawal D, Kumar A, Ansari MA, Srivastava V, Lahiri TK (2010). Aluminium phosphide poisoning with esophageal stricture and tracheoesophageal fistula. *Indian Journal of Thoracic and Cardiovascular Surgery* 26, 198-203.
- Ahlner J, Zackrisson A-L, Lindblom B, Bertilsson L (2010). CYP2D6, serotonin and suicide. *Pharmacogenomics* 11, 903-905.
- Ahn E, Shin DW, Cho SI, Park S, Won YJ, Yun YH (2010). Suicide rates and risk factors among Korean cancer patients, 1993-2005. *Cancer Epidemiology, Biomarkers & Prevention* 19, 2097-2105.
- Ajdacic-Gross V, Killias M, Hepp U, Haymoz S, Bopp M, Gutzwiller F, Rossler W (2010). Firearm suicides and availability of firearms: The Swiss experience. *European Psychiatry* 26, 198-203.
- Al Madni OM, Kharoshah MA, Zaki MK, Ghaleb SS (2010). Hanging deaths in Dammam, Kingdom of Saudi Arabia. *Journal of Forensic and Legal Medicine* 17, 265-268.
- Alston M (2010). Rural male suicide in Australia. *Social Science and Medicine*. Published online: 25 May 2010. doi: 10.1016/j.socscimed.2010.04.036.
- Andrés AR, Halicioğlu F (2010). Determinants of suicides in Denmark: Evidence from time series data. *Health Policy*. Published online: 26 August 2010. doi: 10.1016/j.healthpol.2010.06.02.
- Anonymous (2010). Sexual orientation and gender identity in youth suicide victims: An exploratory study. *Adolescent & Family Health* 4, 191-192.
- Apter A (2010). Clinical aspects of suicidal behavior relevant to genetics. *European Psychiatry* 25, 257-259.

- Arana A, Wentworth CE, Ayuso-mateos JL, Arellano FM (2010). Suicide-related events in patients treated with antiepileptic drugs. *The New England Journal of Medicine* 363, 542-551.
- Barron S (2010). Police officer suicide within the New South Wales Police force from 1999 to 2008. *Police Practice and Research* 11, 371-382.
- Bartram DJ, Baldwin DS (2010). Veterinary surgeons and suicide: A structured review of possible influences on increased risk. *Veterinary Record* 166, 458-458.
- Bee D (2010). Suicide and mental wellbeing among vets. *Veterinary Record* 166, 504-504.
- Beghi M, Rosenbaum JF (2010). Risk factors for fatal and nonfatal repetition of suicide attempt: A critical appraisal. *Current Opinion in Psychiatry* 23, 349-355.
- Bell NS, Harford TC, Amoroso PJ, Hollander IE, Kay AB (2010). Prior health care utilization patterns and suicide among US army soldiers. *Suicide and Life-Threatening Behaviour* 40, 407-415.
- Bennewith O, Nowers M, Gunnell D (2010). Suicidal behaviour and suicide from the Clifton suspension bridge, Bristol and surrounding area in the UK: 1994-2003. *European Journal of Public Health*. Published online: 14 July 2010. doi: 10.1093/eurpub/ckq092.
- Berry HL, Butler JRA, Burgess CP, King U, Tsey K, Cadet-James YL, Rigby CW, Raphael B (2010). Mind, body, spirit: Co-benefits for mental health from climate change adaptation and caring for country in remote Aboriginal Australian communities. *New South Wales Public Health Bulletin* 21, 139-145.
- Bertilsson L (2010). CYP2D6, serotonin, and suicide — A relationship? *Clinical Pharmacology & Therapeutics* 88, 304-305.
- Bindler L, Touzeau T, Travers D, Millet B (2010). On suicide in Huntington's disease: A review. *Annales Medico-psychologiques* 68, 338-342.
- Bodén R, Sundström J, Lindström E, Wieselgren IM, Lindström L (2010). Five-year outcome of first-episode psychosis before and after the implementation of a modified assertive community treatment programme. *Social Psychiatry and Psychiatric Epidemiology* 45, 665-674.
- Bohnert ASB, Roeder K, Ilgen MA (2010). Unintentional overdose and suicide among substance users: A review of overlap and risk factors. *Drug and Alcohol Dependence* 3, 183-192.
- Bowers L, Banda T, Nijman H (2010). Suicide inside: A systematic review of inpatient suicides. *Journal of Nervous and Mental Disorders* 198, 315-328.
- Bradvik L, Mattisson C, Bogren M, Nettelbladt P (2010). Mental disorders in suicide and undetermined death in the Lundby study. The contribution of severe depression and alcohol dependence. *Archives of Suicide Research* 14, 266-275.
- Bramness JG, Walby FA, Hjellvik V, Selmer R, Tverdal A (2010). Self-reported mental health and its gender differences as a predictor of suicide in the middle-aged. *American Journal of Epidemiology* 172, 160-166.
- Braquehais MD, Ramos-Quiroga JA, Sher L (2010). Impulsivity: Current and future trends in pharmacological treatment. *Expert Review of Neurotherapeutics* 10, 1367-1369.
- Breggin PR (2010). Antidepressant-induced suicide, violence, and mania: Risks for military personnel. *Ethical Human Psychology and Psychiatry* 12, 111-121.
- Brent D, Melhem N, Turecki G (2010). Pharmacogenomics of suicidal events. *Pharmacogenomics* 11, 793-807.
- Bryan CJ, Cukrowicz KC, West CL, Morrow CE (2010). Combat experience and the acquired capability for suicide. *Journal of Clinical Psychology* 66, 1044-1056.

- Burrows S, Auger N, Roy M, Alix C (2010). Erratum to 'Socio-economic inequalities in suicide attempts and suicide mortality in Quebec, Canada, 1990-2005'. *Public Health* 124, 78-85.
- Calabria B, Degenhardt L, Hall W, Lynskey M (2010). Does cannabis use increase the risk of death? Systematic review of epidemiological evidence on adverse effects of cannabis use. *Drug and Alcohol Review* 29, 318-330.
- Capps R (2010). Back from the brink: War, suicide, and PTSD. *Health Affairs (Project Hope)* 29, 1407-1410.
- Carlborg A (2010). Suicide in schizophrenia. *Expert Review of Neurotherapeutics* 10, 1153-1164.
- Castagnini AC, Bertelsen A (2010). Mortality and causes of death of acute and transient psychotic disorders. *Social Psychiatry and Psychiatric Epidemiology*. Published online: August 09, 2010. doi: 10.1007/s00127-010-0276-1.
- Ceccherini-Nelli A, Priebe S (2010). Economic factors and suicide rates: Associations over time in four countries. *Social Psychiatry and Psychiatric Epidemiology*. Published online: 22 July 2010. doi: 10.1007/s00127-010-0275-2.
- Cheng D (2010). Higher suicide death rate in Rocky Mountain States and a correlation to altitude. *Wilderness and Environmental Medicine* 21, 177-178.
- Chong DJ, Bazil CW (2010). Update on anticonvulsant drugs. *Current Neurology and Neuroscience Reports* 1, 11.
- Claassen CA, Carmody T, Stewart SM, Bossarte RM, Larkin GL, Woodward WA, Trivedi MH (2010). Effect of 11 September 2001 terrorist attacks in the USA on suicide in areas surrounding the crash sites. *British Journal of Psychiatry* 196, 359-364.
- Classen TJ, Dunn RA (2010). The politics of hope and despair: The effect of presidential election outcomes on suicide rates. *Social Science Quarterly* 91, 593-612.
- Cortés E, Cubano A, Lewis JE, Castellanos D (2010). Antidepressants at autopsy in hispanic suicidal youth in Miami-Dade county, Florida. *Journal of Forensic Science*. Published online: September 14, 2010. doi: 10.1111/j.1556-4029.2010.01541.x.
- Courtet P, Guillaume S, Malafosse A, Jollant F (2010). Genes, suicide and decisions. *European Psychiatry* 25, 294-296.
- Cui H, Supriyanto I, Asano M, Ueno Y, Nagasaki Y, Nishiguchi N, Shirakawa O, Hishimoto A (2010). A common polymorphism in the 3'-UTR of the NOS1 gene was associated with completed suicides in Japanese male population. *Progress in Neuro-Psychopharmacology and Biological Psychiatry* 33, 1537-1544.
- Cutlip AC, Bankston WB, Lee MR (2010). Civic community and nonmetropolitan White suicide. *Archives of Suicide Research* 14, 261-265.
- Da Cruz D, Pearson A, Saini P, Miles C, While D, Swinson N, Williams A, Shaw J, Appleby L, Kapur N (2010). Emergency department contact prior to suicide in mental health patients. *Emergency Medicine Journal*. Published online: July 26, 2010. doi:10.1136/emj.2009.081869.
- De Almeida RM, Yonamine M (2010). Enzymatic-spectrophotometric determination of paraquat in urine samples: A method based on its toxic mechanism. *Toxicology Mechanisms and Methods* 20, 424-427.
- De Leo D, Svetcic J (2010). Suicides in psychiatric in-patients: What are we doing wrong? *Epidemiologia e Psichiatria Sociale* 19, 8-15.
- De Luca V, Tharmalingam S, Zai C, Potapova N, Strauss J, Vincent J, Kennedy JL (2010). Association of HPA axis genes with suicidal behaviour in schizophrenia. *Journal of Psychopharmacology* 24, 677-682.
- de Souza Minayo MC, Cavalcante FG (2010). Suicide in elderly people: A literature review. *Revista de Saude Publica* 44, 750-757.

- Dinkel A, Baumert J, Erazo N, Ladwig K-H (2010). Jumping, lying, wandering: Analysis of suicidal behaviour patterns. *Journal of Psychiatric Research*. Published online: 10 June 2010. doi:10.1016/j.jpsychires.2010.05.005.
- Dome P, Kapitany B, Ignits G, Porkolab L, Rihmer Z (2010). Tobacco consumption and antidepressant use are associated with the rate of completed suicide in Hungary: An ecological study. *Journal of Psychiatric Research*. Published online: 09 September 2010. doi:10.1016/j.jpsychires.2010.08.011
- Dome P, Kapitany B, Ignits G, Rihmer Z (2010). Season of birth is significantly associated with the risk of completed suicide. *Biological Psychiatry* 68, 148-155.
- Dos Santos PA, Longo D, Brandalize AP, Schüler-Faccini L (2010). MTHFR C677T is not a risk factor for autism spectrum disorders in South Brazil. *Psychiatric Genetics* 20, 187-189.
- Dudley M, Goldney R, Hadzi-Pavlovic D (2010). Are adolescents dying by suicide taking SSRI antidepressants? A review of observational studies. *Australasian Psychiatry* 18, 242-245.
- Dwivedi Y, Pandey GN (2010). Elucidating biological risk factors in suicide: Role of protein kinase A. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*. Published online: 3 September 2010. doi:10.1016/j.pnpbp.2010.08.025
- Dye MH (2010). Deprivation, importation, and prison suicide: Combined effects of institutional conditions and inmate composition. *Journal of Criminal Justice* 38, 796-806.
- Epelbaum C, Taylor ER, Dekleva K (2010). Immigration trauma, substance abuse, and suicide. *Harvard Review of Psychiatry* 18, 304-313.
- Falcone T, Fazio V, Lee C, Simon B, Franco K, Marchi N, Janigro D (2010). Serum S100B: A potential biomarker for suicidality in adolescents? *Public Library of Science One* 5, 11089.
- Fiori LM, Turecki G (2010). Gene expression profiling of suicide completers. *European Psychiatry* 25, 287-290.
- Flood AM, Boyle SH, Calhoun PS, Dennis MF, Barefoot JC, Moore SD, Beckham JC (2010). Prospective study of externalizing and internalizing subtypes of posttraumatic stress disorder and their relationship to mortality among Vietnam veterans. *Comprehensive Psychiatry* 51, 236-232.
- Gagné M, Robitaille Y, Hamel D, St-Laurent D (2010). Firearms regulation and declining rates of male suicide in Quebec. *Injury Prevention* 16, 247-253.
- Gettings L (2006). Psychological well-being in rheumatoid arthritis: a review of the literature. *Musculoskeletal Care* 8, 99-106.
- Giancola PR, Josephs RA, Parrott DJ, Duke AA (2010). Alcohol myopia revisited: Clarifying aggression and other acts of disinhibition through a distorted lens. *Perspectives on Psychological Science* 5, 265-278.
- Gibbons RD, Amatya AK, Brown CH, Hur K, Marcus SM, Bhaumik DK, Mann JJ (2010). Post-approval drug safety surveillance. *Annual Review of Public Health* 31, 419-437.
- Gibbons RD, Lambert BL, Mann JJ (2010). Antiepileptic medications and the risk of suicide. *Journal of the American Medical Association* 304, 521-522.
- Giegling I, Chiesa A, Mandelli L, Gibiino S, Hartmann AM, Möller HJ, Schneider B, Schnabel A, Maurer K, De Ronchi D, Rujescu D, Serretti A (2010). Influence of neuronal cell adhesion molecule (NCAM1) variants on suicidal behaviour and correlated traits. *Psychiatry Research*. Published online: 18 May 2010. doi: 10.1016/j.psychres.2009.03.028.
- Goldblatt MJ (2010). Suicide and masochism: The evolving relationship between guilt, suffering, self-attack and suicide. *Psychoanalytic Psychotherapy* 24, 93-100.
- Goldman-Mellor SJ, Saxton KB, Catalano RC (2010). Economic contraction and mental health: A review of the evidence, 1990-2009. *International Journal of Mental Health* 39, 6-31.

- Gradus JL, Qin P, Lincoln AK, Miller M, Lawler E, Lash TL (2010). The association between adjustment disorder diagnosed at psychiatric treatment facilities and completed suicide. *Clinical Epidemiology* 2, 23-28.
- Gradus JL, Qin P, Lincoln AK, Miller M, Lawler E, Sørensen HT, Lash TL (2010). Acute stress reaction and completed suicide. *International Journal of Epidemiology*. Published online: July 12, 2010. doi: 10.1093/ije/dyq112.
- Gradus JL, Qin P, Lincoln AK, Miller M, Lawler E, Sørensen HT, Lash TL (2010). Inflammatory bowel disease and completed suicide in Danish adults. *Inflammatory Bowel Diseases*. Published online: 28 June 2010. doi: 10.1002/ibd.21298.
- Haines J, Williams CL, Lester D (2010). Murder-suicide: A reaction to interpersonal crises. *Forensic Science International* 202, 93-96.
- Hassanin H, Harbi A, Saif A, Davis J, Easa D, Harrigan R (2010). Changes in antidepressant medications prescribing trends in children and adolescents in Hawai'i following the FDA black box warning. *Hawaii Medical Journal* 69, 17-19.
- Hawton K (2010). Completed suicide after attempted suicide. *British Medical Journal* 341, 3064.
- Hawton K, Bergen H, Simkin S, Cooper J, Waters K, Gunnell D, Kapur N (2010). Toxicity of antidepressants: Rates of suicide relative to prescribing and non-fatal overdose. *British Journal of Psychiatry* 196, 354-358.
- Hemenway D, Barber C, Miller M (2010). Unintentional firearm deaths: A comparison of other-inflicted and self-inflicted shootings. *Accident Analysis and Prevention* 42, 1184-1188.
- Holikatti P, Grover S (2010). Risk factors for suicide. *British Journal of Psychiatry* 196, 415.
- Holmgren A, Jones AW (2010). Demographics of suicide victims in Sweden in relation to their blood-alcohol concentration and the circumstances and manner of death. *Forensic Science International* 198, 17-22.
- Huynh C, Guile JM, Breton JJ, Desrosiers L, Cohen D (2010). The Cloninger's psychobiological model of temperament and character in adult bipolar disorders: A literature review. *Annales Medico-Psychologiques* 68, 325-332.
- Ilggen MA, Conner KR, Valenstein M, Austin K, Blow FC (2010). Violent and nonviolent suicide in veterans with substance-use disorders. *Journal of Studies on Alcohol and Drugs* 71, 473-479.
- Im J-S, Choi SH, Hong D, Seo HJ, Park S, Hong JP (2010). Proximal risk factors and suicide methods among suicide completers from national suicide mortality data 2004-2006 in Korea. *Comprehensive Psychiatry*. Published online: 1 September 2010. doi: 10.1016/j.comppsy.2010.07.005.
- Inagaki K (2010). Income inequality and the suicide rate in Japan: Evidence from Conintegration and La-Var. *Journal of Applied Economics* 13, 113-133.
- Ingram Cooke RW (2010). Does neonatal and infant neurodevelopmental morbidity of multiples and singletons differ? *Seminars in Fetal and Neonatal Medicine*. Published online: 2 August 2010. doi:10.1016/j.siny.2010.06.003.
- Innamorati M, Lester D, Amore M, Girardi P, Tatarelli R, Pompili M (2010). Alcohol consumption predicts the EU suicide rates in young women aged 15-29 years but not in men: Analysis of trends and differences among early and new EU countries since 2004. *Alcohol* 44, 463-469.
- Isacsson G, Reutfors J, Papadopoulos FC, Osby U, Ahlner J (2010). Antidepressant medication prevents suicide in depression. *Acta Psychiatrica Scandinavica*. Published online: 8 April 2010. doi: 10.1111/j.1600-0447.2010.01561.x.

- Jepsen P, Schmidt LE, Larsen FS, Vilstrup H (2010). Long-term prognosis for transplant-free survivors of paracetamol-induced acute liver failure. *Alimentary Pharmacology and Therapeutics* 32, 894-900.
- Jokinen J, Forslund K, Ahnemark E, Gustavsson JP, Nordstrom P, Asberg M (2010). Karolinska interpersonal violence scale predicts suicide in suicide attempters. *Journal of Clinical Psychiatry* 71, 1025-1032.
- Jones RM, Hales H, Butwell M, Ferriter M, Taylor PJ (2010). Suicide in high security hospital patients. *Social Psychiatry and Psychiatric Epidemiology*. Published online: 22 July 2010. 10.1007/s00127-010-0275-2.
- Kalucy RS (2010). Identifying the pathways to suicide in child sexual abuse victims. *The Medical Journal of Australia* 192, 182-183.
- Kaptein AA, van Dijk S, Broadbent E, Falzon L, Thong M, Dekker FW (2010). Behavioural research in patients with end-stage renal disease: A review and research agenda. *Patient Education and Counseling* 81, 23-29.
- Karjalainen K, Lintonen T, Impinen A, Makela P, Rahkonen O, Lillsunde P, Ostamo A (2010). Mortality and causes of death among drugged drivers. *Journal of Epidemiology and Community Health* 64, 506-512.
- Kasckow J, Liu N, Haas GL, Phillips MR (2010). Case-control study of the relationship of depressive symptoms to suicide in a community-based sample of individuals with schizophrenia in China. *Schizophrenia Research* 122, 226-231.
- Kauppi A, Kumpulainen K, Karkola K, Vanamo T, Merikanto J (2010). Maternal and paternal filicides: A retrospective review of filicides in Finland. *Journal of the American Academy of Psychiatry and the Law* 38, 229-238.
- Ketter TA (2010). Diagnostic features, prevalence, and impact of bipolar disorder. *The Journal of Clinical Psychiatry* 71, 14-14.
- Khang YH, Yang S, Cho HJ, Jung-Choi K, Yun SC (2010). Decomposition of socio-economic differences in life expectancy at birth by age and cause of death among 4 million South Korean public servants and their dependents. *International Journal of Epidemiology*. Published online: 20 July 2010. doi: 10.1093/ije/dyq117.
- Kim C, Jung SH, Kang DR, Kim HC, Moon KT, Hur NW, Shin DC, Suh I (2010). Ambient particulate matter as a risk factor for suicide. *American Journal of Public Health* 167, 1100-1107.
- Kim HM, Eisenberg D, Ganoczy D, Hoggatt K, Austin KL, Downing K, McCarthy JF, Ilgen M, Valenstein M (2010). Examining the relationship between clinical monitoring and suicide risk among patients with depression: Matched case-control study and instrumental variable approaches. *Health Services Research* 45, 1205-1226.
- Kim N, Mickelson JB, Brenner BE, Haws CA, Yurgelun-Todd DA, Renshaw PF (2010). Altitude, gun ownership, rural areas, and suicide. *The American Journal of Psychiatry*. Published online: 15 Septemebur 2010. doi: 10.1176/appi.ajp.2010.10020289.
- Kim Y, Kim H, Kim D-S (2010). Association between daily environmental temperature and suicide mortality in Korea (2001-2005). *Psychiatry Research*. Published online: 15 September, 2010. doi:10.1016/j.psychres.2010.08.006.
- Kolves K (2010). Child suicide, family environment, and economic crisis. *Crisis* 31, 115-117.
- Kondo N, Oh J (2010). Suicide and karoshi (death from overwork) during the recent economic crises in Japan: The impacts, mechanisms and political responses. *Journal of Epidemiology and Community Health* 64, 649-650.
- Kong Y, Zhang J (2010). Access to farming pesticides and risk for suicide in Chinese rural young people. *Psychiatry Research* 179, 217-221.

- Kordic M, Babic D, Petrov B, Kordic J, Jelavic B, Pivic G (2010). The meteorological factors associated with suicide. *Collegium Antropologicum* 34, 151-155.
- Kuo CJ, Chen VC, Lee WC, Chen WJ, Ferri CP, Stewart R, Lai TJ, Chen CC, Wang TN, Ko YC (2010). Asthma and suicide mortality in young people: A 12-year follow-up study. *American Journal of Public Health*. Published online July 15, 2010. doi: 10.1176/appi.ajp.2010.09101455.
- Kuo CJ, Tsai S-Y, Liao Y-T, Lee W-C, Sung X-W, Chen C-C (2010). Psychiatric discharge against medical advice is a risk factor for suicide but not for other causes of death. *Journal of Clinical Psychiatry* 71, 808-809.
- Kurihara T (2010). No differences in mortality and suicide between treated and never-treated people with schizophrenia. *Evidence-Based Mental Health* 13, 46.
- Kuroki M (2010). Suicide and unemployment in Japan: evidence from municipal level suicide rates and age-specific suicide rates. *Journal of Socio-Economics* 39, 683-691.
- Lankford A (2010). Do suicide terrorists exhibit clinically suicidal risk factors? A review of initial evidence and call for future research. *Aggression and Violent Behavior* 15, 334-340.
- Lara DR (2010). Caffeine, mental health, and psychiatric disorders. *Journal of Alzheimer's Disease* 20, 239-248.
- Large MM, Smith G, Nielssen O (2010). Homicide followed by suicide. *The Journal of the American Academy of Psychiatry and the Law* 38, 146-147.
- Law CK, Yip PS, Caine ED (2010). The contribution of charcoal burning to the rise and decline of suicides in Hong Kong from 1997-2007. *Social Psychiatry and Psychiatric Epidemiology*. Published online: 24 June 2010. doi: 10.1007/s00127-010-0250-y.
- Law YW, Wong PW, Yip PS (2010). Suicide with psychiatric diagnosis and without utilization of psychiatric service. *BMC Public Health* 10, 431.
- Lester D (2010). Big five personality scores of Americans by state. *Psychological Reports* 106, 433-434.
- Lester D, Battuello M, Innamorati M, Falcone I, De Simoni E, Del Bono SD, Tatarelli R, Pompili M (2010). Participation in sports activities and suicide prevention. *International Journal of Sports Psychology* 41, 58-72.
- Lester D, Braaten G (2010). DDT and personal violence (suicide and homicide). *Psychological Reports* 106, 78.
- Lester D, Hathaway D (2010). Blood type, homicide, and suicide. *Psychological Reports* 106, 405-406.
- Liberzon I, George SA (2010). SSRI-enhanced locus coeruleus activity and adolescent suicide: Lessons from animal models. *Neuropsychopharmacology* 35, 1619-1620.
- Liem M, de Vet R, Koenraadt F (2010). Filicide followed by parasuicide: A comparison of suicidal and non-suicidal child homicide. *Child Abuse and Neglect* 34, 558-562.
- Liem M, Nieuwebeerta P (2010). Homicide followed by suicide: A comparison with homicide and suicide. *Suicide and Life Threatening Behavior* 40, 133-145.
- Liettu A, Mikkola L, Saavala H, Rasanen P, Joukamaa M, Hakko H (2010). Mortality rates of males who commit parricide or other violent offense against a parent. *Journal of the American Academy of Psychiatry and the Law* 38, 212-220.
- Likhvar V, Honda Y, Ono M (2010). Relation between temperature and suicide mortality in Japan in the presence of other confounding factors using time-series analysis with a semi-parametric approach. *Environmental Health and Preventive Medicine*. Published online: 30 June 2010. doi: 10.1007/s12199-010-0163-0.
- Lippmann S (2010). Guns: Dangerous, especially for suicide, and costly for America. *Psychiatry* 7, 2.

- Lipsicas BC, Henrik Mäkinen I (2010). Immigration and suicidality in the young. *Canadian Journal of Psychiatry* 55, 274-281.
- Lipworth L, McLaughlin JK (2010). Excess suicide risk and other external causes of death among women with cosmetic breast implants: A neglected research priority. *Current Psychiatry Reports* 12, 234-238.
- Loga S, Loga-Zec S, Spremo M (2010). Cannabis and psychiatric disorders. *Psychiatria Danubina* 22, 296-297.
- Lord VB, Sloop MW (2010). Suicide by cop: Police shooting as a method of self-harming. *Journal of Criminal Justice* 38, 889-895.
- Lotrich F (2010). Management of psychiatric disease in hepatitis C treatment candidates. *Current Hepatitis Reports* 9, 113-118.
- Mac An Ghail M, Haywood C (2010). Understanding boys?: Thinking through boys, masculinity and suicide. *Social Science and Medicine*. Published online 26 August 2010. doi:10.1016/j.socscimed.2010.07.036.
- Magnusson S, Mäkinen IH (2010). Sweden: Income and suicide. *Psychological Reports* 107, 157-162.
- Mainio A, Hakko H, Rasanen P, Timonen M (2010). Cardiovascular diseases among suiciders: A population-based study in northern Finland population. *Cardiovascular Psychiatry and Neurology*. Published online: 18 June 2010. doi:10.1155/2010/302102.
- Manthorpe J, Iliffe S (2010). Suicide in later life. *British Journal of General Practice* 60, 129-130.
- McCartney G, Thomas S, Thomson H, Scott J, Hamilton V, Hanlon P, Morrison DS, Bond L (2010). The health and socioeconomic impacts of major multi-sport events: systematic review (1978-2008). *British Medical Journal* 340, c2369.
- McEwan T, Mullen P, MacKenzie R (2010). Suicide among stalkers. *Journal of Forensic Psychiatry and Psychology* 21, 514-520.
- McGirr A, Diaconu G, Berlim MT, Pruessner JC, Sablé R, Cabot S, Turecki G (2010). Dysregulation of the sympathetic nervous system, hypothalamic-pituitary-adrenal axis and executive function in individuals at risk for suicide. *Journal of Psychiatry & Neuroscience*. Published online: 1 September 2010. doi: 10.1503/jpn.090121.
- McNamara RK, Liu Y (2010). Reduced expression of fatty acid biosynthesis genes in the prefrontal cortex of patients with major depressive disorder. *Journal of Affective Disorders*. Published online: 21 September 2010. doi:10.1016/j.jad.2010.08.021.
- Mehlum L, Jørgensen T, Diep LM, Nrugham L (2010). Is organizational change associated with increased rates of readmission to general hospital in suicide attempters? A 10-year prospective catchment area study. *Archives of Suicide Research* 14, 171-181.
- Miller B, Alaraisanen A, Miettunen J, Jarvelin M-R, Koponen H, Rasanen P, Isohanni M, Kirkpatrick B (2010). Advanced paternal age, mortality, and suicide in the general population. *Journal of Nervous and Mental Disease* 198, 404-411.
- Minkov M (2010). Predictors of national suicide rates: A reply to Voracek (2004, 2006, 2009). *Psychological Reports* 106, 718-720.
- Mirsky J, Kohn R, Dolberg P, Levav I (2010). Suicidal behavior among immigrants. *Social Psychiatry & Psychiatric Epidemiology*. Published online: 07 September 2010. doi: 10.1007/s00127-010-0280-5.
- Mohandie K, Meloy JR (2010). Hostage and barricade incidents within an officer-involved shooting sample: Suicide by cop, intervention efficacy, and descriptive characteristics. *Journal of Police Crisis Negotiations* 10, 101-115.

- Moore EC, Pilcher DV, Bailey MJ, Cleland H, McNamee J (2010). A simple tool for mortality prediction in burns patients: APACHE III score and FTSA. *Burns*. Published online: 31 May 2010. doi: 10.1016/j.burns.2010.03.013.
- Mouri K, Hishimoto A, Fukutake M, Nishiguchi N, Shirakawa O, Maeda K (2010). Association study of RGS2 gene polymorphisms with panic disorder in Japanese. *The Kobe Journal of Medical Sciences* 55, 116-121.
- Nakao M (2010). Work-related stress and psychosomatic medicine. *BioPsychoSocial Medicine* 4, 4.
- Nedic G, Nikolac M, Sviglin KN, Muck-Seler D, Borovecki F, Pivac N (2010). Association study of a functional catechol- O-methyltransferase (COMT) Val108/158Met polymorphism and suicide attempts in patients with alcohol dependence. *The International Journal of Neuropsychopharmacology*. Published online: 22 September 2010. doi: 10.1017/S1461145710001057.
- Neligan A, Bell GS, Mula M (2010). Antiepileptic medications and the risk of suicide. *Journal of American Medical Association* 304, 521-521.
- Neuner T, Hubner-Liebermann B, Wolfersdorf M, Felber W, Hajak G, Spiessl H (2010). Time patterns of inpatient suicides. *International Journal of Psychiatry in Clinical Practice* 14, 95-101.
- Nierenberg AA (2010). The congressional antidepressant hearings: Exploring the relationship between medication and veteran suicide. *CNS Spectrums* 15, 348-349.
- Opmeer EM, Kortekaas R, Aleman A (2010). Depression and the role of genes involved in dopamine metabolism and signalling. *Progress in Neurobiology* 92, 112-133.
- Patorno E, Avorn J, Schneeweiss S (2010). Antiepileptic medications and the risk of suicide: Reply. *Journal of the American Medical Association* 304, 522-523.
- Patorno E, Bohn RL, Wahl PM, Avorn J, Patrick AR, Liu J, Schneeweiss S (2010). Anticonvulsant medications and the risk of suicide, attempted suicide, or violent death. *Journal of American Medical Association* 303, 1401-1409.
- Pedersen NL, Fiske A (2010). Genetic influences on suicide and nonfatal suicidal behavior: Twin study findings. *European Psychiatry* 25, 264-267.
- Peng EYC, Lee M-B, Morisky DE, Yeh C-Y, Farabee D, Lan Y-C, Chen Y-MA, Lyu S-Y (2010). Psychiatric morbidity in HIV-infected male prisoners. *Journal of the Formosan Medical Association* 109, 177-184.
- Peter JV (2010). Response to Letter to the Editor entitled 'Is there a relationship between the WHO hazard classification of organophosphate pesticide and outcomes in suicidal human poisoning with commercial organophosphate formulations?'. *Regulatory Toxicology and Pharmacology* 57, 339-340.
- Peter JV, Jerobin J, Nair A, Bennett A (2010). Is there a relationship between the WHO hazard classification of organophosphate pesticide and outcomes in suicidal human poisoning with commercial organophosphate formulations? *Regulatory Toxicology and Pharmacology* 57, 99-102.
- Phillips MR (2010). Rethinking the role of mental illness in suicide. *American Journal of Psychiatry* 167, 731-733.
- Piatt EE, Munetz MR, Ritter C (2010). An examination of premature mortality among decedents with serious mental illness and those in the general population. *Psychiatric Services* 61, 663-668.
- Pires GN, Andersen ML, Kahan V, Araujo P, Galduróz JC, Tufik S (2010). Is serotonin responsible for the relationship between sleep debt and suicide? A comment on Kohyama's hypothesis. *Medical Hypotheses*. Published online: 29 July 2010. doi: 10/1016/j.mehy.2010.07.015

- Pompili M (2010). Exploring the phenomenology of suicide. *Suicide and Life Threatening Behaviour* 40, 234-244.
- Pompili M, Serafini G, Innamorati M, Dominici G, Ferracuti S, Kotzalidis GD, Serra G, Girard P, Janiri L, Tatarelli R, Sher L, Lester, D (2010). Suicidal behavior and alcohol abuse. *International Journal of Environmental Research and Public Health* 7, 1392-1431.
- Pompili M, Tatarelli R, Girardi P, Tondo L, Baldessarini RJ (2010). Suicide risk during anticonvulsant treatment. *Pharmacoeconomics and Drug Safety* 19, 525-528.
- Poudel-Tandukar K, Nanri A, Iwasaki M, Mizoue T, Matsushita Y, Takahashi Y, Noda M, Inoue M, Tsugane S (2010). Long chain n-3 fatty acids intake, fish consumption and suicide in a cohort of Japanese men and women — The Japan Public Health Center-based (JPHC) Prospective Study. *Journal of Affective Disorders*. Published online: 9 August 2010. doi:10.1016/j.jad.2010.07.014.
- Poulter MO, Du L, Zhurov V, Palkovits M, Faludi G, Merali Z, Anisman H (2010). Altered organization of GABA(A) receptor mRNA expression in the depressed suicide brain. *Frontiers in Molecular Neuroscience* 3, 3.
- Pregelj P, Nedic G, Paska AV, Zupanc T, Nikolac M, Balažić J, Tomori M, Komel R, Seler DM, Pivac N (2010). The association between brain-derived neurotrophic factor polymorphism (BDNF Val66Met) and suicide. *Journal of Affective Disorders*. Published online: 27 July 2010. doi:10.1016/j.jad.2010.07.001.
- Razvodovsky YE (2010). Psychosocial distress as a risk factor of asthma mortality. *Psychiatria Danubina* 22, 167-172.
- Reutfors J, Bahmanyar S, Jonsson EG, Ekblom A, Nordstrom P, Brandt L, Osby U (2010). Diagnostic profile and suicide risk in schizophrenia spectrum disorder. *Schizophrenia Research*. Published online: 7 August 2010. doi:10.1016/j.schres.2010.07.014.
- Rice BD, Smith RD, Delpech VC (2010). HIV infection and suicide in the era of HAART in England, Wales and Northern Ireland. *AIDS* 24, 1795-1797.
- Rihmer Z, Gonda X, Rihmer A, Fountoulakis KN (2010). Suicidal and violent behaviour in mood disorders: A major public health problem. A review for the clinician. *International Journal of Psychiatry in Clinical Practice* 14, 88-94.
- Robinson J, Harris M, Cotton S, Hughes A, Conus P, Lambert M, Schimmelmann BG, McGorry P (2010). Sudden death among young people with first-episode psychosis: An 8-10 year follow-up study. *Psychiatry Research* 177, 305-308.
- Rodríguez Andrés A, Collings S, Qin A (2010). Sex-specific impact of socio-economic factors on suicide risk: A population-based case-control study in Denmark. *European Journal of Public Health* 20, 265-270.
- Rose GL, Brown RE Jr (2010). The impaired anesthesiologist: Not just about drugs and alcohol anymore. *Journal of Clinical Anesthesia* 22, 379-384.
- Rosmann MR (2010). The agrarian imperative. *Journal of Agromedicine* 15, 71-75.
- Rothing A, Svendsen SHB (2010). Homotolerance and heterosexuality as Norwegian values. *Journal of LGBT Youth* 7, 147-166.
- Saifi A, Mansourian AR, Marjani A, Mansourian HR (2010). Drugs and suicide by young adults (Gorgan-Northern Iran). *Journal of Clinical and Diagnostic Research* 4, 2253-2256.
- Saleh C (2010). STN DBS and suicide: Is tangential evidence, evidence enough? *European Neurology* 63, 372-373.
- Salib E, Cortina-Borja M (2010). An association between month of birth and method of suicide. *International Journal of Psychiatry in Clinical Practice* 14, 8-17.
- Samandari G, Martin SL, Kupper LL, Schiro S, Norwood T, Avery M (2010). Are pregnant and postpartum women at increased risk for violent death? Suicide and homicide findings

- from North Carolina. *Maternal and Child Health Journal*. Published online: 12 June 2010. doi: 10.1007/s10995-010-0623-6,
- Sarras H, Semeralul MO, Fadel MP, Feldcamp LA, Labrie V, Wong AHC (2010). Elevated PICK1 mRNA in schizophrenia increased SRR mRNA in suicide. *Schizophrenia Research* 120, 236-237.
- Schneeweiss S, Patrick AR, Solomon DH, Dormuth CR, Miller M, Mehta J, Lee JC, Wang PS (2010). Comparative safety of antidepressant agents for children and adolescents regarding suicidal acts. *Pediatrics* 125, 876-888.
- Schneeweiss S, Patrick AR, Solomon DH, Mehta J, Dormuth C, Miller M, Lee JC, Wang PS (2010). Variation in the risk of suicide attempts and completed suicides by antidepressant agent in adults: A propensity score-adjusted analysis of 9 years' data. *Archives of General Psychiatry* 67, 497-506.
- Scourfield J, Fincham B, Langer S, Shiner M (2010). Sociological autopsy: An integrated approach to the study of suicide in men. *Social Science and Medicine*. Published online: 24 May 2010. doi:10.1016/j.socscimed.2010.01.054.
- Selvaraj V, Veeravalli S, Ramaswamy S, Balon R, Yeragani VK (2010). Depression, suicidality and antidepressants: a coincidence. *Indian Journal of Psychiatry* 52, 17-20.
- Shah A (2010). A replication of the relationship between elderly suicide rates and the human development index in a cross-national study. *International Psychogeriatrics* 22, 727-732.
- Shah A (2010). The relationship between obesity and elderly suicide rates: a cross-national study. *Journal of Injury and Violence Research* 2, 105-109.
- Shah A, Bhatia V (2010). The relationship between elderly suicide rates and smoking in England and Wales. *International Psychogeriatrics* 22, 504-507.
- Sher L (2010). Neurobiology of suicidal behavior in post-traumatic stress disorder. *Expert Review of Neurotherapeutics* 10, 1233-1235.
- Sher L (2010). New scientific evidence supports the concept of post-traumatic mood disorder and an association of post-traumatic mood disorder with completed suicide. *Medical Hypotheses* 75, 271-272.
- Short N (2010). Suicide and mental wellbeing among vets. *Veterinary Record* 166, 470-471.
- Shrira I, Christenfeld N (2010). Disentangling the person and the place as explanations for regional differences in suicide. *Suicide and Life Threatening Behaviour* 40, 287-297.
- Shulman KI (2010). Lithium for older adults with bipolar disorder: Should it still be considered a first-line agent? *Drugs & Aging* 27, 607-615.
- Sinclair J (2010). High mortality and reduced quality of life in people who have presented to hospital for self-harm in the UK. *Evidence-Based Mental Health* 13, 74.
- Skegg K, Firth H, Gray A, Cox B (2010). Suicide by occupation: Does access to means increase the risk? *Australian and New Zealand Journal of Psychiatry* 44, 429-434.
- Smeets J (2010). Suicide and mental wellbeing among vets. *Veterinary Record* 166, 471-471.
- Smith PN, Cukrowicz KC (2010). Capable of suicide: A functional model of the acquired capability component of the Interpersonal-Psychological Theory of suicide. *Suicide and Life Threatening Behaviour* 40, 266-275.
- Spoletini I, Gianni W, Caltagirone C, Madaio R, Repetto L, Spalletta G (2010). Suicide and cancer: Where do we go from here? *Critical Reviews in Oncology/Hematology*. Published online: 2 June 2010. doi: 10.1016/j.critrevonc.2010.05.005.
- Stattin P, Garmo H, Steineck G, Bill-Axelson A (2010). Re: Immediate risk of suicide and cardiovascular death after a prostate cancer diagnosis: Cohort study in the United States. *National Cancer Institute*. Published online: 12 August 2010. doi: 10.1093/jnci/djq307.

- Takai M, Yamamoto K, Iwamitsu Y, Miyaji S, Yamamoto H, Tatematsu S, Yukawa M, Ide A, Kamijo Y, Soma K, Miyaoka H (2010). Exploration of factors related to hara-kiri as a method of suicide and suicidal behavior. *European Psychiatry*. Published online: 26 April 2010. <http://dx.doi.org/10.1016/j.eurpsy.2009.10.005>.
- Tarrier N (2010). The cognitive and behavioral treatment of PTSD, what is known and what is known to be unknown: How not to fall into the practice gap. *Clinical Psychology-Science and Practice* 17, 134-143.
- Tewksbury R, Suresh G, Holmes RM (2010). Factors related to suicide via firearms and hanging and leaving of suicide notes. *International Journal of Men's Health* 9, 40-49.
- Tong Y, Phillips MR (2010). Cohort-specific risk of suicide for different mental disorders in China. *British Journal of Psychiatry* 196, 467-473
- Troister T, Holden RR (2010). Comparing psychache, depression, and hopelessness in their associations with suicidality: A test of Shneidman's theory of suicide. *Personality and Individual Differences* 49, 689-693.
- Tsai J-F (2010). Socioeconomic factors outweigh climate in the regional difference of suicide death rate in Taiwan. *Psychiatry Research* 179, 212-216.
- Tsai J-F, Cho W (2010). The secular trend of suicide rate and the socio-economic, media, and climatic factors in Taiwan, 1976-2009: A population-based study. *Journal of Affective Disorders*. Published online: 15 September 2010. doi:10.1016/j.jad.2010.08.008 .
- Turaga KK, Malafa MP, Jacobsen PB, Schell MJ, Sarr MG (2010). Suicide in patients with pancreatic cancer. *Cancer*. Published online: 7 September. Doi: 10.1002/cncr.25428.
- Valdizán EM, Díez-Alarcia R, González-Maeso J, Pilar-Cuellar F, García-Sevilla JA, Meana JJ, Pazos A (2010). (2)-adrenoceptor functionality in postmortem frontal cortex of depressed suicide victims. *Biological Psychiatry* 68, 869-872.
- Valente SM (2010). Assessing patients for suicide risk. *Nursing* 40, 99-106.
- Van Heeringen C, Bijttebier S, Godfrin K (2010). Suicidal brains: A review of functional and structural brain studies in association with suicidal behaviour. *Neuroscience & Biobehavioral Reviews*. Published online: 6 September 2010. doi: 10.1234/12345678.
- van Leeuwen PJ, Schroder FH (2001). Risk factors: Increased risk of suicide after prostate cancer diagnosis. *Nature Reviews Urology* 7, 369-370.
- Vey EL, Kovelman I (2010). Adverse events, toxicity and post-mortem data on duloxetine: Case reports and literature survey. *Journal of Forensic and Legal Medicine* 17, 175-185.
- Violanti JM (2010). Police suicide: A national comparison with fire-fighter and military personnel. *Policing* 33, 270-286.
- von Borczyskowski A, Lindblad F, Vinnerljung B, Reintjes R, Hjern A (2010). Familial factors and suicide: An adoption study in a Swedish National Cohort. *Psychological Medicine*. Published online: 7 July 2010. doi: 10.1017/S0033291710001315.
- Wagenaar AC, Tobler AL, Komro KA (2010). Effects of alcohol tax and price policies on morbidity and mortality: A systematic review. *American Journal of Public Health*. Published online: 23 September 2010. doi: 10.2105/AJPH.2009.186007.
- Warren-Gordon K, Byers BD, Brodt SJ, Wartak M, Biskupski B (2010). Murder followed by suicide: A newspaper surveillance study using the New York Times index. *Journal of Forensic Sciences*. Published online: 4 August 2010. doi: 10.1111/j.1556-4029.2010.01473.x.
- Wasserman D, Wasserman J, Sokolowski M (2010). Genetics of HPA-axis, depression and suicidality. *European Psychiatry* 25, 278-280.
- Westefeld JS, Bell A, Bermingham C, Button C, Shaw K, Skow C, Stinson RD, Woods T (2010). Suicide among preadolescents: A call to action. *Journal of Loss and Trauma* 15, 381-407.

- Whitley E, Rasmussen F, Tynelius P, Batty GD (2010). Physical stature and method-specific attempted suicide: Cohort study of one million men. *Psychiatry Research* 179, 116-118.
- Windfuhr K, Bickley H, While D, Williams A, Hunt IM, Appleby L, Kapur N (2010). Nonresident suicides in England: A national study. *Suicide and Life-Threatening Behavior* 40, 151-158.
- Wolfe F, Hassett AL, Walitt B, Michaud K (2010). Mortality in fibromyalgia: An 8,186 patient study over 35 years. *Arthritis Care & Research*. Published online: 26 July 2010. doi: 10.1002/acr.20301.
- Yackerson NS, Zilberman A, Todder D, Kaplan Z (2010). The influence of several changes in atmospheric states over semi-arid areas on the incidence of mental health disorders. *International Journal of Biometeorology*. Published online: 29 July 2010. doi: 10.1007/s00484-010-0350-0.
- Yamamura E (2010). The different impacts of socio-economic factors on suicide between males and females. *Applied Economics Letters* 10, 1009-1012.
- Yang AC, Tsai SJ, Huang NE (2010). Decomposing the association of completed suicide with air pollution, weather, and unemployment data at different time scales. *Journal of Affective Disorder*. Published online: 15 September 2010. doi:10.1016/j.jad.2010.08.010.
- Yanos PT, Roe D, Lysaker PH (2010). The impact of illness identity on recovery from severe mental illness. *American Journal of Psychiatric Rehabilitation* 13, 73-93.
- Yip PS, Cheung YT, Chau PH, Law YW (2010). The impact of epidemic outbreak: The case of severe acute respiratory syndrome (SARS) and suicide among older adults in Hong Kong. *Crisis* 31, 86-92.
- Yur Yev A, Leppik L, Tooding LM, Sisask M, Varnik P, Wu J, Varnik A (2010). Social inclusion affects elderly suicide mortality. *International Psychogeriatrics*. Published online: 14 September 2010. doi: 10.1017/S1041610210001614.
- Zahl PH, De Leo D, Ekeberg O, Hjelmeland H, Dieserud G (2010). The relationship between sales of SSRI, TCA and suicide rates in the Nordic countries. *BMC Psychiatry* 10, 62.
- Zalsman G (2010). Timing is critical: Gene, environment and timing interactions in genetics of suicide in children and adolescents. *European Psychiatry* 5, 284-286.
- Zhang J, Xiao S, Zhou L (2010). Mental disorders and suicide among young rural Chinese: A case-control psychological autopsy study. *American Journal of Psychiatry* 167, 773-781.
- Zhang J, Zhou L (2010). Suicidal ideation, plans, and attempts among rural young Chinese: The effect of suicide death by a family member or friend. *Community Mental Health Journal*. Published online: 10 September 2010. doi: 10.1007/s10597-010-9332-2.
- Zhang Y, Zhang C, Yuan G, Yao J, Cheng Z, Liu C, Liu Q, Wan G, Shi G, Cheng Y, Ling Y, Li K (2010). Effect of Tryptophan Hydroxylase-2 rs7305115 SNP on suicide attempts risk in major depression. *Behavioral and Brain Functions* 6, 49.
- Zigmond J (2010). Not such a pastoral setting. Rural-specific issues contribute to high suicide rates. *Modern Healthcare* 40, 30-31.

Prevention

- Bagley SC, Munjas B, Shekelle P (2010). A systematic review of suicide prevention programs for military or veterans. *Suicide & Life-Threatening Behavior* 40, 257-265.
- Bartram DJ, Sinclair JMA, Baldwin OS (2010). Interventions with potential to improve the mental health and well being of UK veterinary surgeons. *Veterinary Record* 166, 518-523.
- Betz ME, Barber CW, Miller M (2010). Firearm restriction as suicide prevention: variation in belief and practice among providers in an urban emergency department. *Injury Prevention* 16, 278-281.

- Borowsky IW (2010). Expose, heed, and coordinate care: Priorities for mental health promotion and suicide prevention. *Pediatrics* 125, 1064-1065.
- Bossarte R, Claassen CA, Knox K (2010). Veteran suicide prevention: emerging priorities and opportunities for intervention. *Military Medicine* 175, 461-462.
- Chan SS, Leung VP, Tsoh J, Li SW, Yu CS, Yu GK, Poon TK, Pan PC, Chan WF, Conwell Y, Lam LC, Chiu HF (2010). Outcomes of a two-tiered multifaceted elderly suicide prevention program in a Hong Kong Chinese community. *American Journal of Geriatric Psychiatry*. Published online: 10 June 2010. doi: 10.1097/JGP.0b013e3181e56d0f.
- Crompton D, Groves A, McGrath J (2010). What can we do to reduce the burden of avoidable deaths in those with serious mental illness? *Epidemiologia e Psichiatria Sociale* 19, 4-7.
- Cross W, Matthieu MM, Lezine D, Knox KL (2010). Does a brief suicide prevention gatekeeper training program enhance observed skills? *Crisis* 31, 149-159.
- De Leo D, Milner A (2010). The WHO/START Study: Promoting suicide prevention for a diverse range of cultural contexts. *Suicide and Life Threatening Behavior* 40, 99-106.
- Dorgan BL (2010). The tragedy of Native American youth suicide. *Psychological Services* 7, 213-218.
- Finlay J, Hardy M, Morris D, Nagy A (2010). Mamow Ki-ken-da-ma-win: A partnership approach to child, youth, family and community wellbeing. *International Journal of Mental Health and Addiction* 8, 245-257.
- Fountoulakis KN, Gonda X, Rihmer Z (2010). Suicide prevention programs through community intervention. *Journal of Affective Disorders*. Published online: 2 July 2010. doi:10.1016/j.jad.2010.06.009.
- Ganz D, Braquehais MD, Sher L (2010). Secondary prevention of suicide. *Plos Medicine* 7, 1000271.
- Goldston DB, Walrath CM, McKeon R, Puddy RW, Lubell KM, Potter LB, Rodi MS (2010). The Garrett Lee Smith memorial suicide prevention program. *Suicide & Life-Threatening Behavior* 40, 245-256.
- Gray JS, Muehlenkamp JJ (2010). Circle of strength: A case description of culturally integrated suicide prevention. *Archives of Suicide Research* 14, 182-191.
- Gunnell D, Miller M (2010). Strategies to prevent suicide. *British Medical Journal* 341, c3054.
- Hamilton SM, Rolf KA (2010). Suicide in adolescent American Indians: Preventative social work programs. *Child & Adolescent Social Work Journal* 27, 283-290.
- Hampton T (2010). Depression care effort brings dramatic drop in large HMO population's suicide rate. *Journal of the American Medical Association* 303, 1903-1905.
- Hillbrand M (2010). Commentary: addressing suicidality in the treatment of parricidal offenders. *Journal of American Academy of Psychiatry and Law* 38, 221-222.
- Hooven C, Herting JR, Snedker KA (2010). Long-term outcomes for the promoting CARE suicide prevention program. *American Journal of Health Behavior* 34, 721-736.
- Hough D, Lewis P (2010). A suicide prevention advisory group at an academic medical center. *Military Medicine* 175, 347-351
- Hoven CW, Mandell DJ, Bertolote JM (2010). Prevention of mental ill-health and suicide: Public health perspectives. *European Psychiatry* 25, 252-256.
- Hubner-Liebermann B, Neuner T, Hegerl U, Hajak G, Spiessl H (2010). Reducing suicides through an alliance against depression? *General Hospital Psychiatry*. Published online: 29 June 2010. doi: 10.1016/j.genhosppsy.2010.06.008.
- Isacson G, Rich CL, Jureidini J, Raven M (2010). The increased use of antidepressants has contributed to the worldwide reduction in suicide rates. *British Journal of Psychiatry* 196, 429-433.

- Jakupcak M, Varra EM (2010). Treating Iraq and Afghanistan war veterans with PTSD who are at high risk for suicide. *Cognitive and Behavioral Practice*. Published online: 24 April 2010. doi:10.1016/j.cbpra.2009.08.007.
- Jones E (2010). Suicide prevention through stories of hope. *Journal of Christian Nursing* 27, 252-257.
- Jorm AF, Fischer JA, Oh E (2010). Effect of feedback on the quality of suicide prevention web-sites: Randomised controlled trial. *British Journal of Psychiatry* 197, 73-74.
- Knoll JL (2010). Suicide in correctional settings: Assessment, prevention, and professional liability. *Journal of Correctional Health Care* 16, 188-204.
- Knox KL, Pflanz S, Talcott GW, Campise RL, Lavigne JE, Bajorska A, Tu X, Caine ED (2010). The US Air Force Suicide Prevention Program: Implications for public health policy. *American Journal of Public Health*. Published online: 13 May 2010. doi: 10.2105/AJPH.2009.159871, 2010.
- Kohyama J (2010). More sleep will bring more serotonin and less suicide in Japan. *Medical Hypotheses* 75, 340-340.
- Long GC, Silaule P, Collier N (2010). Use of an extra care area in a medium secure setting for women: Findings and implications for practice. *Journal of Psychiatric Intensive Care* 6, 39-45.
- Mishara BL, Weisstub DN (2010). Resolving ethical dilemmas in suicide prevention: The case of telephone helpline rescue policies. *Suicide and Life Threatening Behavior* 40, 159-169.
- Muller-Oerlinghausen B, Lewitzka U (2010). Lithium reduces pathological aggression and suicidality: A mini-review. *Neuropsychobiology* 62, 43-49.
- Oyama H, Sakashita T, Hojo K, Watanabe N, Takizawa T, Sakamoto S, Takizawa S, Tasaki H, Tanaka E (2010). Community-based survey and screening for depression in the elderly. *Crisis* 31, 100-108.
- Parker GF (2010). Application of a firearm seizure law aimed at dangerous persons: Outcomes from the first two years. *Psychiatric Services* 61, 478-482.
- Pearson M, Zwi AB, Buckley NA (2010). Prospective policy analysis: How an epistemic community informed policymaking on intentional self poisoning in Sri Lanka. *Health Research Policy and Systems* 8, 19.
- Podgorski CA, Langford L, Pearson JL, Conwell Y (2010). Suicide prevention for older adults in residential communities: Implications for policy and practice. *Public Library of Science — Medicine* 7, e1000254.
- Pompili M (2010). From Bench to Bedside in the prevention of suicide: A never-ending back and forth journey. *Crisis* 31, 59-61.
- Pompili M, Girardi P, Tatarelli R (2010). Vatican to join the prevention of suicide. *Quaderni Italiani di Psichiatria* 29, 78.
- Rahimi-Movaghar V (2010). Controlled evaluation of injury in an international Safe Community: Kashmar, Iran. *Public Health* 124, 190-197.
- Reid WH (2010). Preventing suicide. *Journal of Psychiatric Practice* 16, 120-124.
- Sakinofsky I (2010). Barriers to suicide: Strategies at Bloor Viaduct. *British Medical Journal* 341, 4447.
- Shahtahmasebi S, Villa L, Nielsen H, Graham-Smith H (2010). Proposal of a holistic model to support local-level evidence-based practice. *The Scientific World Journal* 10, 1520-1529.
- Sinyor M, Levitt AJ (2010). Effect of a barrier at Bloor Street Viaduct on suicide rates in Toronto: Natural experiment. *British Medical Journal* 341, c2884.
- Szumilas M, Kutcher S (2010). Problematic conclusions regarding suicide prevention: A response to ten Have et al., 2009. *Canadian Journal of Psychiatry* 55, 398-399.

- Szumilas M, Kutcher S, Leblanc JC, Langille DB (2010). Use of school-based health centres for mental health support in Cape Breton, Nova Scotia. *Canadian Journal of Psychiatry* 55, 319-328.
- Takada M, Shima S (2010). Characteristics and effects of suicide prevention programs: comparison between workplace and other settings. *Industrial Health* 48, 416-426.
- Ten Have M, De Graaf R (2010). Focus suicide prevention also on suicidal ideation and suicide attempts. *Canadian Journal of Psychiatry* 55, 398-399.
- Valente SM (2010). Oncology nurses' knowledge of suicide evaluation and prevention. *Cancer Nursing* 33, 290-295.
- Williams A, Donaghue N (2010). 'Now that's a fair dinkum academic debate, but this affects people's lives': A discursive analysis of arguments for and against the provision of warnings about potential side effects of SSRIs in a public debate. *Critical Public Health* 20, 15-24.
- Wintersteen MB (2010). Standardized screening for suicidal adolescents in primary care. *Pediatrics* 125, 938-944.
- Wyman PA, Brown CH, Lomurray M, Schmeelk-Cone K, Petrova M, Yu Q, Walsh E, Tu X, Wang W (2010). An outcome evaluation of the sources of strength suicide prevention program delivered by adolescent peer leaders in high schools. *American Journal of Public Health* 100, 1653-1661.

Postvention and Bereavement

- Aguirre RTP, Slater H (2010). Suicide postvention as suicide prevention: Improvement and expansion in the United States. *Death Studies* 34, 529.
- Chapple A, Ziebland S (2010). Viewing the body after bereavement due to a traumatic death: Qualitative study in the UK. *British Medical Journal* 340, 2032.
- Gibson J, Gallagher M, Jenkins M (2010). The experiences of parents readjusting to the workplace following the death of a child by suicide. *Death Studies* 34, 500-528.
- Gulfi A, Angela D, Dransart C, Heeb JL, Gutjahr E (2010). The impact of patient suicide on the professional reactions and practices of mental health caregivers and social workers. *Crisis* 31, 202-210.
- Hoffmann W, Myburgh C, & Poggenpoel M (2010). The lived experiences of late-adolescent female suicide survivors: 'A part of me died'. *Health SA Gesondheid* 15, 493.
- Koch BJ (2010). The psychological impact on police officers of being first responders to completed suicides. *Journal of Police and Criminal Psychology* 25, 90-98.
- Landers A, O'Brien S, Phelan D (2010). Impact of patient suicide on consultant psychiatrists in Ireland. *Psychiatrist* 34, 136-140.
- Li N, Zhang J (2010). Influencing factors for depression among Chinese suicide survivors. *Psychiatry Research* 178, 97-100.
- Lobb EA, Kristjanson LJ, Aoun SM, Monterosso L, Halkett GKB, Davies A (2010). Predictors of complicated grief: A systematic review of empirical studies. *Death Studies* 34, 673-698.
- Mann JJ (2010). In her wake: A child psychiatrist explores the mystery of her mother's suicide. *American Journal of Psychiatry* 167, 872-873.
- Muniz-Cohen M, Melhem NM, Brent DA (2010). Health risk behaviors in parentally bereaved youth. *Archives of Pediatrics & Adolescent Medicine* 164, 621-624.
- Salvatore T (2010). Life after suicide. How emergency responders can help those left behind. *EMS Magazine* 39, 54-57.

- Szumilas M, Wie Y, Kutcher S (2010).** Psychological debriefing in schools. *Canadian Medical Association Journal* 182, 883-884.
- Wilson A (2010).** Consumer participation: Ensuring suicide postvention research counts for end users. *International Journal of Nursing Practice* 16, 7-13.
- Wilson A, Marshall A (2010).** The support needs and experiences of suicidally bereaved family and friends. *Death Studies* 34, 625-640.

NON-FATAL SUICIDAL BEHAVIOUR

Epidemiology

- Alaghebandan R, Lari AR, Joghataei MT, Islami A, Motavalian A (2010). A prospective population-based study of suicidal behavior by burns in the province of Ilam, Iran. *Burns*. Published online: 13 July 2010. doi: 10.1016/j.burns.2010.04.010.
- Bebarta VS, Pitotti RL, Borys DJ, Morgan DL (2010). Seven years of cyanide ingestions in the USA: Critically ill patients are common, but antidote use is not. *Emergency Medicine Journal*. Published online: 29 May 2010. doi: 10.1136/emj.2009.089896.
- Bebbington PE, Minot S, Cooper C, Dennis M, Meltzer H, Jenkins R, Brugha T (2010). Suicidal ideation, self-harm and attempted suicide: Results from the British psychiatric morbidity survey. *European Psychiatry*. Published online: 7 June 2010. doi:10.1016/j.eurpsy.2009.12.004.
- Bresin K, Gordon KH, Bender TW, Gordon LJ, Joiner TE Jr (2010). No pain, no change: Reductions in prior negative affect following physical pain. *Motivation and Emotion* 34, 280-287.
- Cerutti R, Manca M, Presaghi F, Gratz KL (2010). Prevalence and clinical correlates of deliberate self-harm among a community sample of Italian adolescents. *Journal of Adolescence*. Published online: 12 May 2010. doi:10.1016/j.adolescence.2010.04.004.
- Chang JS, Moon E, Cha B, Ha K (2010). Adjunctive lamotrigine therapy for patients with bipolar II depression partially responsive to mood stabilizers. *Progress in Neuro-Psychopharmacology & Biological Psychiatry* 34, 1322-1326.
- Charuvastra A, Goldfarb E, Petkova E, Cloitre M (2010). Implementation of a screen and treat program for child posttraumatic stress disorder in a school setting after a school suicide. *Journal of Traumatic Stress* 23, 500-503.
- Chowdhury AN, Banerjee S, Brahma A, Das S, Sarker P, Biswas MK, Sanyal D, Hazra A (2010). A prospective study of suicidal behaviour in Sundarban delta, West Bengal, India. *National Medical Journal of India* 23, 201-205.
- Cooper J, Murphy E, Webb R, Hawton K, Bergen H, Waters K, Kapur N (2010). Ethnic differences in self-harm, rates, characteristics and service provision: Three-city cohort study. *British Journal of Psychiatry* 197, 212-218.
- Corcoran P, Reulbach U, Perry JJ, Arensman E (2010). Suicide and deliberate self harm in older Irish adults. *International Psychogeriatric*. Published online: 18 August 2010. doi: 10.1017/S1041610210001377.
- Dewing D, Mashadi SA, Iwuagwu F (2010). Deliberate self-harm: The St Andrew's experience. *European Journal of Plastic Surgery* 33, 237-239.
- Dianat S, Zarei MR, Hassanian-Moghaddam H, Rashidi-Ranjbar N, Rahimian R, Rasouli MR (2010). Tricyclic antidepressants intoxication in Tehran, Iran: Epidemiology and associated factors. *Human and Experimental Toxicology*. Published online: 20 May 2010. doi: 10.1177/0960327110371701.
- Eaton DK, Kann L, Kinchen S, Shanklin S, Ross J, Hawkins J, Harris WA, Lowry R, McManus T, Chyen D, Lim C, Whittle L, Brener ND, Wechsler H (2010). Division of adolescent and school health, National Center for Chronic Disease Prevention and Health Promotion, CDC. Youth risk behavior surveillance — United States, 2009. *Morbidity and Mortality Weekly Report : Surveillance Summaries* 59, 1-42.
- Fanger PC, de Azevedo RCS, Mauro MLE, Lima DD, Gaspar KC, da Silva VF, do Nascimento WTJ, Botega NJ (2010). Depression and suicidal behavior of cancer inpatients: Prevalence and associated factors. *Revista Da Associacao Medica Brasileira* 56, 173-178.

- Gashi M, Gashi S, Berisha M, Mekaj A, Gashi G (2010). Cases of poisoning with organophosphates treated at the University Clinical Centre of Kosova. *Medicinski Arhiv* 64, 48-50.
- Gordon-Smith K, Jones LA, Burge SM, Munro CS, Tavadia S, Craddock N (2010). The neuropsychiatric phenotype in Darier disease. *British Journal of Dermatology* 163, 515-522.
- Hallberg L, Westrin A, Isaksson A, Janelidze S, Träskman-Bendz L, Brundin L (2010). Decreased aldosterone in the plasma of suicide attempters with major depressive disorder. *Psychiatry Research*. Published online: 24 August 2010. doi:10.1016/j.psychres.2010.07.038.
- Hodgkinson SC, Colantuoni E, Roberts D, Berg-Cross L, Belcher HME (2010). Depressive symptoms and birth outcomes among pregnant teenagers. *Journal of Pediatric and Adolescent Gynecology* 23, 16-22.
- Hopper SM, Pangestu I, Cations J, Stewart C, Sharwood LN, Babl FE (2010). Adolescents in mental health crisis: The role of routine follow-up calls after emergency department visits. *Emergency Medicine Journal*. Published online: 15 September, 2010. doi:10.1136/emj.2008.062745.
- Howard MO, Perron BE, Sacco P, Ilgen M, Vaughn MG, Garland E, Freedentahl S (2010). Suicide ideation and attempts among inhalant users: Results from the national epidemiologic survey on alcohol and related conditions. *Suicide & Life-Threatening Behavior* 40, 276-286.
- Hviid LB, Ravnkilde B, Ahdidan J, Rosenberg R, Stodkilde-Jorgensen H, Videbech P (2010). Hippocampal visuospatial function and volume in remitted depressed patients: An 8-year follow-up study. *Journal of Affective Disorders* 125, 177-183.
- Kalkan S, Hocaoglu N, Oransay K, Unverir P, Tuncok Y(2010). Cardiovascular medication exposures and poisonings in Izmir, Turkey: A 14-year experience. *Human and Experimental Toxicology*. Published online: 20 May 2010. doi: 10.1177/0960327110371256.
- Kapur N, Clements C, Bateman N, Foëx B, Mackway-Jones K, Hawton K, Gunnell D (2010). Self-poisoning suicide deaths in England: Could improved medical management contribute to suicide prevention? *Quarterly Journal of Medicine*. Published online: 4 August 2010. doi: 10.1093/qjmed/hcq128.
- Kolves K, Vecchiato T, Pivetti M, Barbero G, Cimitan A, Tosato F, De Leo D (2010). Non-fatal suicidal behaviour in Padua, Italy, in two different periods: 1992-1996 and 2002-2006. *Social Psychiatry and Psychiatric Epidemiology*. Published online: 19 June 2010. doi: 10.1007/s00127-010-0251-x.
- Landstedt E, Gillander Gådin K (2010). Deliberate self-harm and associated factors in 17-year-old Swedish students. *Scandinavian Journal of Public Health*. Published online: 16 September 2010. doi: 10.1177/1403494810382941.
- Lau JTF, Yu X, Zhang J, Mak WWS, Choi KC, Lui WWS, Chan EYY (2010). Psychological distress among adolescents in Chengdu, Sichuan at 1 month after the 2008 Sichuan earthquake. *Journal of Urban Health* 87, 504-523.
- Lipnik-Stangelj M (2010). Hospitalizations due to poisonings in Slovenia — epidemiological aspects. *Wiener Klinische Wochenschrift* 122, 54-58.
- Lloyd J, Doll H, Hawton K, Dutton WH, Geddes JR, Goodwin GM, Rogers RD (2010). Internet gamblers: A latent class analysis of their behaviours and health experiences. *Journal of Gambling Studies* 26, 387-399.
- Maharajh HD, Seepersad R (2010). Cutting and other forms of derma-abuse in adolescents. *Health* 2, 366-375.
- Mgele X (2010). Non-accidental injury — ‘the silent pandemic’. *South African Medical Journal* 100, 290.

- Mohamed F, Perera A, Wijayaweera K, Kularatne K, Jayamanne S, Eddleston M, Dawson A, Konradsen F, Gunnell D (2010). The prevalence of previous self-harm amongst self-poisoning patients in Sri Lanka. *Social Psychiatry and Psychiatric Epidemiology*. Published online: 7 April 2010. doi: 10.1007/s00127-010-0217-z.
- Ndeti DM, Khasakhala LI, Mutiso V, Mwayo AW (2010). Suicidality and depression among adult patients admitted in general medical facilities in Kenya. *Annals of General Psychiatry* 9, 7.
- Nielsen O, Glozier N, Babidge N, Reutens S, Andrews D, Gerard A, Malhi GS, Large MM (2010). Suicide attempts by jumping and psychotic illness. *Australian and New Zealand Journal of Psychiatry* 44, 568-573.
- Noshad H, Sadreddini S, Etemadi J (2010). Acetaminophen self-poisoning: Suicidal and accidental. *Iranian Journal of Psychiatry and Behavioral Sciences* 4, 47-52.
- Onotai LO, Ibekwe U (2010). The pattern of cut throat injuries in the University of Port-Harcourt Teaching Hospital, Portharcourt. *Nigerian Journal of Medicine* 19, 264-266.
- Peng EY, Yeh CY, Lyu SY, Morisky DE, Chen YM, Lee MB, Farabee D, Malow RM (2010). Prevalence and correlates of lifetime suicidal ideation among HIV-infected male inmates in Taiwan. *AIDS Care* 22, 1212-1220.
- Petersson A, Bengtsson J, Voltaire-Carlsson A, Thiblin I (2010). Substance abusers' motives for using anabolic androgenic steroids. *Drug and Alcohol Dependence* 111, 170-172.
- Roadset JO, Bakken AM, Bjørkly S (2010). A prospective study of lipids and serotonin as risk markers of violence and self-harm in acute psychiatric patients. *Psychiatry Research*. Published online: 31 August 2010. doi:10.1016/j.psychres.2010.07.029.
- Sawyer MG, Guidolin M, Schulz KL, McGinnes B, Zubrick SR, Baghurst PA (2010). The mental health and wellbeing of adolescents on remand in Australia. *Australian and New Zealand Journal of Psychiatry* 44, 551-559.
- Schwenk TL, Davis L, Wimsatt LA (2010). Depression, stigma, and suicidal ideation in medical students. *The Journal of the American Medical Association* 304, 1181-1190.
- Senadheera C, Marecek J, Hewage C, Wijayasiri WAA (2010). A hospital-based study on trends in deliberate self-harm in children and adolescents. *Ceylon Medical Journal* 55, 67-68.
- Slade EP, Dixon LB, Semmel S (2010). Trends in the duration of emergency department visits, 2001-2006. *Psychiatric Services* 61, 878-884.
- Souza LDDM, Silva RAD, Jansen K, Kuhn RP, Horta BL, Pinheiro RT (2010). Suicidal ideation in adolescents aged 11 to 15 years: Prevalence and associated factors. *Revista Brasileira de Psiquiatria* 32, 37-41.
- Thierry X (2010). Accidental and violent injuries: Less frequent among the older population, but more serious. *Population and Societies* 468, 1-4.
- Wong A, Taylor DM, Ashby K, Robinson J (2010). Changing epidemiology of intentional antidepressant drug overdose in Victoria, Australia. *Australian and New Zealand Journal of Psychiatry* 44, 759-764.
- Zhao PC, Yang R, Phillips MR (2010). Age-specific characteristics of serious suicide attempters in China. *Suicide and Life-Threatening Behavior* 40, 383-393.
- Ziemba KS, O'Carroll CB, Drazkowski JF, Wingerchuk DM, Hoffman-Snyder C, Wellik KE, Demaerschalk BM (2010). Do antiepileptic drugs increase the risk of suicidality in adult patients with epilepsy? A critically appraised topic. *Neurologist* 16, 325-328.

Risk and Protective Factors

- Agfi TO, Cox BJ, Martens PJ, Sareen J, Enns MW (2010). The relationship between problem gambling and mental and physical health correlates among a nationally representative sample of Canadian women. *Canadian Journal of Public Health* 101, 171-175.
- Agius M, Gardner J, Liu K, Zaman R (2010). An audit to compare discharge rates and suicidally between antidepressant monotherapies prescribed for unipolar depression. *Psychiatria Danubina* 22, 350-353.
- Agrawal A, Nurnberger JI, Lynskey MT (2010). Cannabis involvement in individuals with bipolar disorder. *Psychiatry Research*. Published online: 31 July 2010. doi:10.1016/j.psychres.2010.07.007.
- Ahmet S, Kaan K, Nurdan O, Burak E, Memduha A, Ayhan N (2010). Injury patterns and psychological traits of patients with self-inflicted wounds produced by punching glass. *Journal of Trauma* 69, 691-693.
- Ajdacic-Gross V, Bopp M, Ring M, Gutzwiller F, Rossler W (2010). The use of alcohol and drugs to self-medicate symptoms of posttraumatic stress disorder. *Depression & Anxiety* 27, 731-736.
- An H, Ahn J-H, Bhang S-Y (2010). The association of psychosocial and familial factors with adolescent suicidal ideation: A population-based study. *Psychiatry Research* 177, 318-322.
- Andersohn F, Schade R, Willich SN, Garbe E (2010). Use of antiepileptic drugs in epilepsy and the risk of self-harm or suicidal behavior. *Neurology* 75, 335-340.
- Andersson P (2010). Post-traumatic stress symptoms linked to hidden Holocaust trauma among adult Finnish evacuees separated from their parents as children in World War II, 1939-1945: A case-control study. *International Psychogeriatric*. Published online: 20 September 2010. 10.1017/S1041610210001791.
- Andover MS, Gibb BE (2010). Non-suicidal self-injury, attempted suicide, and suicidal intent among psychiatric inpatients. *Psychiatry Research* 178, 101-105.
- Anestis MD, Joiner TE (2010). Examining the role of emotion in suicidality: Negative urgency as an amplifier of the relationship between components of the interpersonal-psychological theory of suicidal behavior and lifetime number of suicide attempts. *Journal of Affective Disorders*. Published online: 11 September 2010. doi: 10.1016/j.jad.2010.08.006
- Anonymous (2010). Antiepileptic drugs do not increase risk of suicide attempts in patients with bipolar disorder. *Australian Journal of Pharmacy* 91, 1080-1084.
- Anonymous (2010). Assessing suicide intent in pregnant women. *Australian Nursing Journal* 17, 49.
- Anonymous (2010). Erratum: Associations between attempted suicide, violent life events, depressive symptoms, and resilience in adolescents and young adults. *Journal of Nervous and Mental Disease* 198, 389-389.
- Anonymous (2010). Parental mental illness, suicide influence offspring's health. *Journal of Psychosocial Nursing and Mental Health Services* 48, 6-7.
- Anonymous (2010). Suicidal ideation during treatment of depression. *Australian Journal of Pharmacy* 91, 1079-1093.
- Ansell EB, Pinto A, Crosby RD, Becker DF, Anez LM, Paris M, Grilo CM (2010). The prevalence and structure of obsessive-compulsive personality disorder in Hispanic psychiatric outpatients. *Journal of Behavior Therapy and Experimental Psychiatry* 41, 275-281.
- Arkar H (2010). Relationship between attempted suicide and Cloninger's personality dimensions of temperament and character in Turkish psychiatric patients. *Yeni Symposium* 48, 110-115.

- Arseneault L, Bowes L, Shakoor S (2010). Bullying victimization in youths and mental health problems: 'Much ado about nothing'? *Psychological Medicine* 40, 717-729.
- Azorin JM, Kaladjian A, Adida M, Fakra E, Hantouche E, Lancrenon S (2010). Correlates of first-episode polarity in a French cohort of 1089 bipolar I disorder patients: Role of temperaments and triggering events. *Journal of Affective Disorders*. Published online: 19 September 2010. doi:10.1016/j.jad.2010.08.020.
- Badakhsh R, Lackovic M, Ratard R (2010). Characteristics of pesticide-related hospitalizations, Louisiana, 1998-2007. *Public Health Reports* 125, 457-467.
- Bailey CM, Samples HL, Broshek DK, Freeman JR, Barth J (2010). The relationship between psychological distress and baseline sports-related concussion. *Clinical Journal of Sport Medicine* 4, 272-277.
- Baker D (2010). Self-harm and the internet. *Psychologist* 23, 366-366.
- Ballard E, Bosk A, Pao M (2010). Invited commentary: Understanding brain mechanisms of pain processing in adolescents' non-suicidal self-injury. *Journal of Youth and Adolescence* 39, 327-334.
- Balsam KF, Lehavot K, Beadnell B (2010). Sexual revictimization and mental health: A comparison of lesbians, gay men, and heterosexual women. *Journal of Interpersonal Violence*. Published online: 18 August 2010. doi: 10.1177/0886260510372946.
- Bandelow B, Schmahl C, Falkai P, Wedekind D (2010). Borderline personality disorder: A dysregulation of the endogenous opioid system? *Psychological Review* 117, 623-636
- Barnes AJ, Eisenberg ME, Resnick MD (2010). Suicide and self-injury among children and youth with chronic health conditions. *Pediatrics* 125, 889-895.
- Barnes W, Ismail KM, Crome IB (2010). Triply troubled: Criminal behaviour and mental health in a cohort of teenage pregnant substance misusers in treatment. *Criminal Behaviour and Mental Health*. Published online: 24 August 2010. doi: 10.1002/cbm.776.
- Barr W, Kirkcaldy A, Horne A, Hodge S, Hellin K, Gpfert M (2010). Quantitative findings from a mixed methods evaluation of once-weekly therapeutic community day services for people with personality disorder. *Journal of Mental Health* 19, 412-421.
- Barrett EA, Sundet K, Faerden A, Agartz I, Bratlien U, Romm KL, Mork E, Rossberg JI, Steen NE, Andreassen OA, Melle I (2010). Suicidality in first episode psychosis is associated with insight and negative beliefs about psychosis. *Schizophrenia Research*. Published online: 2 August 2010. doi:10.1016/j.schres.2010.07.018.
- Barrett EA, Sundet K, Faerden A, Nesvåg R, Agartz I, Fosse R, Mork E, Steen NE, Andreassen OA, Melle I (2010). Suicidality before and in the early phases of first episode psychosis. *Schizophrenia Research* 119, 11-17.
- Barrett EA, Sundet K, Simonsen C, Agartz I, Lorentzen S, Mehlum L, Mork E, Andreassen OA, Melle I (2010). Neurocognitive functioning and suicidality in schizophrenia spectrum disorders. *Comprehensive Psychiatry*. Published online: 3 August 2010. doi:10.1016/j.schres.2010.07.018.
- Bassett DL (2010). Risk assessment and management in bipolar disorders. *Medical Journal of Australia* 193, 21-23.
- Batty GD, Whitley E, Deary IJ, Gale CR, Tynelius P, Rasmussen F (2010). Psychosis alters association between IQ and future risk of attempted suicide: Cohort study of 1,109,475 Swedish men. *British Medical Journal* 340, 2506.
- Batty GD, Whitley E, Kivimaki M, Tynelius P, Rasmussen F (2010). Respond to 'BMI and Suicide — Untangling an Unlikely Association'. *American Journal of Epidemiology* 172, 905-906.

- Batty GD, Whitley E, Kivimäki M, Tynelius P, Rasmussen F (2010). Body mass index and attempted suicide: cohort study of 1,133,019 Swedish men. *American Journal of Epidemiology* 172, 890-899.
- Beer MD, Muthukumaraswamy A, Khan AA, Arif Musabbir M (2010). Clinical characteristics of patients with self harming behaviour in a low secure mental health unit. *Journal of Psychiatric Intensive Care* 6, 15-21.
- Bender TW, Gordon KH, Bresin K, Joiner TE (2010). Impulsivity and suicidality: The mediating role of painful and provocative experiences. *Journal of Affective Disorders*. Published online: 16 August 2010. doi:10.1016/j.jad.2010.07.023.
- Benn EKT, Hesdorffer DC, Levy SR, Testa FM, Dimario FJ, Berg A (2010). Parental report of behavioral and cognitive diagnoses in childhood-onset epilepsy: A case-sibling-controlled analysis. *Epilepsy & Behavior* 18, 276-279.
- Benningfield MM, Arria AM, Kaltenbach K, Heil SH, Stine SM, Coyle MG, Fischer G, Jones HE, Martin PR (2010). Co-occurring psychiatric symptoms are associated with increased psychological, social, and medical impairment in opioid dependent pregnant women. *American Journal of Addiction* 19, 416-421.
- Bergen H, Hawton K, Waters K, Cooper J, Kapur N (2010). Psychosocial assessment and repetition of self-harm: The significance of single and multiple repeat episode analyses. *Journal of Affective Disorders*. Published online: 29 May 2010. doi:10.1016/j.jad.2010.05.001.
- Bergman Levy T, Barak Y, Sigler M, Aizenberg D (2010). Suicide attempts and burden of physical illness among depressed elderly inpatients. *Archives of Gerontology and Geriatric*. Published online: 18 April 2010. doi: 10.1016/j.archger.2010.02.012.
- Berlin I, Chen H, Covey LS (2010). Depressive mood, suicide ideation and anxiety in smokers who do and smokers who do not manage to stop smoking after a target quit day. *Addiction*. Published online: 15 September 2010. doi: 10.1111/j.1360-0443.2010.03109.x.
- Bertolote JM, Fleischmann A, De Leo D, Phillips MR, Botega NJ, Vijayakumar L, de Silva D, Schlebusch L, Nguyen VT, Sisask M, Bolhari J, Wasserman D (2010). Repetition of suicide attempts. *Crisis* 31, 194-201.
- Bhattacharya A, Khesr CRJ, Munda SK, Bakhla AK, Praharaj SK, Kumar M (2010). Sex difference in symptomatology of manic episode. *Comprehensive Psychiatry*. Published online: 16 August 2010. doi: 10.1016/j.comppsy.2010.06.010.
- Bi B, Tong J, Liu L, Wei S, Li H, Hou J, Tan S, Chen X, Chen W, Jia X, Liu Y, Dong G, Qin X, Phillips MR (2010). Comparison of patients with and without mental disorders treated for suicide attempts in the emergency departments of four general hospitals in Shenyang, China. *General Hospital Psychiatry* 32, 549-555.
- Bjornaas MA, Hovda KE, Heyerdahl F, Skog K, Drottning P, Opdahl A, Jacobsen D, Ekeberg O (2010). Suicidal intention, psychosocial factors and referral to further treatment — A one-year cross-sectional study of self-poisonings. *BMC Psychiatry* 10, 58.
- Bjornsson AS, Didie ER, Phillips KA (2010). Body dysmorphic disorder. *Dialogues in Clinical Neuroscience* 12, 221-232.
- Boenisch S, Bramesfeld A, Mergl R, Havers I, Althaus D, Lehfeld H, Niklewski G, Hegerl U (2010). The role of alcohol use disorder and alcohol consumption in suicide attempts -A secondary analysis of 1921 suicide attempts. *European Psychiatry*. Published online: 3 June 2010. doi:10.1016/j.eurpsy.2009.11.007.
- Bogdanovica I, Jiang G-X, Lohr C, Schmidtke A, Mittendorfer-Rutz E (2010). Changes in rates, methods and characteristics of suicide attempters over a 15-year period: Comparison between Stockholm, Sweden, and Würzburg, Germany. *Social Psychiatry and Psychiatric Epidemiology*. Published online: 5 September 2010. doi: 10.1007/s00127-010-0282-3

- Bonanno RA, Hymel S (2010). Beyond hurt feelings investigating why some victims of bullying are at greater risk for suicidal ideation. *Merrill-Palmer Quarterly* 56, 420-440.
- Bonugli RH, Brackley M, Williams GB, Lesser J (2010). Sexual abuse and posttraumatic stress disorder in adult women with severe mental illness: A pilot study. *Issues in Mental Health Nursing* 31, 456-460.
- Botega NJ, de Azevedo RCS, Mauro MLF, Mitsushashi GN, Fanger PC, Lima DD, Gaspar KC, da Silva VF (2010). Factors associated with suicide ideation among medically and surgically hospitalized patients. *General Hospital Psychiatry* 6, 446-452.
- Boxer P (2010). Variations in risk and treatment factors among adolescents engaging in different types of deliberate self-harm in an inpatient sample. *Journal of Clinical Child & Adolescent Psychology* 39, 470-480.
- Brakoulias V, Mandali R, Seymour J, Sammut P, Starcevic V (2010). Characteristics of admissions to a recently opened Psychiatric Emergency Care Centre. *Australasian Psychiatry* 18, 326-329.
- Branco BC, Inaba K, Barmparas G, Talving P, David JS, Plurad D, Green DJ, Demetriades D (2010). Sex-related differences in childhood and adolescent self-inflicted injuries: A National Trauma Databank review. *Journal of Pediatric Surgery* 45, 796-800.
- Bray RM, Pemberton MR, Lane ME, Hourani LL, Mattiko MJ, Babeu LA (2010). Substance use and mental health trends among U.S. military active duty personnel: Key findings from the 2008 DoD health behavior survey. *Military Medicine* 175, 390-399.
- Bruffaerts R, Demyttenaere K, Borges G, Haro JM, Chiu WT, Hwang I, Karam EG, Kessler RC, Sampson N, Alonso J, Andrade LH, Angermeyer M, Benjet C, Bromet E, de Girolamo G, de Graaf R, Florescu S, Gureje O, Horiguchi I, Hu C, Kovess V, Levinson D, Posada-Villa J, Sagar R, Scott K, Tsang A, Vassilev SM, Williams DR, Nock MK (2010). Childhood adversities as risk factors for onset and persistence of suicidal behaviour. *British Journal of Psychiatry* 197, 20-27.
- Bryan CJ (2010). The clinical utility of a brief measure of perceived burdensomeness and thwarted belongingness for the detection of suicidal military personnel. *Journal of Clinical Psychology*. Published online: 16 August 2010. doi: 10.1002/jclp.20726.
- Bryant-Davis T, Ullman SE, Tsong Y, Tillman S, Smith K (2010). Struggling to survive: sexual assault, poverty, and mental health outcomes of African American women. *American Journal of Orthopsychiatry* 80, 61-70.
- Buhlmann U, Glaesmer H, Mewes R, Fama JM, Wilhelm S, Brahler E, Rief W (2010). Updates on the prevalence of body dysmorphic disorder: A population-based survey. *Psychiatry Research*. 178, 171-175.
- Butler S, Agius M, Zaman R (2010). A comparison of outcomes of patients with depression, recurrent depression, and depression and anxiety within patients in a British CMHT. *Psychiatria Danubina* 22, 387-388.
- Buyck P, Dietze P, Ritter A, Loxley W (2010). Characteristics of medication overdose presentations to the ED: How do they differ from illicit drug overdose and self-harm cases? *Emergency Medicine Journal* 27, 499-503.
- Calati R, Porcelli S, Giegling I, Hartmann AM, Möller HJ, De Ronchi D, Serretti A, Rujescu D (2010). Catechol-o-methyltransferase gene modulation on suicidal behavior and personality traits: Review, meta-analysis and association study. *Journal of Psychiatry Research*. Published online: 26 July 2010. doi: 10.1016/j.jpsychires.2010.07.004.
- Carli V, Roy A, Bevilacqua L, Maggi S, Cesaro C, Sarchiapone M (2010). Insomnia and suicidal behaviour in prisoners. *Psychiatry Research*. Published online: 26 May 2010. doi:10.1016/j.psychres.2009.10.001.

- Carrico AW, Neilands TB, Johnson M (2010). Suicidal ideation is associated with HIV transmission risk in men who have sex with men. *Journal of Acquired Immune Deficiency Syndromes* 54, 3-4.
- Cha CB, Najmi S, Park JM, Finn CT, Nock MK (2010). Attentional bias toward suicide-related stimuli predicts suicidal behavior. *Journal of Abnormal Psychology* 119, 616-622.
- Chan S (2010). 'Suicidal behaviour' — advances in psychotherapy (evidence-based practice). *East Asian Perspective of Psychiatry* 20, 94-94.
- Chang EC, Sanna LJ, Hirsch JK, Jeglic EL (2010). Loneliness and negative life events as predictors of hopelessness and suicidal behaviors in hispanics: Evidence for a diathesis-stress model. *Journal of Clinical Psychology*. Published online: 26 August 2010. doi: 10.1002/jclp.20721.
- Chapman JC, Andersen AM, Roselli LA, Meyers NM, Pincus JH (2010). Screening for mild traumatic brain injury in the presence of psychiatric comorbidities. *Archives of Physical Medicine and Rehabilitation* 91, 1082-1086.
- Chen L, Murad M, Paras M, Colbenson K, Sattler A, Goranson E, Elamin M, Seime R, Shinozaki G, Prokop L & Zirakzadeh A (2010). Sexual abuse and lifetime diagnosis of psychiatric disorders: Systematic review and meta-analysis. *Mayo Clinic Proceedings* 85, 618-629.
- Cheng Y, Newman IM, Qu M, Mbulo L, Chai Y, Chen Y, Shell DF (2010). Being bullied and psychosocial adjustment among middle school students in China. *The Journal of School Health* 80, 193-199.
- Choi JL, Rogers JR (2010). Exploring the validity of the college student reasons for living inventory among Asian American College Students. *Archives of Suicide Research* 14, 222-235.
- Christiansen E, Goldney RD, Beautrais AL, Agerbo E (2010). Youth suicide attempts and the dose-response relationship to parental risk factors: A population-based study. *Psychological Medicine*. Published online: 21 April 2010. doi: 10.1017/S0033291710000747.
- Clarke DE, Eaton WW, Petronis KR, Ko JY, Chatterjee A, Anthony JC (2010). Increased risk of suicidal ideation in smokers and former smokers compared to never smokers: Evidence from the Baltimore ECA follow-up study. *Suicide and Life-Threatening Behavior* 40, 307-318.
- Cohen CI, Abdallah CG, Diwan S (2010). Suicide attempts and associated factors in older adults with schizophrenia. *Schizophrenia Research* 119, 253-257.
- Conron KJ, Mimiaga MJ, Landers SJ (2010). A population-based study of sexual orientation identity and gender differences in adult health. *American Journal of Public Health*. Published online: 1 June 2010. doi: 10.2105/AJPH.2009.174169.
- Contreras J, Hernandez S, Quezada P, Dassori A, Walss-Bass C, Escamilla M, Raventos H (2010). Association of serotonin transporter promoter gene polymorphism (5-HTTLPR) with depression in Costa Rican schizophrenic patients. *Journal of Neurogenetics* 24, 83-89.
- Cooper J (2010). High mortality and reduced quality of life in people who have presented to hospital for self-harm in the UK. *Evidence-Based Mental Health* 13, 74.
- Corna LM, Cairney J, Streiner DL (2010). Suicide ideation in older adults: Relationship to mental health problems and service use. *Gerontologist Gerontologist*. Published online: June 21, 2010. doi: 10.1093/geront/gnq048.
- Cousins W, Taggart L, Milner S (2010). Looked after or overlooked? An exploratory investigation of the mental health issues of adolescents living in state care in Northern Ireland. *Psychology, Health and Medicine* 15, 497-506.

- Crandall M, Sridharan L, Schermer C (2010). Depression and thoughts of death among disadvantaged mothers: Risk factors and impact on maternal and child health. *Archives of Suicide Research* 14, 248-260.
- Craven R (2010). Antiepileptic drugs and suicidality: Finding ways forward. *The Lancet Neurology* 9, 568-569.
- Daffern M, Tonkin M, Howells K, Krishnan G, Ijomah G, Milton J (2010). The impact of interpersonal style and perceived coercion on aggression and self-harm in personality-disordered patients admitted to a secure psychiatric hospital. *Journal of Forensic Psychiatry and Psychology* 21, 426-445.
- Daini S, Manzo A, Pisani F, Tancredi A (2010). Attempted suicide: psychopathology and Wartegg Test indicators. *SIS Journal of Projective Psychology & Mental Health* 17, 171-177.
- Danchin CL, MacLeod AK, Tata P (2010). Painful engagement in deliberate self-harm: The role of conditional goal setting. *Behaviour Research and Therapy* 48, 915-920.
- Davidson CL, Wingate LR, Slish ML, Rasmussen KA (2010). The Great Black Hope: Hope and its relation to suicide risk among African Americans. *Suicide and Life Threatening Behavior* 40, 170-180.
- Davis A, Gilhooley M, Agius M, Zaman R (2010). Suicide risk and choice of antidepressant. *Psychiatria Danubina* 22, 358-359.
- De Luca V, Souza RP, Zai CC, Panariello F, Javaid N, Strauss J, Kennedy JL, Tallerico T, Wong AH (2010). Parent of origin effect and differential allelic expression of BDNF Val66Met in suicidal behaviour. *World Journal of Biological Psychiatry*. Published online: 23 August 2010. doi: 10.3109/15622975.2010.506928.
- De Vries F, Setakis E, van Staa T-P (2010). Concomitant use of ibuprofen and paracetamol and the risk of major clinical safety outcomes. *British Journal of Clinical Pharmacology* 70, 429-438.
- DeLisi M, Drury AJ, Kosloski AE, Caudill JW, Conis PJ, Anderson CA, Vaughn MG, Beaver KM (2010). The cycle of violence behind bars: Traumatization and institutional misconduct among juvenile delinquents in confinement. *Youth Violence and Juvenile Justice* 8, 107-121.
- Demjaha A, Valmaggia L, Stahl D, Byrne M, McGuire P (2010). Disorganization/Cognitive and negative symptom dimensions in the at-risk mental state predict subsequent transition to psychosis. *Schizophrenia Bulletin*. Published online: 12 August 2010. doi: 10.1093/schbul/sbq088.
- Denny SJ, Robinson EM, Utter J, Fleming TM, Grant S, Milfont TL, Crengle S, Ameratunga SN, Clark T (2010). Do schools influence student risk-taking behaviors and emotional health symptoms? *Journal of Adolescent Health*. Published online: 2 September 2010. doi: 10.1016/j.jadohealth.2010.06.020.
- Desalew M, Aklilu A, Amanuel A, Addisu M, Ethiopia T (2010). Pattern of acute adult poisoning at Tikur Anbessa specialized teaching hospital, a retrospective study, Ethiopia. *Human & Experimental Toxicology*. Published online: July 14 2010. doi: 10.1177/0960327110377520.
- Dick DM, Meyers J, Aliev F, Nurnberger J, Kramer J, Kuperman S, Porjesz B, Tischfield J, Edenberg HJ, Foroud T, Schuckit M, Goate A, Hesselbrock V, Bierut L (2010). Evidence for genes on chromosome 2 contributing to alcohol dependence with conduct disorder and suicide attempts. *American Journal of Medical Genetics. Part B, Neuropsychiatric Genetics* 2, 158-170.
- Didyk LA, Gorgo YP, Dirckx JJJ, Semenova IA, Didyk NP, Gorlov DS (2010). The effects of slight atmospheric pressure fluctuations on the occurrence of emergency transport due to suicidal injuries. *Health* 2, 448-453.

- Dilli D, Dallar Y, Cakir I (2010). Psychological characteristics of adolescent suicide attempters presenting to a pediatric emergency service. *Turkish Journal of Medical Sciences* 40, 377-390.
- Distel MA, Willemsen G, Ligthart L, Derom CA, Martin NG, Neale MC, Trull TJ, Boomsma DI (2010). Genetic covariance structure of the four main features of borderline personality disorder. *Journal of Personality Disorders* 24, 427-444.
- Dodig-Curkovi K, Curkovi M, Radi J, Degmeci D, Filekovi P (2010). Suicidal behavior and suicide among children and adolescents — Risk factors and epidemiological characteristics. *Collegium Antropologicum* 34, 771-777.
- Dombrowski A, Clark L, Siegle G, Butters M, Ichikawa N, Sahakian B, Szanto K (2010). Reward/punishment reversal learning in older suicide attempters. *The American Journal of Psychiatry* 167, 699-707.
- Duke NN, Pettingell SL, McMorris BJ, Borowsky IW (2010). Adolescent violence perpetration: Associations with multiple types of adverse childhood experiences. *Pediatrics* 125, 778-786.
- Eckert KA, Kutek SM, Dunn KI, Air TM, Goldney RD (2010). Changes in depression-related mental health literacy in young men from rural and urban South Australia. *Australian Journal of Rural Health* 18, 153-158.
- Eddleston M (2010). Response to Peter and colleagues. Re: Is there a relationship between the WHO hazard classification of organophosphate pesticide and outcomes in suicidal human poisoning with commercial organophosphate formulations? *Regulatory Toxicology and Pharmacology* 57, 338.
- Eggan SM, Stoyak SR, Verrico CD, Lewis DA (2010). Cannabinoid CB1 receptor immunoreactivity in the prefrontal cortex: Comparison of schizophrenia and major depressive disorder. *Neuropsychopharmacology* 35, 2060-2071.
- El-Gabalawy R, Katz LY, Sareen J (2010). Comorbidity and associated severity of borderline personality disorder and physical health conditions in a nationally representative sample. *Psychosomatic Medicine* 72, 641-647.
- Elijah J (2010). Varenicline (Champix): An update. *Australian Prescriber* 33, 120-120.
- Emslie GJ, Mayes T, Porta G, Vitiello B, Clarke G, Wagner KD, Asarnow JR, Spirito A, Birmaher B, Ryan N, Kennard B, Debar L, McCracken J, Strober M, Onorato M, Zelazny J, Keller M, Iyengar S, Brent D (2010). Treatment of resistant depression in adolescents (TORDIA): Week 24 outcomes. *American Journal of Psychiatry*, E publication.
- Epstein JA, Spirito A (2010). Gender-specific risk factors for suicidality among high school students. *Archives of Suicide Research* 14, 193-205.
- Erfan S, Hashim AH, Shaheen M, Sabry N (2010). Effect of comorbid depression on substance use disorders. *Substance Abuse* 31, 162-169.
- Eskin M, Voracek M, Stieger S, Altinyazar V (2010). A cross-cultural investigation of suicidal behavior and attitudes in Austrian and Turkish medical students. *Social Psychiatry and Psychiatric Epidemiology*. Published online: 19 June 2010. 10.1007/s00127-010-0254-7.
- Evren C, Dalbudak E, Evren B, Cetin R, Durkaya M (2010). Self-mutilative behaviours in male alcohol-dependent inpatients and relationship with posttraumatic stress disorder. *Psychiatry Research*. Published online: 30 August 2010. doi:10.1016/j.psychres.2010.07.045.
- Fairweather-Schmidt AK, Anstey KJ, Salim A, Rodgers B (2010). Baseline factors predictive of serious suicidality at follow-up: Findings focusing on age and gender from a community-based study. *BMC Psychiatry* 10, 1-41.
- Falcone T, Mishra L, Carlton E, Lee C, Butler RS, Janigro D, Simon B, Franco K (2010). Suicidal behavior in adolescents with first-episode psychosis. *Clinical Schizophrenia and Related Psychoses* 4, 34-40.

- Fikke LT, Melinder A, Landrø NI (2010). Executive functions are impaired in adolescents engaging in non-suicidal self-injury. *Psychological Medicine*. Published online: 19 May 2010. doi: 10.1017/S0033291710001030.
- Freeman D, McManus S, Brugha T, Meltzer H, Jenkins R, Bebbington P (2010). Concomitants of paranoia in the general population. *Psychological Medicine*. Published online: 24 August 2010.
- Fu KW, Chan WS, Wong PW, Yip PS (2010). Internet addiction: prevalence, discriminant validity and correlates among adolescents in Hong Kong. *British Journal of Psychiatry* 196, 486-492.
- Gmitrowicz A (2010). Suicidal behaviours among Polish youth in light of the following papers: Suicidal behaviour in children and adolescents. Parts 1 and 2. *Canadian Journal of Psychiatry* 55, 399-400.
- Gonda X, Fountoulakis KN, Harro J, Pompili M, Akiskal HS, Bagdy G, Rihmer Z (2010). The possible contributory role of the S allele of 5-HTTLPR in the emergence of suicidality. *Journal of Psychopharmacology*. Published online 13 September 2010. doi: 10.1177/0269881110376693.
- Gonzalez-Pinto A, Alberich S, Barbeito S, Alonso M, Vieta V, Martinez-Aran A, Saenz M, Lopez P (2010). Different profile of substance abuse in relation to predominant polarity in bipolar disorder: The Vitoria long-term follow-up study. *Journal of Affective Disorder* 124, 250-255.
- Grangeon MC, Seixas C, Quarantini LC, Miranda-Scippa A, Pompili M, Steffens DC, Wenzel A, Lacerda ALT, de Oliveira IR (2010). White matter hyperintensities and their association with suicidality in major affective disorders: A meta-analysis of magnetic resonance imaging studies. *CNS Spectrums* 15, 375-381.
- Gratz KL, Breetz A, Tull MT (2010). The moderating role of borderline personality in the relationships between deliberate self-harm and emotion-related factors. *Personality and Mental Health* 4, 96-107.
- Gratz KL, Hepworth C, Tull MT, Paulson A, Clarke S, Remington B, Lejuez CW (2010). An experimental investigation of emotional willingness and physical pain tolerance in deliberate self-harm: The moderating role of interpersonal distress. *Comprehensive Psychiatry*. Published online: 26 May 2010.
- Green KT, Calhoun PS, Dennis MF, Beckham JC (2010). Exploration of the resilience construct in posttraumatic stress disorder severity and functional correlates in military combat veterans who have served since September 11, 2001. *Journal of Clinical Psychiatry* 71, 823-830.
- Greening L, Stoppelbein L, Luebke A, Fite PJ (2010). Aggression and the risk for suicidal behaviors among children. *Suicide and Life-Threatening Behavior* 40, 337-345.
- Gregorio, SWD, Gustin J, Do D, Coller K, Adolph M, Taylor R (2010). Predictors of suicidal ideation among palliative care patients. *Journal of Pain and Symptom Management* 39, 448-448.
- Greydanus D, Patel D, Pratt H (2010). Suicide risk in adolescents with chronic illness: implications for primary care and specialty pediatric practice: A review. *Developmental Medicine & Child Neurology*. Published online: August 31, 2010. doi: 10.1111/j.1469-8749.2010.03771.x.
- Guerra VS, Calhoun PS (2010). Examining the relation between posttraumatic stress disorder and suicidal ideation in an OEF/OIF veteran sample. *Journal of Anxiety Disorders*. Published online: 7 July 2010. doi:10.1016/j.janxdis.2010.06.025.

- Guerry JD, Prinstein MJ (2010). Longitudinal prediction of adolescent nonsuicidal self-injury: Examination of a cognitive vulnerability-stress model. *Journal of Clinical Child and Adolescent Psychology* 39, 77-89.
- Haarr RN (2010). Suicidality among battered women in Tajikistan. *Violence against Women* 16, 764-788.
- Hahm HC, Lee Y, Ozonoff A, van Wert MJ (2010). The impact of multiple types of child maltreatment on subsequent risk behaviors among women during the transition from adolescence to young adulthood. *Journal of Youth and Adolescence* 39, 528-540.
- Halim KS, Khondker L, Wahab MA, Nargis F, Khan SI (2010). Various factors of attempted suicide in a selected area of Naogaon district. *Mymensingh Medical Journal* 19, 244-249.
- Hall B, Place M (2010). Cutting to cope — A modern adolescent phenomenon. *Child: Care, Health and Development* 36, 623-629.
- Hallab L, Covic T (2010). Deliberate self-harm: The interplay between attachment and stress. *Behaviour Change* 27, 93-103.
- Halvorsen JA, Stern RS, Dalgard F, Thoresen M, Bjertness E, Lien L (2010). Suicidal ideation, mental health problems, and social impairment are increased in adolescents with acne: A population-based study. *Journal of Investigative Dermatology*. Published online: 16 September 2010. doi: 10.1038/jid.2010.264.
- Hankin BL, Abela JR (2010). Nonsuicidal self-injury in adolescence: Prospective rates and risk factors in a 2 (1/2) year longitudinal study. *Psychiatry Research*. Published online: 29 August 2010. doi:10.1016/j.psychres.2010.07.056.
- Hantouche E, Angst J, Azorin JM (2010). Explained factors of suicide attempts in major depression. *Journal of Affective Disorder*. Published online: 27 May 2010. doi:10.1016/j.jad.2010.04.032.
- Harned MS, Rizvi SL, Linehan MM (2010). Impact of co-occurring posttraumatic stress disorder on suicidal women with borderline personality disorder. *American Journal of Psychiatry*. Published online: 1 September 2010. doi: 10.1176/appi.ajp.2010.09081213.
- Harris KM, McLean JP, Sheffield J, Jobes D (2010). The internal suicide debate hypothesis: Exploring the life versus death struggle. *Suicide and Life Threatening Behavior* 40, 191-192.
- Hassanian-Moghaddam H, Zarei MR, Kargar M, Sarjami S, Rasouli MR (2010). Factors associated with nonbenzodiazepine antiepileptic drug intoxication: Analysis of 9,809 registered cases of drug poisoning. *Epilepsia*. Published online: 2 April 2010. doi: 10.1111/j.1528-1167.2010.02553.x.
- Haw C, Hawton K (2010). Living alone and deliberate self-harm: A case-control study of characteristics and risk factors. *Social Psychiatry and Psychiatric Epidemiology*. Published online: 19 August 2010. doi: 10.1007/s00127-010-0278-z.
- Hayes JA, Crane AL, Locke BD (2010). Save me from myself: College students' fears of losing control and acting violently. *Journal of College Student Psychotherapy* 24, 181-202.
- Heilbron N, Prinstein MJ (2010). Adolescent peer victimization, peer status, suicidal ideation, and nonsuicidal self-injury examining concurrent and longitudinal associations. *Merrill-Palmer Quarterly* 56, 388-419.
- Hellerstein DJ, Skodol EA, Petkova AE, Petkova E, Xie H, Markowitz JC, Yen S, Gunderson J, Grilo C, Daversa MT, McGlashan TH (2010). The impact of comorbid dysthymic disorder on outcome in personality disorders. *Comprehensive Psychiatry* 51, 449-457.
- Hennessy S, Schelleman H, Daniel GW, Bilker WB, Kimmel SE, Guevara J, Cziraky MJ, Strom BL (2010). Cardiovascular safety of ADHD medications: Rationale for and design of an investigator-initiated observational study. *Pharmacoepidemiology and Drug Safety* 19, 934-941.

- Herrenkohl TI, Kosterman R, Mason WA, Hawkins JD, McCarty CA, McCauley E (2010). Effects of childhood conduct problems and family adversity on health, health behaviors, and service use in early adulthood: Tests of developmental pathways involving adolescent risk taking and depression. *Development and Psychopathology* 22, 655-665.
- Herrestad H, Biong S (2010). Relational hopes: A study of the lived experience of hope in some patients hospitalized for intentional self-harm. *International Journal of Qualitative Studies on Health and Well-Being* 5, 4651-4661.
- Hickle KE, Roe-Sepowitz DE (2010). Female juvenile arsonists: An exploratory look at characteristics and solo and group arson offences. *Legal and Criminological Psychology* 15, 385-399.
- Hinduja S, Patchin JW (2010). Bullying, cyberbullying, and suicide. *Archives of Suicide Research* 14, 206-212.
- Hodes M (2010). The mental health of detained asylum seeking children. *European Child & Adolescent Psychiatry* 19, 621-623.
- Holdsworth N, Griffiths H, Crawford D (2010). Discriminating levels of alcohol use associated with self-harm in individuals presenting to a district general hospital. *Psychiatrist* 34, 226-230.
- Holma KM, Melartin TK, Haukka J, Holma IA, Sokero TP, Isometsa ET (2010). Incidence and predictors of suicide attempts in DSM-IV major depressive disorder: A five-year prospective study. *American Journal of Psychiatry* 167, 801-808.
- Hudon C, Voyer P, Tremblay I, Tardif S, Carmichael PH (2010). Differentiation of the pattern of cognitive impairment between depressed and non-depressed patients with dementia living in long-term care facilities. *Aging and Mental Health* 14, 293-302.
- Hwang JP, Lee TW, Tsai SJ, Chen TJ, Yang CH, Lirng JF, Tsai CF (2010). Cortical and subcortical abnormalities in late-onset depression with history of suicide attempts investigated with mri and voxel-based morphometry. *Journal of Geriatric Psychiatry and Neurology*. Published online: 29 April 2010. doi: 10.1177/0891988710363713.
- Iancu I, Bodner E, Roitman S, Piccone Sapir A, Poreh A, Kotler M (2010). Impulsivity, aggression and suicide risk among male schizophrenia patients. *Psychopathology* 43, 223-229.
- Iliceto P, Pompili M, Girardi P, Lester D, Vincenti C, Rihmer Z, Tatarelli R, Akiskalv HS (2010). Hopelessness, temperament, and health perception in heroin addicts. *Journal of Addictive Disorder* 29, 352-358.
- Ishida K, Stupp P, Melian M, Serbanescu F, Goodwin M (2010). Exploring the associations between intimate partner violence and women's mental health: Evidence from a population-based study in Paraguay. *Social Science & Medicine* 71, 1653-1661.
- Ishida K, Stupp P, Serbanescu F, Tullo E (2010). Perinatal risk for common mental disorders and suicidal ideation among women in Paraguay. *International Journal of Gynecology and Obstetrics* 110, 235-240.
- Jacobson CM, Marrocco F, Kleinman M, Gould MS (2010). Restrictive emotionality, depressive symptoms, and suicidal thoughts and behaviors among high school students. *Journal of Youth and Adolescence*. Published online: 27 July 2010. doi: 10.1007/s10964-010-9573-y.
- Jakupcak M, Vannoy S, Imel Z, Cook JW, Fontana A, Rosenheck R, McFall M (2010). Does PTSD moderate the relationship between social support and suicide risk in Iraq and Afghanistan War Veterans seeking mental health treatment? *Depression and Anxiety*. Published online: 18 August 2010. doi: 10.1002/da.20722.
- Jaworski F, Dubertret C, Ades J, Gorwood P (2010). Presence of co-morbid substance use disorder in bipolar patients worsens their social functioning to the level observed in patients with schizophrenia. Published online: 27 June 2010. doi:10.1016/j.psychres.2010.06.005.

- Jeon HJ, Lee J-Y, Lee YM, Hong JP, Won S-H, Cho S-J, Kim J-Y, Chang SM, Lee HW, Cho MJ (2010). Unplanned versus planned suicide attempters, precipitants, methods, and an association with mental disorders in a Korea-based community sample. *Journal of Affective Disorders*. Published online: 28 June 2010. doi:10.1016/j.jad.2010.05.027.
- Jeon HJ, Lee JY, Lee YM, Hong JP, Won SH, Cho SJ, Kim JY, Chang SM, Lee D, Lee HW, Cho MJ (2010). Lifetime prevalence and correlates of suicidal ideation, plan, and single and multiple attempts in a Korean nationwide study. *Journal of Nervous and Mental Disorders* 198, 643-646.
- Jia Z, Huang X, Wu Q, Zhang T, Lui S, Zhang J, Amatya N, Kuang W, Chan RC, Kemp GJ, Mechelli A, Gong Q (2010). High-field magnetic resonance imaging of suicidality in patients with major depressive disorder. *American Journal of Psychiatry*. Published online: 15 Septmeber 2010. doi: 10.1176/appi.ajp.2010.09101513.
- Jiang Y, Perry DK, Hesser JE (2010). Adolescent suicide and health risk behaviors: Rhode Island's 2007 Youth Risk Behavior Survey. *American Journal or Preventative Medicine* 38, 551-555.
- Jiang Y, Perry DK, Hesser JE (2010). Suicide patterns and association with predictors among rhode island public high school students: A latent class analysis. *American Journal of Public Health* 100, 1701-1707.
- Jirapramukpitak T, Harpham T, Prince M (2010). Family violence and its 'adversity package': A community survey of family violence and adverse mental outcomes among young people. *Social Psychiatry and Psychiatric Epidemiology*. Published online: 20 June 2010. doi: 10.1007/s00127-010-0252-9.
- Johnson J, Gooding PA, Wood AM, Taylor PJ, Pratt D, Tarrrier N (2010). Resilience to suicidal ideation in psychosis: Positive self-appraisals buffer the impact of hopelessness. *Behaviour Research and Therapy* 48, 883-889.
- Jokinen J, Nordstrom AL, Nordstrom P (2010). Cholesterol, CSF 5-HIAA, violence and intent in suicidal men. *Psychiatry Research* 178, 217-219.
- Jokinen J, Ouda J, Nordstrom P (2010). Noradrenergic function and HPA axis dysregulation in suicidal behaviour. *Psychoneuroendocrinology*. Published online: 25 June 2010. doi:10.1016/j.psyneuen.2010.05.008.
- Jollant F, Lawrence NS, Olie E, O'Daly O, Malafosse A, Courtet P, Phillips ML (2010). Decreased activation of lateral orbitofrontal cortex during risky choices under uncertainty is associated with disadvantageous decision-making and suicidal behavior. *NeuroImage* 51, 1275-1281.
- Kadir NBA, Bifulco A (2010). Malaysian moslem mothers' experience of depression and service use. *Culture, Medicine and Psychiatry* 34, 443-467.
- Katon W (2010). Asthma, suicide risk, and psychiatric comorbidity. *The American Journal of Psychiatry* 167, 1020-1022.
- Kean C (2010). Battling with the life instinct: The paradox of the self and suicidal behavior in psychosis. *Schizophrenia Bulletin*. Published online: 5 July 2010. doi: 10.1093/schbul/sbq076.
- Kennedy TD, Edmonds WA, Dann KTJ, Burnett KF (2010). The clinical and adaptive features of young offenders with histories of child-parent violence. *Journal of Family Violence* 25, 509-520.
- Kerr DCR, Capaldi DM (2010). Young men's intimate partner violence and relationship functioning: Long-term outcomes associated with suicide attempt and aggression in adolescence. *Psychological Medicine*. Published online: 14 June 2010. doi: 10.1017/S0033291710001182.
- Keyvanara M, Haghshenas A (2010). The sociocultural contexts of attempting suicide among women in Iran. *Health Care for Women International* 31, 771-783.

- Kim SW, Kim SJ, Mun JW, Bae KY, Kim JM, Kim SY, Yang SJ, Shin IS, Yoon JS (2010). Psychosocial factors contributing to suicidal ideation in hospitalized schizophrenia patients in Korea. *Psychiatry Investigation* 7, 79-85.
- Klomek BA, Sourander A, Gould M (2010). The association of suicide and bullying in childhood to young adulthood: A review of cross-sectional and longitudinal research findings. *Canadian Journal of Psychiatry* 55, 282-288.
- Krause JS, Reed KS, McArdle JJ (2010). Factor structure and predictive validity of somatic and nonsomatic symptoms from the patient health questionnaire-9: A longitudinal study after spinal cord injury. *Archives of Physical Medicine and Rehabilitation* 91, 1218-1224.
- Kwok SYCL, Shek DTL (2010). Hopelessness, parent-adolescent communication, and suicidal ideation among Chinese adolescents in Hong Kong. *Suicide & Life-Threatening Behavior* 40, 224-233.
- Lamis DA, Malone PS, Langhinrichsen-Rohling J, Ellis TE (2010). Body investment, depression, and alcohol use as risk factors for suicide proneness in college students. *Crisis* 31, 118-127.
- Lamis DA, Malone PS, Langhinrichsen-Rohling J (2010). Involvement in intimate partner psychological abuse and suicide proneness in college women: Alcohol related problems as a potential mediator. *Partner Abuse* 1, 169-185.
- Lampe FC, Harding R, Smith CJ, Phillips AN, Johnson M, Sherr L (2010). Physical and psychological symptoms and risk of virologic rebound among patients with virologic suppression on antiretroviral therapy. *Journal of Acquired Immune Deficiency Syndromes* 54, 500-505.
- Lanes EC (2010). Are the 'Worst of the Worst' self-injurious prisoners more likely to end up in long-term maximum-security administrative segregation? *International Journal of Offender Therapy and Comparative Criminology*. Published online: 28 July 2010. doi: 10.1177/0306624X10378494.
- Langille D, Wilson K, Szumilas M, Corbett E (2010). Associations of sexual orientation with suicidal behaviour in Nova Scotia adolescents. *Journal of Adolescent Health* 46, 14.
- Large M, Babidge N, Nielsens O (2010). Intracranial self-stabbing. *American Journal of Forensic Medicine and Pathology*. Published online: 8 April 2010. doi: 10.1097/PAF.0b013e3181dd5b47.
- Lasgaard M, Goossens L, Elklit A (2010). Loneliness, depressive symptomatology, and suicide ideation in adolescence: Cross-sectional and longitudinal analyses. *Journal of Abnormal Child Psychology*. Published online: 11 August 2010. doi: 10.1007/s10802-010-9442-x.
- Lau JTF, Tsui HY, Ho SPY, Wong E, Yang X (2010). Prevalence of psychological problems and relationships with condom use and HIV prevention behaviors among Chinese female sex workers in Hong Kong. *Aids Care — Psychological and Socio-Medical Aspects of AIDS/HIV* 22, 659-668.
- Lau JTF, Yu XN, Mak WWS, Cheng YM, Lv YH, Zhang JX (2010). Suicidal ideation among HIV plus former blood and/or plasma donors in rural China. *Aids Care — Psychological and Socio-Medical Aspects of AIDS/HIV* 22, 946-954.
- Lee B-H, Kim Y-K (2010). Potential peripheral biological predictors of suicidal behavior in major depressive disorder. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*. Published online: 11 August 2010. doi: 10.1016/j.pnpbp.2010.08.001.
- Lee H-Y, Kim Y-K (2010). Transforming growth factor- β 1 and major depressive disorder with and without attempted suicide: Preliminary study. *Psychiatry Research* 178, 92.
- Lee KL, Ng HW, Tse ML, Lau FL (2010). Daytime versus night time intentional drug overdose: The outcome is different. *Hong Kong Journal of Emergency Medicine* 17, 347-351.

- Lesniak RG (2010). The lived experience of adolescent females who self-injure by cutting. *Advanced Emergency Nursing Journal* 32, 137-147.
- Lewis SP, Santor DA (2010). Self-harm reasons, goal achievement, and prediction of future self-harm intent. *Journal of Nervous and Mental Disease* 198, 362-369.
- Li LR, Sydenham E, Chaudhary B, You C (2010). Glucocorticoid with cyclophosphamide for paraquat-induced lung fibrosis. *Cochrane Database of Systematic Reviews* 6, CD008084.
- Liem M (2010). Homicide-parasuicide: A qualitative comparison with homicide and parasuicide. *Journal of Forensic Psychiatry and Psychology* 21, 247-263.
- Liisanantti JH, Ala-Kokko TI, Dunder TS, Ebeling HE (2010). Contributing factors in self-poisoning leading to hospital admission in adolescents in northern Finland. *Substance Use and Misuse* 45, 1340-1350.
- Lim HW, Song HS, Hwang YH, Lee HW, Suh CK, Park SP, Kwon SH (2010). Predictors of suicidal ideation in people with epilepsy living in Korea. *Journal of Clinical Neurology* 6, 81-88.
- Lizardi DM, Thompson RG, Keyes KM, Hasin DS (2010). The effect of parental remarriage following parental divorce on offspring suicide attempt. *Families in Society* 91, 186.
- Lizardi DM, Thompson RG, Keyes KM, Hasin DS (2010). The role of depression in the differential effect of childhood parental divorce on male and female adult offspring suicide attempt risk. *Journal of Nervous and Mental Disorders* 198, 687-690.
- Lloyd-Richardson EE (2010). Non-suicidal self-injury in adolescents. *Prevention Researcher* 17, 3-7.
- Ma WJ, Yan QH, Xu YJ, Xu XJ, Cai QM, Xu HF, Song XL, Nie SP (2010). Features on suicide attempts and its influencing factors among residents in Guangdong province. *Zhonghua Liu Xing Bing Xue Za Zhi* 31, 413-416.
- Maalouf FT, Brent DA (2010). Pharmacotherapy and psychotherapy of pediatric depression. *Expert Opinion on Pharmacotherapy* 11, 2129-2140.
- MacLaren VV, Best LA (2010). Nonsuicidal self-injury, potentially addictive behaviors, and the Five Factor Model in undergraduates. *Personality and Individual Differences* 49, 521-525.
- MacLean WE, Tervo RC, Hoch J, Tervo M, Symons FJ (2010). Suicidality among a community cohort of young children at risk for intellectual and developmental disabilities. *Journal of Pediatrics*. Published online 15 July 2010. doi: 10.1016/j.jpeds.2010.05.052.
- Madan A, Mrug S, Windle M (2010). Brief report: Do delinquency and community violence exposure explain internalizing problems in early adolescent gang members? *Journal of Adolescence*. Published online: 2 July 2010. doi:10.1016/j.adolescence.2010.06.003.
- Maddock GR, Carter GL, Murrell ER, Lewin TJ, Conrad AM (2010). Distinguishing suicidal from non-suicidal deliberate self-harm events in women with Borderline Personality Disorder. *Australian & New Zealand Journal of Psychiatry* 44, 574-582.
- Madianos MG, Evi K (2010). Trauma and natural disaster: The case of earthquakes in Greece. *Journal of Loss and Trauma* 15, 138-150.
- Magalhães PV, Kapczinski NS, Kapczinski F (2010). Correlates and impact of obsessive-compulsive comorbidity in bipolar disorder. *Comprehensive Psychiatry* 51, 353-356.
- Mahfoud ZR, Afifi RA, Haddad PH, DeJong J (2010). Prevalence and determinants of suicide ideation among Lebanese adolescents: Results of the GSHS Lebanon 2005. *Journal of Adolescence*. Published online: 30 April 2010. doi:10.1016/j.adolescence.2010.03.009.
- Mahon PB, Stütz AM, Seifuddin F, Huo Y, Goes FS, Jancic D, Judy JT, Depaulo JR, Gershon ES, McMahon FJ, Zandi PP, Potash JB, Willour VL (2010). Case-control association study of TGOLN2 in attempted suicide. *American Journal of Medical Genetics. Part B, Neuropsychiatric Genetics* 153, 1016-1023.

- Mahony D (2010). Assessing sexual abuse/attack histories with bariatric surgery patients. *Journal of Child Sexual Abuse* 19, 469-484.
- Mangnall J, Yurkovich E (2010). A grounded theory exploration of deliberate self-harm in incarcerated women. *Journal of Forensic Nursing* 6, 88-95.
- Mann JJ, Currier DM (2010). Stress, genetics and epigenetic effects on the neurobiology of suicidal behavior and depression. *European Psychiatry* 25, 268-271.
- Marshall BDL, Werb D (2010). Health outcomes associated with methamphetamine use among young people: a systematic review. *Addiction* 105, 991-1002.
- Marzano L, Fazel S, Rivlin A, Hawton K (2010). Psychiatric disorders in women prisoners who have engaged in near-lethal self-harm: Case-control study. *The British Journal of Psychiatry* 197, 219-226.
- Maschi T, Perez RM, Gibson S (2010). Examining gender differences in service utilization among children: nature, nurture, or social network? *Child and Adolescent Social Work Journal* 27, 177-191.
- Masi G, Mucci M, Pias P, Muratori F (2010). Managing bipolar youths in a psychiatric inpatient emergency service. *Child Psychiatry and Human Development*. Published online: 20 July 2010. DOI: 10.1007/s10578-010-0197-y.
- Mathieu MM, Welch B, Morrow-Howell N, Proctor E, Nickel M, Navarro J, Moon A (2010). Is veteran status and suicide risk assessed in community long-term care? A review of the states' assessment instruments. *Suicide and Life-Threatening Behavior* 40, 125-132.
- McCall WV, Blocker JN, D'Agostino R, Kimball J, Boggs N, Lasater B, Rosenquist PB (2010). Insomnia severity is an indicator of suicidal ideation during a depression clinical trial. *Sleep Medicine* 11, 822-827.
- McDuffie E, Brown GR (2010). 70 U.S. veterans with gender identity disturbances: A descriptive study. *International Journal of Transgenderism* 12, 21-30.
- McKelvey LM, Whiteside-Mansell L, Bradley RH, Casey PH, Conners-Burrow NA, Barrett KW (2010). Growing up in violent communities: Do family conflict and gender moderate impacts on adolescents' psychosocial development? *Journal of Abnormal Child Psychology*. Published online: 7 August 2010. DOI: 10.1007/s10802-010-9448-4.
- McMahon EM, Reulbach U, Keeley H, Perry IJ, Arensman E (2010). Bullying victimisation, self harm and associated factors in Irish adolescent boys. *Social Science & Medicine*. Published online 15 July 2010. doi:10.1016/j.socscimed.2010.06.034.
- Megarbane B, Buisine A, Jacobs F, Resiere D, Chevillard L, Vicaut E, Baud FJ (2010). Prospective comparative assessment of buprenorphine overdose with heroin and methadone: Clinical characteristics and response to antidotal treatment. *Journal of Substance Abuse Treatment* 38, 403-407.
- Melchior M, Ferrie JE, Alexanderson K, Goldberg M, Kivimaki M, Singh-Manoux A, Vahtera J, Westerlund H, Zins M, Head J (2010). Does sickness absence due to psychiatric disorder predict cause-specific mortality? A 16-year follow-up of the GAZEL occupational cohort study. *American Journal of Epidemiology* 172, 700-707.
- Melle I, Johannessen JO, Friis S, Haahr U, Joa I, Larsen TK, Opjordsmoen S, Rund BR, Simonsen E, Vaglum P, McGlashan T (2010). Course and predictors of suicidality over the first two years of treatment in first-episode schizophrenia spectrum psychosis. *Archives of Suicide Research* 14, 158-170.
- Mellsoy GW, Bower A, Baxendine SL (2010). Externalising and emotional categories, diagnostic groups and clinical profiles. *Internal Journal of Mental Health Systems* 4, 1-20.

- Meltzer H, Bebbington P, Brugha T, Jenkins R, McManus S, Dennis MS (2010). Personal debt and suicidal ideation. *Psychological Medicine*. Published online: 16 June 2010. doi:10.1017/S0033291710001261.
- Mendlewicz J, Massat I, Linotte S, Kasper S, Konstantinidis A, Lecrubier Y, Montgomery S, Serretti A, Zohar J, Souery D (2010). Identification of clinical factors associated with resistance to antidepressants in bipolar depression: Results from an European multicentre study. *International Clinical Psychopharmacology* 25, 297-301.
- Mentari EK, Stone M, Hammad TA (2010). Antiepileptic drugs and suicide attempts in patients with bipolar disorder. *Archives of General Psychiatry* 67, 972-972.
- Merrill RM, Njord L, Njord R, Read C, Pachano JDR (2010). The effect of family influence on indicators associated with street life among Filipino street children. *Vulnerable Children and Youth Studies* 5, 142-150.
- Meyer A, Koifman S, Koifman RJ, Moreira JC, de Rezende Chrisman J, Abreu-Villaca Y (2010). Mood disorders hospitalizations, suicide attempts, and suicide mortality among agricultural workers and residents in an area with intensive use of pesticides in Brazil. *Journal of Toxicology and Environmental Health Part A* 73, 866-877.
- Michel L, Carrieri MP, Fugon L, Roux P, Aubin HJ, Lert F, Obadia Y, Spire B (2010). Harmful alcohol consumption and patterns of substance use in HIV-infected patients receiving anti-retrovirals (ANRS-EN12-VESPA Study): Relevance for clinical management and intervention. *AIDS Care — Psychological and Socio-Medical Aspects of AIDS/HIV* 22, 1136-1145.
- Mihaljevic S, Vuksan-Cusa B, Marcinko D, Koic E, Kusevic Z, Jakovljevic M (2010). Spiritual well-being, cortisol, and suicidality in Croatian war veterans suffering from PTSD. *Journal of Religion and Health*. Published online: 7 August 2010. doi: 10.1007/s10943-010-9383-2.
- Miller M, Borges G, Orozco R, Mukamal K, Rimm EB, Benjet C, Medina-Mora ME (2010). Exposure to alcohol, drugs and tobacco and the risk of subsequent suicidality: Findings from the Mexican Adolescent Mental Health Survey. *Drug and Alcohol Dependence*. Published online: 30 August 2010. doi:10.1016/j.drugalcdep.2010.07.016.
- Minocha A, Bollineni D, Johnson WD, Wigington WC (2010). Racial differences in general health, suicidal thoughts, physical and sexual abuse in African Americans and Caucasians with irritable bowel syndrome. *Southern Medical Association* 103, 764-770.
- Moreno DH, Andrade LH (2010). Latent class analysis of manic and depressive symptoms in a population-based sample in São Paulo Paulo, Brazil. *Journal of Affective Disorders* 123, 208-215.
- Morita S, Higami S, Yamagiwa T, Iizuka S, Nakagawa Y, Yamamoto I, Inokuchi S (2010). Characteristics of elderly Japanese patients with severe burns. *Burns* 36, 1116-1121.
- Morris DW, Trivedi MH, Husain MM, Fava M, Budhwar N, Wisniewski SR, Miyahara S, Gollan JK, Davis LL, Daly EJ, Rush AJ (2010). Indicators of pretreatment suicidal ideation in adults with major depressive disorder. *Acta Psychiatrica Scandinavica* 121, 480-484.
- Mortimer AM, Singh P, Shepherd C, Puthiryackal J (2010). Clozapine for treatment-resistant schizophrenia: National Institute of Clinical Excellence (NICE) guidance in the real world. *Clinical Schizophrenia & Related Psychoses* 4, 49-55.
- Mota NP, Burnett M, Sareen J (2010). Associations between abortion, mental disorders, and suicidal behaviour in a nationally representative sample. *Canadian Journal of Psychiatry* 55, 239-247.
- Muehlenkamp JJ, Ertelt TW, Miller AL, Claes L (2010). Borderline personality symptoms differentiate non-suicidal and suicidal self-injury in ethnically diverse adolescent outpatients. *Journal of Child Psychology and Psychiatry*. Published online: 23 August 2010. doi:10.1111/j.1469-7610.2010.02305.x.

- Muehlenkamp JJ, Kerr PL (2010). Untangling a complex web: How non-suicidal self-injury and suicide attempts differ. *Prevention Researcher* 17, 8-10.
- Muehlenkamp JJ, Kerr PL, Bradley AR, Larsen MA (2010). Abuse subtypes and nonsuicidal self-injury: Preliminary evidence of complex emotion regulation patterns. *Journal of Nervous and Mental Disease* 198, 258-263.
- Mukamal KJ, Miller M (2010). Invited commentary: Body Mass Index and suicide — untangling an unlikely association. *American Journal of Epidemiology* 172, 900-904.
- Mula M, Bell GS, Sander JW (2010). Suicidality in epilepsy and possible effects of antiepileptic drugs. *Current Neurology and Neuroscience Reports* 10, 327-332.
- Needham BL, Austin EL (2010). Sexual orientation, parental support, and health during the transition to young adulthood. *Journal of Youth & Adolescence* 39, 1189-1198.
- Nejtek VA, Hardy S, Winter S (2010). Adolescent mental health: Challenges with maternal noncompliance. *Neuropsychiatric Disease and Treatment* 6, 67-69.
- Neufeld E, O'Rourke N, Donnelly M (2010). Enhanced measurement sensitivity of hopeless ideation among older adults at risk of self-harm: Reliability and validity of Likert-type responses to the Beck Hopelessness Scale. *Aging & Mental Health* 14, 752-756.
- Neuner I, Halfter S, Wollenweber F, Podoll K, Neuner I, Schneider F (2010). Nucleus accumbens deep brain stimulation did not prevent suicide attempt in Tourette syndrome. *Biological Psychiatry* 88, 19-20.
- Niedtfeld I, Schulze L, Kirsch P, Herpertz SC, Bohus M, Schmahl C (2010). Affect regulation and pain in borderline personality disorder: a possible link to the understanding of self-injury. *Biological Psychiatry* 68, 383-391.
- Nisenbaum R, Links PS, Eynan R, Heisel MJ (2010). Variability and predictors of negative mood intensity in patients with borderline personality disorder and recurrent suicidal behavior: Multilevel analyses applied to experience sampling methodology. *Journal of Abnormal Psychology* 119, 433-439.
- Nock MK (2010). Self-injury. *Annual Review of Clinical Psychology* 6, 339-363.
- Nock MK, Park JM, Finn CT, Deliberto TL, Dour HJ, Banaji MR (2010). Measuring the suicidal mind: Implicit cognition predicts suicidal behavior. *Psychological Science* 21, 511-517.
- Nyer M, Kasckow J, Fellows I, Lawrence EC, Golshan S, Solorzano E, Zisook S (2010). The relationship of marital status and clinical characteristics in middle-aged and older patients with schizophrenia and depressive symptoms. *Annals of Clinical Psychiatry* 22, 172-179.
- O'Connor CM, Jiang W, Kuchibhatla M, Silva SG, Cuffe MS, Callwood DD, Zakhary B, Stough WG, Arias RM, Rivelli SK, Krishnan R (2010). Safety and efficacy of sertraline for depression in patients with heart failure: Results of the SADHART-CHF (Sertraline against depression and heart disease in chronic heart failure) trial. *Journal of the American College of Cardiology* 56, 692-699.
- Oliffe JL, Ogrodniczuk JS, Bottorff JL, Johnson JL, Hoyak K (2010). 'You feel like you can't live anymore': Suicide from the perspectives of men who experience depression. *Social Science and Medicine*. Published online: 24 May 2010. doi:10.1016/j.socscimed.2010.03.057.
- Oliver C, Richards C (2010). Self-injurious behaviour in people with intellectual disability. *Current Opinion in Psychiatry* 23, 412-416.
- Oquendo MA, Currier D, Liu SM, Hasin DS, Grant BF, Blanco C (2010). Increased risk for suicidal behavior in comorbid bipolar disorder and alcohol use disorders: results from the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC). *Journal of Clinical Psychiatry* 71, 902-909.
- Oreland L, Nordquist N, Hallman J, Harro J, Nilsson KW (2010). Environment and the serotonergic system. *European Psychiatry* 25, 304-306.

- Ortega-Albas JJ, Lopez-Bernabe R, Garcia ALS, Gomez JRD (2010). Suicidal ideation secondary to sodium oxybate. *The Journal of Neuropsychiatry and Clinical Neurosciences* 22, 35226.
- Ortiz A, Cervantes P, Zlotnik G, van de Velde C, Slaney C, Garnham J, Turecki G, O'Donovan C, Alda M (2010). Cross-prevalence of migraine and bipolar disorder. *Bipolar Disorders* 12, 397-403.
- Pacchiarotti I, Valenti M, Colom F, Rosa AR, Nivoli AMA, Murru A, -Moreno JS, Vieta E (2010). Differential outcome of bipolar patients receiving antidepressant monotherapy versus combination with an antimanic drug. *Journal of Affective Disorders*. Published online: 3 September 2010. doi:10.1016/j.jad.2010.07.036.
- Pagura J, Stein MB, Bolton JM, Cox BJ, Grant B, Sareen J (2010). Comorbidity of borderline personality disorder and posttraumatic stress disorder in the U.S. population. *Journal of Psychiatric Research*. Published online: 26 May 2010. doi: 10.1016/j.jpsychires.2010.04.016.
- Palmieri A, Sorar  G, Albertini E, Semenza C, Vottero-Ris F, D'Ascenzo C, Querin G, Zennaro A, Pegoraro E, Angelini C (2010). Psychopathological features and suicidal ideation in amyotrophic lateral sclerosis patients. *Journal of the Neurological Sciences*. Published online: 3 June 2010. doi: 10.1007/s10072-010-0332-3.
- Pantalone DW, Hessler DM, Simoni JM (2010). Mental health pathways from interpersonal violence to health-related outcomes in HIV-positive sexual minority men. *Journal of Consulting & Clinical Psychology* 78, 387-397.
- Paparrigopoulos T, Ferentinos P, Kouzoupis A, Koutsis G, Papadimitriou GN (2010). The neuropsychiatry of multiple sclerosis: Focus on disorders of mood, affect and behaviour. *International Review of Psychiatry* 22, 14.
- Park S, Cho MJ, Chang SM, Jeon HJ, Cho SJ, Kim BS, Bae JN, Wang HR, Ahn JH, Hong JP (2010). Prevalence, correlates, and comorbidities of adult ADHD symptoms in Korea: Results of the Korean epidemiologic catchment area study. *Psychiatry Research*. Published online: 19 August 2010. doi:10.1016/j.psychres.2010.07.047.
- Park S-M, Cho S-I, Moon S-S (2010). Factors associated with suicidal ideation: Role of emotional and instrumental support. *Journal of Psychosomatic Research* 5, 362-369.
- Pavkov TW, Travis L, Fox KA, King CB, Cross TL (2010). Tribal youth victimization and delinquency: analysis of youth risk behavior surveillance survey data. *Cultural Diversity and Ethnic Minority Psychology* 16, 123-134.
- Pedrelli P, Baer L, Losifescu DV, Fava M (2010). Relationship between residual symptoms of depression and self-reported cognitive impairment. *CNS Spectrums* 15, 46-51.
- Penas-Lledo E, Jimenez-Murcia S, Granero R, Penelo E, Aguera Z, Alvarez-Moya E, Fernandez-Aranda F (2010). Specific eating disorder clusters based on social anxiety and novelty seeking. *Journal of Anxiety Disorders* 24, 767-773.
- Pereira EJ, Kroner DG, Holden RR, Flamenbaum R (2010). Testing Shneidman's model of suicidality in incarcerated offenders and in undergraduates. *Personality and Individual Differences* 49, 912-917.
- Perepletchikova F, Kaufman J (2010). Emotional and behavioral sequelae of childhood maltreatment. *Current Opinion in Pediatrics* 22, 610-615.
- Perlis RH, Ostacher MJ, Miklowitz DJ, Hay A, Nierenberg AA, Thase ME, Sachs GS (2010). Clinical features associated with poor pharmacologic adherence in bipolar disorder: Results from the STEP-BD study. *Journal of Clinical Psychiatry* 71, 296-303.
- Peteet JR, Maytal G, Rokni H (2010). Unimaginable loss: contingent suicidal ideation in family members of oncology patients. *Psychosomatics* 51, 166-170.

- Peters E, Landau S, McCrone P, Cooke M, Fisher P, Steel C, Evans R, Carswell K, Dawson K, Williams S, Howard A, Kuipers E (2010). A randomised controlled trial of cognitive behaviour therapy for psychosis in a routine clinical service. *Acta Psychiatrica Scandinavica* 122, 302-318.
- Pettersen K, Rydningen NN, Christensen TB, Walby FA (2010). Autobiographical memory and suicide attempts in schizophrenia. *Suicide and Life-Threatening Behavior* 40, 369-375.
- Pickles A, Aglan A, Collishaw S, Messer J, Rutter M, Maughan B (2010). Predictors of suicidality across the life span: The Isle of Wight study. *Psychological Medicine* 40, 1453-1466.
- Pigeon WR, Caine ED (2010). Insomnia and the risk for suicide: Does sleep medicine have interventions that can make a difference? *Sleep Medicine* 11, 816-817.
- Ploderl M, Faistauer G, Fartacek R (2010). The contribution of school to the feeling of acceptance and the risk of suicide attempts among Austrian gay and bisexual males. *Journal of Homosexuality* 57, 819-841.
- Pompili M, Innamorati M, Lester D, Girardi P, Tatarelli R (2010). Nearly lethal resuscitated suicide attempters have no low serum levels of cholesterol and triglycerides. *Psychological Reports* 106, 785-790.
- Pompili M, Serafini G, di Cosimo D, Dominici G, Innamorati M, Lester D, Forte A, Girardi N, de Filippis S, Tatarelli R, Martelletti P (2010). Psychiatric comorbidity and suicide risk in patients with chronic migraine. *Neuropsychiatric Disease and Treatment* 6, 81-91.
- Powell S, Butollo W, Hagl M (2010). Missing or killed: the differential effect on mental health in women in Bosnia and Herzegovina of the confirmed or unconfirmed loss of their husbands. *European Psychologist* 15, 185-192.
- Prinstein MJ, Heilbron N, Guerry JD, Franklin JC, Rancourt D, Simon V, Spirito A (2010). Peer influence and nonsuicidal self injury: Longitudinal results in community and clinically-referred adolescent samples. *Journal of Abnormal and Child Psychology* 38, 669-682.
- Prisciandaro JJ, Roberts JE (2010). Evidence for the continuous latent structure of mania in the Epidemiologic Catchment Area from multiple latent structure and construct validation methodologies. *Psychological Medicine*. Published online: 27 May 2010. Doi: 10.1017/S0033291710001078.
- Putkonen H, Weizmann-Henelius G, Lindberg N, Rovamo T, Häkkinen-Nyholm H (2010). Gender differences in homicide offenders' criminal career, substance abuse and mental health care. A nationwide register-based study of Finnish homicide offenders 1995-2004. *Criminal Behaviour and Mental Health*. Published online: 5 July 2010. doi: 10.1002/cbm.782.
- Quarantini LC, Miranda-Scippa A, Nery-Fernandes F, Andrade-Nascimento M, Galvao-de-Almeida A, Guimaraes JL, Teles CAS, Netto LR, Lira SB, de Oliveira IR, Post RM, Kapczinski F, Koenen KC (2010). The impact of comorbid posttraumatic stress disorder on bipolar disorder patients. *Journal of Affective Disorders* 123, 71-76.
- Quintero-Rivera F, Sharifi-Hannauer P, Martinez-Agosto JA (2010). Autistic and psychiatric findings associated with the 3q29 microdeletion syndrome: Case report and review. *American Journal of Medical Genetics Part A*. Published online: 9 September 2010. doi: 10.1002/ajmg.a.33573.
- Qusar MMAS, Morshed NM, Kader A, Azad AK, Uddin A, Shaikh MAK (2010). Psychiatric morbidity of suicide attempt patients requiring ICU intervention. *Journal of Medicine* 11, 7-11.
- Rabasseda X (2010). A report from the 4th Biennial Conference of the International Society of Bipolar Disorder (March 17-20, 2010 - Sao Paulo, Brazil). *Drugs of Today* 46, 433-436.

- Reeves RR, Ladner ME (2010). Antidepressant-induced suicidality: An update. *CNS Neuroscience and Therapeutics* 16, 227-234.
- Reimherr FW, Martin ML, Eudicone JM, Marchant BK, Tran Q-V, Pikalov A, Marcus RN, Berman RM, Carlson BX (2010). A pooled MADRS/IDS cross-correlation analysis: Clinician and patient self-report assessment of improvement in core depressive symptoms with adjunctive aripiprazole. *Journal of Clinical Psychopharmacology* 30, 300-305.
- Reisch T, Seifritz E, Esposito F, Wiest R, Valach L, Michel K (2010). An fMRI study on mental pain and suicidal behaviour. *Journal of Affective Disorders* 126, 321-325.
- Rezaie L, Khazaie H, Soleimani A, Schwebel DC (2010). Is self-immolation a distinct method for suicide? A comparison of Iranian patients attempting suicide by self-immolation and by poisoning. *Burns*. Published online: 12 August 2010. doi: 10.1016/j.burns.2010.07.003.
- Rihmer Z, Benazzi F (2010). Impact on suicidality of the borderline personality traits impulsivity and affective instability. *Annals of Clinical Psychiatry* 22, 121-128.
- Ritchie CW, King MB, Nolan F, O'Connor S, Evans M, Toms N, Kitchen G, Evans S, Bielawski C, Lee D, Blanchard M (2010). The association between personality disorder and an act of deliberate self harm in the older person. *International Psychogeriatrics*. Published online: 15 September 2010. doi: 10.1017/S1041610210001742.
- Rivers I, Noret N (2010). Participant roles in bullying behavior and their association with thoughts of ending one's life. *Crisis* 31, 143-148.
- Roca M, Armengol S, Garcia-Garcia M, Rodriguez-Bayon A, Ballesta I, Serrano MJ, Comas A, Gili M (2010). Clinical differences between first and recurrent episodes in depressive patients. *Comprehensive Psychiatry*. Available online 28 June 2010. doi: 10.1016/j.comppsy.2010.04.011.
- Rocca CC, Gerchmann L, Abreu LN, Lafer B (2010). Lifetime history of suicide attempts is associated with poorer social skills in patients with bipolar disorder type I. *Revista Brasileira de Psiquiatria* 32, 200-201.
- Rosness TA, Barca ML, Engedal K (2010). Occurrence of depression and its correlates in early onset dementia patients. *International Journal of Geriatric Psychiatry* 25, 704-711.
- Roy A (2010). Risk factors for attempting suicide in heroin addicts. *Suicide and Life-Threatening Behavior* 40, 416-420.
- Roy A, Roy M, Janal M (2010). Suicide attempts and ideation in African-American type 1 diabetic patients. *Psychiatry Research* 179, 53-56.
- Rubin DC (2010). Emotion and autobiographical memory: Considerations from posttraumatic stress disorder. *Physics of Life Reviews* 7, 132-133.
- Runeson B, Tidemalm D, Dahlin M, Lichtenstein P, Långström N (2010). Method of attempted suicide as predictor of subsequent successful suicide: National long term cohort study. *British Medical Journal* 341, 3222.
- Russell ST, Toomey RB (2010). Men's sexual orientation and suicide: Evidence for adolescent-specific risk. *Social Science & Medicine*. Published online: 30 August 2010. doi:10.1016/j.socscimed.2010.07.038.
- Ryu V, Jon D-I, Cho HS, Kim SJ, Lee E, Kim EJ, Seok J-H (2010). Initial depressive episodes affect the risk of suicide attempts in Korean patients with bipolar disorder. *Yonsei Medical Journal* 51, 641-647.
- Sanches M, Newberg AR, Soares JC (2010). Emerging drugs for bipolar disorder. *Expert Opinion on Emerging Drugs* 15, 453-466.
- Sansone RA, Whitecar P, Wiederman MW (2010). Self-harm behaviors among buprenorphine-treated patients. *Primary Care Companion to the Journal of Clinical Psychiatry* 12, 2.

- Sarkar NN (2010). Childhood sexual abuse and its impact on woman's health. *International Medical Journal* 17, 107-112.
- Schenkel LC, Segal J, Becker JA, Manfro GG, Bianchin MM, Leistner-Segal S (2010). The BDNF Val66Met polymorphism is an independent risk factor for high lethality in suicide attempts of depressed patients. *Progress in Neuro-Psychopharmacology and Biological Psychiatry* 34, 940-944.
- Schneider B, Baumert J, Schneider A, Marten-Mittag B, Meisinger C, Erazo N, Hammer GP, Ladwig KH (2010). The effect of risky alcohol use and smoking on suicide risk: Findings from the German MONICA/KORA-Augsburg Cohort Study. *Social Psychiatry and Psychiatric Epidemiology*. Published online: 20 September 2010. doi: 10.1007/s00127-010-0287-y.
- Schraiber LB, Latorre Mdo R, Franca I Jr, Segri NJ, D'Oliveira AF (2010). Validity of the WHO VAW study instrument for estimating gender-based violence against women. *Revista de Saude Publica* 44, 658-666.
- Scott KM, Hwang I, Chiu WT, Kessler RC, Sampson NA, Angermeyer M, Beautrais A, Borges G, Bruffaerts R, de Graaf R, Florescu S, Fukao A, Haro JM, Hu C, Kovess V, Levinson D, Posada-Villa J, Scocco P, Nock MK (2010). Chronic physical conditions and their association with first onset of suicidal behavior in the world mental health surveys. *Psychosomatic Medicine* 72, 712-719.
- Serafini G, Pompili M, Innamorati M, Fusar-Poli P, Akiskal HS, Rihmer Z, Lester D, Romano A, de Oliveira IR, Strusi L, Ferracuti S, Girardi P, Tatarelli R (2010). Affective temperamental profiles are associated with white matter hyperintensity and suicidal risk in patients with mood disorders. *Journal of Affective Disorders*. Published online: 11 August 2010. doi:10.1016/j.jad.2010.07.020.
- Sherr L, Lampe FC, Clucas C, Johnson M, Fisher M, Leake Date H, Anderson J, Edwards S, Smith CJ, Hill T, Harding R (2010). Self-reported non-adherence to ART and virological outcome in a multiclinic UK study. *AIDS Care* 22, 939-945.
- Shorey RC, Sherman AE, Kivisto AJ, Elkins SR, Rhatigan DL, Moore TM (2010). Gender differences in depression and anxiety among victims of intimate partner violence: The moderating effect of shame proneness. *Journal of Interpersonal Violence*. Published online: 28 June 2010. doi: 10.1177/0886260510372949.
- Smith JM (2010). Clinical implications of treating depressed older adults with SSRIs: Possible risk of hyponatremia. *Journal of Gerontological Nursing* 36, 22-29.
- Smith PN, Cukrowicz KC, Poindexter EK, Hobson V, Cohen LM (2010). The acquired capability for suicide: A comparison of suicide attempters, suicide ideators, and non-suicidal controls. *Depression & Anxiety* 27, 871-877.
- Snorrason I, Smári J, Olafsson RP (2010). Emotion regulation in pathological skin picking: Findings from a non-treatment seeking sample. *Journal of Behavior Therapy and Experimental Psychiatry* 41, 238-245.
- Sparkes A (2010). Understanding repeated self-injury: A multidisciplinary approach. *British Journal of Social Work* 40, 1023 -1025.
- Spoerri A, Zwahlen M, Bopp M, Gutzwiller F, Egger M; for the Swiss National Cohort Study (2010). Religion and assisted and non-assisted suicide in Switzerland: National Cohort Study. *Intentional Journal of Epidemiology*. Published online: 13 September 2010. doi: 10.1093/ije/dyq141.

- Stein DJ, Chiu WT, Hwang I, Kessler RC, Sampson N, Alonso J, Borges G, Bromet E, Bruffaerts R, de Girolamo G, Florescu S, Gureje O, He Y, Kovess-Masfety V, Levinson D, Matschinger H, Mneimneh Z, Nakamura Y, Ormel J, Posada-Villa J, Sagar R, Scott KM, Tomov T, Viana MC, Williams DR, Nock MK (2010). Cross-national analysis of the associations between traumatic events and suicidal behavior: findings from the WHO World Mental Health Surveys. *PLoS One* 5, e10574.
- Stevens J, McGeehan J, Kelleher KJ (2010). Readiness to change in adolescents screening positive for substance use in urban primary care clinics. *Journal of Child and Adolescent Substance Abuse* 19, 99-107.
- Stewart SL, Theall-Honey L, Armieri A, Cullion C (2010). Predicting the utilization of intrusive interventions at a tertiary residential treatment center. *Residential Treatment for Children & Youth* 27, 175-190.
- Strupp M (2010). Pharmacotherapy: lithium and ALS, levodopa and neuropathy, antiepileptic drugs and suicide. *Journal of Neurology*. Published online: 16 September 2010. doi: 10.1007/s00415-010-5751-9.
- Sumnall H, Bellis MA, Hughes K, Calafat A, Juan M, Mendes F (2010). A choice between fun or health? Relationships between nightlife substance use, happiness, and mental well-being. *Journal of Substance Use* 15, 89-104.
- Suokas JT, Suominen K, Heila H, Ostamo A, Aalto-Setälä T, Perala J, Saarni S, Lonnqvist J, Suvisaari JM (2010). Attempted suicide in mental disorders in young adulthood. *Social Psychiatry and Psychiatric Epidemiology*. Published online: 24 July 2010. doi: 10.1007/s00127-010-0272-5.
- Suto I, Arnaut GLY (2010). Suicide in prison: A qualitative study. *Prison Journal* 90, 288-312.
- Swann AC (2010). Mechanisms of impulsivity in bipolar disorder and related illness. *Epidemiologia e Psichiatria Sociale* 19, 120-130.
- Swann AC, Lijffijt M, Lane SD, Steinberg JL, Moeller FG (2010). Interactions between bipolar disorder and antisocial personality disorder in trait impulsivity and severity of illness. *Acta Psychiatrica Scandinavica* 121,453-461.
- Swogger MT, You S, Cashman-Brown S, Conner KR. (2010). Childhood physical abuse, aggression, and suicide attempts among criminal offenders. *Psychiatry Research*. Published online 17 August 2010. doi: 10.1016/j.psychres.2010.07.036.
- Symons FJ, Harper V, Shinde SK, Clary J, Bodfish JW (2010). Evaluating a sham-controlled sensory-testing protocol for nonverbal adults with neurodevelopmental disorders: Self-injury and gender effects. *Journal of Pain* 11, 773-781.
- Taguchi T, Mizobuchi M, Terada Y (2010). Hypoglycemic encephalopathy as a result of an attempted suicide. *Clinical Neurology and Neurosurgery* 112, 455-456.
- Tahir SM, Memon AR, Kumar M, Ali SA (2010). Self inflicted burn: A high tide. *Journal of the Pakistan Medical Association* 65, 338-341.
- Taliaferro LA, Rienzo BA, Miller MD, Pigg RM, Dodd VJ (2010). Potential mediating pathways through which sports participation relates to reduced risk of suicidal ideation. *Research Quarterly for Exercise and Sport* 81, 328-339.
- Tamison D, Margaret S (2010). RE: Suicidal behaviours among Polish youth in light of the following papers: suicidal behaviour in children and adolescents. Parts 1 and 2. *Canadian Journal of Psychiatry* 55, 400.
- Tarrier N, Picken A (2010). Co-morbid PTSD and suicidality in individuals with schizophrenia and substance and alcohol abuse. *Social Psychiatry and Psychiatric Epidemiology*. Published online: 15 August 2010. doi: 10.1007/s00127-010-0277-0.

- Taylor PJ, Wood AM, Gooding P, Tarrrier N (2010). Appraisals and suicidality: The mediating role of defeat and entrapment. *Archives of Suicide Research* 14, 236-247.
- Taylor PJ, Gooding PA, Wood AM, Johnson J, Pratt D, Tarrrier N (2010). Defeat and entrapment in schizophrenia: The relationship with suicidal ideation and positive psychotic symptoms. *Psychiatry Research* 178, 244-248.
- Taylor PJ, Gooding PA, Wood AM, Tarrrier N (2010). Memory specificity as a risk factor for suicidality in non-affective psychosis: The ability to recall specific autobiographical memories is related to greater suicidality. *Behaviour Research and Therapy* 48, 1047-1052.
- Teasdale B, Bradley-Engen MS (2010). Adolescent same-sex attraction and mental health: The role of stress and support. *Journal of Homosexuality* 57, 287-309.
- Teicher MH (2010). Commentary: Childhood abuse: new insights into its association with posttraumatic stress, suicidal ideation, and aggression. *Journal of Pediatric Psychology* 35, 578-580.
- Thundiyil JG, Rowley F, Papa L, Olson KR, Kearney TE (2010). Risk factors for complications of drug-induced seizures. *Journal of Medical Toxicology*. Published online: 27 July 2010. doi: 10.1007/s13181-010-0096-4.
- Till B, Niederkrotenthaler T, Herberth A, Vitouch P, Sonneck G (2010). Suicide in films: The impact of suicide portrayals on nonsuicidal viewers' well-being and the effectiveness of censorship. *Suicide and Life-Threatening Behavior* 40, 319-327.
- Topol EJ, Bousser MG, Fox KAA, Creager MA, Despres JP, Easton JD, Hamm CW, Montalescot G, Steg PG, Pearson TA, Cohen E, Gaudin C, Job B, Murphy JH, Bhatt DL (2010). Rimonabant for prevention of cardiovascular events (CRESCENDO): A randomised, multicentre, placebo-controlled trial. *The Lancet* 376, 517-523.
- Tourian KA, Padmanabhan K, Groark J, Ninan PT (2010). Retrospective analysis of suicidality in patients treated with the antidepressant desvenlafaxine. *Journal of Clinical Psychopharmacology* 30, 411-416.
- Trull TJ, Jahng S, Tomko RL, Wood PK, Sher KJ (2010). Revised NESARC personality disorder diagnoses: Gender, prevalence, and comorbidity with substance dependence disorders. *Journal of Personality Disorders* 24, 412-426.
- van Bergen DD, Eikelenboom M, Smit JH, van de Looij-Jansen PM, Saharso S (2010). Suicidal behavior and ethnicity of young females in Rotterdam, the Netherlands: Rates and risk factors. *Ethnicity & Health*. Published online: 5 August 2010. doi: 10.1080/13557858.2010.494719.
- Vance DE, Ross JA, Moneyham L, Farr KF, Fordham P (2010). A model of cognitive decline and suicidal ideation in adults aging with HIV. *Journal of Neuroscience Nursing* 42, 150-156.
- Vang FJ, Ryding E, Traskman-Bendz L, van Westen D, Lindstrom MB (2010). Size of basal ganglia in suicide attempters, and its association with temperament and serotonin transporter density. *Psychiatry Research — Neuroimaging* 183, 177-179.
- Vaszari JM, Bradford S, Callahan O'Leary C, Ben Abdallah A, Cottler LB (2010). Risk factors for suicidal ideation in a population of community-recruited female cocaine users. *Comprehensive Psychiatry*. Published online: 9 September 2010. doi: 10.1016/j.comppsy.2010.07.003.
- Vázquez GH, Gonda X, Zaratiegui R, Lorenzo LS, Akiskal K, Akiskal HS (2010). Hyperthymic temperament may protect against suicidal ideation. *Journal of Affective Disorders*. Published online: 11 May 2010. doi: 10.1016/j.jad.2010.04.015.
- Vázquez J, Panadero S, Rincón P (2010). Stressful life events and suicidal behaviour in countries with different development levels: Nicaragua, El Salvador, Chile and Spain. *Journal of Community & Applied Social Psychology* 20, 288-298.
- Ventrice D, Valach L, Reisch T, Michel K (2010). Suicide attempters' memory traces of exposure to suicidal behavior. *Crisis* 31, 93-99.

- Vyssoki B, Steindl-Munda P, Ferenci P, Walter H, Hofer P, Bluml V, Friedrich F, Kogoj D, Lesch OM (2010). Comparison of alcohol-dependent patients at a gastroenterological and a psychiatric ward according to the Lesch alcoholism typology: Implications for treatment. *Alcohol and Alcoholism*. Published online: 20 September 2010. doi: 10.1093/alcalc/aqq059.
- Wachtel LE, Dhossche DM (2010). Self-injury in autism as an alternate sign of catatonia: Implications for electroconvulsive therapy. *Medical Hypotheses* 75, 111-114.
- Wagner JL, Smith G, Ferguson P, van Bakergem K, Hrisiko S (2010). Pilot study of an integrated cognitive-behavioral and self-management intervention for youth with epilepsy and caregivers: Coping Openly and Personally with Epilepsy (COPE). *Epilepsy and Behavior* 18, 280-285.
- Wahlström L, Michélsen H, Schulman A, Backheden M (2010). Childhood life events and psychological symptoms in adult survivors of the 2004 Tsunami. *Nordic Journal of Psychiatry* 64, 226-226.
- Walker RL, Alabi D, Roberts J, Obasi, EM (2010). Ethnic group differences in reasons for living and the moderating role of cultural worldview. *Cultural Diversity & Ethnic Minority Psychology* 16, 372-378.
- Walls NE, Bell S (2010). Correlates of engaging in survival sex among homeless youth and young adults. *Journal of Sex Research*. Published online: 25 August 2010. doi: 10.1080/00224499.2010.501916.
- Warden D, Trivedi MH, Wisniewski SR, Kurian B, Zisook S, Kornstein SG, Friedman ES, Miyahara S, Leuchter AF, Fava M, Rush AJ (2010). Early adverse events and attrition in selective serotonin reuptake inhibitor treatment a suicide assessment methodology study report. *Journal of Clinical Psychopharmacology* 30, 259-266.
- Washburn JJ, Juzwin KR, Styer DM, Aldridge D (2010). Measuring the urge to self-injure: Preliminary data from a clinical sample. *Psychiatry Research* 178, 540-544.
- Weissman AS, Bates ME (2010). Increased clinical and neurocognitive impairment in children with autism spectrum disorders and comorbid bipolar disorder. *Research in Autism Spectrum Disorders* 4, 670-680.
- Wesseling C, van Wendel de Joode B, Keifer M, London L, Mergler D, Stallones L (2010). Symptoms of psychological distress and suicidal ideation among banana workers with a history of poisoning by organophosphate or n-methyl carbamate pesticides. *Occupational and Environmental Medicine*. Published online: 25 August 2010. doi:10.1136/oem.2009.047266.
- Westmoreland P, Gunter T, Loveless P, Allen J, Sieleni B, Black DW (2010). Attention deficit hyperactivity disorder in men and women newly committed to prison: clinical characteristics, psychiatric comorbidity, and quality of life. *International Journal of Offender Therapy and Comparative Criminology* 54, 361-377.
- Whitlock J (2010). Self-injurious behavior in adolescents. *PLoS Med* 7, e1000240.
- Wilcox HC (2010). Erratum: Psychiatric morbidity, violent crime, and suicide among children and adolescents exposed to parental death. *Journal of the American Academy of Child and Adolescent Psychiatry* 49, 858-859.
- Wilcox HC, Arria AM, Caldeira KM, Vincent KB, Pinchevsky GM, O'Grady KE (2010). Prevalence and predictors of persistent suicide ideation, plans, and attempts during college. *Journal of Affective Disorders*. Published online: 23 August 2010. doi: 10.1016/j.jad.2010.04.017.
- Wilcox HC, Kuramoto SJ, Lichtenstein P, Langstrom N, Brent DA, Runeson B (2010). Psychiatric morbidity, violent crime, and suicide among children and adolescents exposed to parental death. *Journal of the American Academy of Child and Adolescent Psychiatry* 49, 514-523.

- Williams JMG, Russell IT, Crane C, Russell D, Whitaker CJ, Duggan DS, Barnhofer T, Fennell MJV, Crane R, Silverton S (2010). Staying well after depression: Trial design and protocol. *BMC Psychiatry* 10, 23.
- Willsher KA (2010). Overcoming mixed messages on alcohol consumption: A teaching strategy. *Nurse Education in Practice* 10, 279-284.
- Wingo AP, Fani N, Bradley B, Ressler KJ (2010). Psychological resilience and neurocognitive performance in a traumatized community sample. *Depression and Anxiety* 27, 768-774.
- Winterrowd E, Canetto SS, Chavez EL (2010). Friendships and suicidality among Mexican American adolescent girls and boys. *Death Studies* 34, 641-660.
- Witte TK, Gould MS, Munfakh JL, Kleinman M, Joiner TE Jr, Kalafat J (2010). Assessing suicide risk among callers to crisis hotlines: A confirmatory factor analysis. *Journal of Clinical Psychology* 66, 1-24.
- Wong SP, Phillips MR (2009). Nonfatal suicidal behavior among Chinese women who have been physically abused by their male intimate partners. *Suicide and Life Threatening Behavior* 39, 648-658.
- Woodhead C, Rona RJ, Iversen A, Macmanus D, Hotopf M, Dean K, McManus S, Meltzer H, Brugha T, Jenkins R, Wessely S, Fear NT (2010). Mental health and health service use among post-national service veterans: results from the 2007 Adult Psychiatric Morbidity Survey of England. *Psychological Medicine*. Published online 21 April 2010. Doi: 10.1017/S0033291710000759.
- Xi Z-X (2010). Preclinical pharmacology, efficacy, and safety of varenicline in smoking cessation and clinical utility in high risk patients. *Drug, Healthcare and Patient Safety* 2, 39-48.
- Yagmur F, Cavusoglu M, Karanfil R, Din H (2010). Determination of sociodemographic characteristics and etiological factors of suicide attempters. *Pakistan Journal of Medical Sciences* 26, 678-683.
- Yang Y-S, Yen J-Y, Ko C-H, Cheng C-P, Yen C-F (2010). The association between problematic cellular phone use and risky behaviors and low self-esteem among Taiwanese adolescents. *BMC Public Health* 10, 217
- Yen CF, King BH, Tang TC (2010). The association between short and long nocturnal sleep durations and risky behaviours and the moderating factors in Taiwanese adolescents. *Psychiatry Research* 179, 69-74.
- Yoder KA, Whitbeck LB, Hoyt DR (2010). Comparing subgroups of suicidal homeless adolescents: Multiple attempters, single attempters and ideators. *Vulnerable Children and Youth Studies* 5, 151-162.
- Yoshimasu K, Kawakami N (2010). Epidemiological aspects of intermittent explosive disorder in Japan; prevalence and psychosocial comorbidity: Findings from the World Mental Health Japan Survey 2002-2006. *Psychiatry Research*. Published online: 13 August 2010. doi:10.1016/j.psychres.2010.07.018.
- Young R (2010). Trauma, attempted suicide, and morning cortisol in a community sample of adolescents. *Journal of Traumatic Stress* 23, 288-291.
- Yuan C-M, Huang J, Wang Z, Li Z-Z, Wang Z-Y, Yi Z-H, Wang Y, Hong W, Peng D-H, Chen J, Hu Y-Y, Cao L, Fang Y-R (2010). Correlation analysis of early trauma experience and depression and suicidal tendency of patients with depression. *Journal of Shanghai Jiaotong University* 30, 628-630.
- Zisook S, Kasckow JW, Lanouette NM, Golshan S, Fellows I, Vahia I, Mohamed S, Rao S (2010). Augmentation with citalopram for suicidal ideation in middle-aged and older outpatients with schizophrenia and schizoaffective disorder who have subthreshold depressive symptoms: A randomized controlled trial. *Journal of Clinical Psychiatry* 71, 915-922.

- Zubaran C, Foresti K, Thorell MR, Franceschini P, Homero W (2010). Depressive symptoms in crack and inhalant users in southern Brazil. *Journal of Ethnicity in Substance Abuse* 9, 221-136.
- Zubillaga P, Emparanza JI, Guinea B, Mendizabal F, Muriel A, Ruiz M, Sanchez AM, Sistiaga F, Viguria F (2010). A cohort study of accidents occurring in mentally handicapped patients living in institutions. *Annals of General Psychiatry* 9, 22.
- Zyoud SH, Awang R, Sulaiman SAS, Al-Jabi SW (2010). A cross-sectional observation of the factors associated with deliberate self-poisoning with acetaminophen: impact of gender differences and psychiatric intervention. *Human Psychopharmacology* 25, 500-508.
- Zyoud SH, Awang R, Sulaiman SAS, Al-Jabi SW (2010). High prevalence of hypokalemia after acute acetaminophen overdose: Impact of psychiatric illness. *Human and Experimental Toxicology* 29, 773-778.

Care and Support

- Anonymous (2010). Helping those who self-harm. *Lancet* 376, 141.
- Anonymous (2010). Inadequate care in suicide attempts. *Australian Journal of Pharmacy* 91, 1078-1722.
- Anonymous (2010). Prepare for more — Many more — Mental health emergencies. *ED Nursing* 13, 109-111.
- Bannan N (2010). Group-based problem-solving therapy in self-poisoning females: A pilot study. *Counselling and Psychotherapy Research* 10, 201-213.
- Beautrais AL, Gibb SJ, Faulkner A, Fergusson DM, Mulder RT (2010). Postcard intervention for repeat self-harm: randomised controlled trial. *British Journal of Psychiatry* 197, 55-60.
- Berrino A, Ohlendorf P, Duriaux S, Burnand Y, Lorillard S, Andreoli A (2010). Crisis intervention at the general hospital: An appropriate treatment choice for acutely suicidal borderline patients. *Psychiatry Research*. Published online: 29 July 2010. doi: 10.1016/j.psychres.2010.06.018.
- Bliss S (2010). The 'internal saboteur': contributions of W. R. D. Fairbairn in understanding and treating self-harming adolescents. *Journal of Social Work Practice* 24, 227-237.
- Britton PC, Patrick H, Wenzel A, Williams GC (2010). Integrating motivational interviewing and self-determination theory with cognitive behavioral therapy to prevent suicide. *Cognitive and Behavioral Practice*. Published online: 9 April 2010. doi: 10.1016/j.cbpra.2009.06.004.
- Buila SM, Swanke JR (2010). Patient-centered mental health care: Encouraging caregiver participation. *Care Management Journal* 11, 146-150.
- Burke BL (2010). What can motivational interviewing do for you? *Cognitive and Behavioral Practice*. Published online 13 April 2010. doi:10.1016/j.cbpra.2009.08.004.
- Busby KK, Sajatovic M (2010). Patient, treatment, and systems-level factors in bipolar disorder nonadherence: A summary of the literature. *CNS Neuroscience & Therapeutics* 16, 308-315.
- Chen CK, Wang TY, Wang WS (2010). Demographic and clinical characteristics of users of psychiatric emergency services on an off-shore island in Taiwan. *International Journal of Psychiatry in Clinical Practice* 14, 168-173.
- Chen H, Mishara BL, Liu XX (2010). A pilot study of mobile telephone message interventions with suicide attempters in China. *Crisis* 31, 109-112.

- Cook R, Pan P, Silverman R, Soltys SM (2010). Do-not-resuscitate orders in suicidal patients: Clinical, ethical, and legal dilemmas. *Psychosomatics* 51, 277-282.
- Craig L, Milliken T (2010). The self-injury experiences of young adult women: implications for counseling. *Journal of Humanistic Counseling, Education and Development* 49, 112-126.
- Cresswell M, Karimova Z (2010). Self-harm and medicine's moral code: A historical perspective, 1950-2000. *Ethical Human Psychology and Psychiatry* 12, 158-175.
- David AS, Hotopf M, Moran P, Owen G, Szmukler G, Richardson G (2010). Mentally disordered or lacking capacity? Lessons for management of serious deliberate self harm. *British Medical Journal* 341, c4489.
- Dresser R (2010). Suicide attempts and treatment refusals. *Hastings Center Report* 40, 10-11.
- Eaton L (2010). Standards of care for people who self harm are 'bleak', finds report. *British Medical Journal* 341, 3649.
- Ellis IK, Philip T (2010). Improving the skills of rural and remote generalists to manage mental health emergencies. *Rural and Remote Health Journal* 10, 1503.
- Emerson AL (2010). A brief insight into how nurses perceive patients who self-harm. *British Journal of Nursing* 19, 840-843.
- Feigenbaum J (2010). Self-harm — the solution, not the problem: The dialectical behaviour therapy model. *Psychoanalytic Psychotherapy* 24, 115-134.
- Gardner W, Klima J, Chisolm D, Feehan H, Bridge J, Campo J, Cunningham N, Kelleher K (2010). Screening, triage, and referral of patients who report suicidal thought during a primary care visit. *Pediatrics* 125, 945-952.
- Gibb SJ, Beautrais AL, Surgenor LJ (2010). Health-care staff attitudes towards self-harm patients. *Australian and New Zealand Journal of Psychiatry* 44, 713-720.
- Goodkind JR, Ross-Toledo K, John S, Hall JL, Ross L, Freeland L, Coletta E, Becenti-Fundark T, Poola C, Begay-Roanhorse R, Lee C (2010). Promoting healing and restoring trust: Policy recommendations for improving behavioral health care for American Indian/Alaska Native adolescents. *American Journal of Community Psychology*. Published online: 21 September 2010. 10.1007/s10464-010-9347-4.
- Gratton M, Garza A, Salomone JA, McElroy J, Shearer J (2010). Ambulance staging for potentially dangerous scenes: another hidden component of response time. *Prehospital Emergency Care* 14, 340-344.
- Gregory RJ, Delucia-Deranja E, Mogle JA (2010). Dynamic deconstructive psychotherapy versus optimized community care for borderline personality disorder co-occurring with alcohol use disorders: A 30-month follow-up. *Journal of Nervous and Mental Disease* 198, 292-298.
- Greidanus E, Everall RD (2010). Helper therapy in an online suicide prevention community. *British Journal of Guidance and Counselling* 38, 191-204.
- Haddad M, Butler GS, Tylee A (2010). School nurses' involvement, attitudes and training needs for mental health work: A UK-wide cross-sectional study. *Journal of Advanced Nursing*. Published online: August 23, 2010. doi: 10.1111/j.1365-2648.2010.05432.x.
- Harned MS, Jackson SC, Comtois KA, Linehan MM (2010). Dialectical behavior therapy as a precursor to PTSD treatment for suicidal and/or self-injuring women with borderline personality disorder. *Journal of Traumatic Stress*. Published online: 20 July 2010. doi: 10.1002/jts.20553.
- Heath NL, Baxter AL, Toste JR, McLouth R (2010). Adolescents' willingness to access school-based support for nonsuicidal self-injury. *Canadian Journal of School Psychology* 25, 260-276.

- Hetrick SE, Purcell R, Garner B, Parslow R (2010). Combined pharmacotherapy and psychological therapies for post traumatic stress disorder (PTSD). *Cochrane Database of Systematic Reviews* 7, CD007316.
- Hills DJ, Robinson T, Kelly B, Heathcote S (2010). Outcomes from the trial implementation of a multidisciplinary online learning program in rural mental health emergency care. *Education for Health: Change in Learning and Practice* 23, 351.
- Holtzheimer PE 3rd, McDonald WM, Mufti M, Kelley ME, Quinn S, Corso G, Epstein CM (2010). Accelerated repetitive transcranial magnetic stimulation for treatment-resistant depression. *Depression and Anxiety* 27, 960-963.
- Howell A (2010). Sovereignty, security, psychiatry: Liberation and the failure of mental health governance in Iraq. *Security Dialogue* 41, 347-367.
- Hu Y-H, Chou H-L, Lu W-H, Huang H-H, Yang C-C, Yen DHT, Kao W-F, Deng J-F, Huang C-I (2010). Features and prognostic factors for elderly with acute poisoning in the emergency department. *Journal of the Chinese Medical Association* 73, 78-87.
- Jenner E, Jenner LW, Matthews-Sterling M, Butts JK, Williams TE (2010). Awareness effects of a youth suicide prevention media campaign in Louisiana. *Suicide and Life-Threatening Behavior* 40, 394-406.
- Johansen IH, Morken T, Hunskaar S (2010). Contacts related to mental illness and substance abuse in primary health care: A cross-sectional study comparing patient's use of daytime versus out-of-hours primary care in Norway. *Scandinavian Journal of Primary Health Care* 28, 160-165.
- Kales HC, Kim HM, Austin KL, Valenstein M (2010). Who receives outpatient monitoring during high-risk depression treatment periods? *Journal of the American Geriatrics Society* 58, 908-913.
- Kaltiala-Heino R (2010). Involuntary commitment and detainment in adolescent psychiatric inpatient care. *Social Psychiatry and Psychiatric Epidemiology* 45, 785-793.
- Kapur N, Cooper J, Bennewith O, Gunnell D, Hawton K (2010). Postcards, green cards and telephone calls: Therapeutic contact with individuals following self-harm. *British Journal of Psychiatry* 197, 5-7.
- Kaslow NJ, Leiner AS, Reviere S, Jackson E, Bethea K, Bhaju J, Rhodes M, Gantt MJ, Senter H, Thompson MP (2010). Suicidal, abused African American women's response to a culturally informed intervention. *Journal of Consulting & Clinical Psychology* 78, 449-458.
- Kenning C, Cooper J, Short V, Shaw J, Abel K, Chew-Graham C (2010). Prison staff and women prisoner's views on self-harm; their implications for service delivery and development: A qualitative study. *Criminal Behaviour and Mental Health* 20, 274-284.
- Kingsley M (2010). I was scared about saying the wrong thing to a suicidal man. *Nursing Standard* 24, 27.
- Kitts RL (2010). Barriers to optimal care between physicians and lesbian, gay, bisexual, transgender, and questioning adolescent patients. *Journal of Homosexuality* 57, 730-747.
- Ko S, Chan HY, Ng F (2010). The impact of Emergency Medicine Ward in acute intoxication management. *Hong Kong Journal of Emergency Medicine* 17, 323-331.
- Koons CR (2010). The role of the team in managing telephone consultation in dialectical behavior therapy: Three case examples. *Cognitive and Behavioral Practice*. Published online: 30 June 2010. doi:10.1016/j.cbpra.2009.10.008.
- Kraemer S (2010). Liaison and co-operation between paediatrics and mental health. *Paediatrics and Child Health* 20, 382-387.
- Kripalani M, Nag S, Nag S, Gash A (2010). Integrated care pathway for self-harm: Our way forward. *Emergency Medicine Journal* 27, 544-546.

- Lawrence ST, Willig JH, Crane HM, Ye J, Aban I, Lober W, Nevin CR, Scott Batey D, Mugavero MJ, McCullumsmith C, Wright C, Kitahata M, Raper JL, Saag MS, Schumacher JE (2010). Routine, self-administered, touch-screen, computer-based suicidal ideation assessment linked to automated response team notification in an HIV primary care setting. *Clinical Infectious Diseases* 50, 1165-1173.
- Levy KN, Meehan KB, Yeomans FE (2010). Transference-focused psychotherapy reduces treatment drop-out and suicide attempters compared with community psychotherapist treatment in borderline personality disorder. *Evidence Based Mental Health*. Published online: 10 August 2010. doi: 10.1136/ebmh1097.
- Long M, Jenkins M (2010). Counsellors' perspectives on self-harm and the role of the therapeutic relationship for working with clients who self-harm. *Counselling and Psychotherapy Research* 10, 192-200.
- Marcinko D, Bilic V (2010). Family therapy as addition to individual therapy and psychopharmacotherapy in late adolescent female patients suffering from borderline personality disorder with comorbidity and positive suicidal history. *Psychiatria Danubina* 22, 257-260.
- McAllister M, Hasking P, Estefan A, McClenaghan K, Lowe J (2010). A strengths-based group program on self-harm: A feasibility study. *Journal of School Nursing* 26, 278-288.
- Mehlum L, Mork E, Reinholdt NP, Fadum EA, Rossow I (2010). Quality of psychosocial care of suicide attempters at general hospitals in Norway a longitudinal nationwide study. *Archives of Suicide Research* 14, 146-157.
- Mehlum L, Ramberg M (2010). Continuity of care in the treatment of suicide attempters: Current challenges. *Archives of Suicide Research* 14, 105-108.
- Miller AL, Smith HL, Klein DA, German M (2010). Engaging suicidal youth in outpatient treatment: Theoretical and empirical underpinnings. *Archives of Suicide Research* 14, 111-119.
- Miller GD, Iverson KM, Kimmelmeier M, MacLane C, Pistorello J, Fruzzetti AE, Crenshaw KY, Erikson KM, Katrichak BM, Oser M, Pruitt LD, Watkins MM (2010). A pilot study of psychotherapist trainees' alpha-amylase and cortisol levels during treatment of recently suicidal clients with borderline traits. *Professional Psychology: Research and Practice* 41, 228-235.
- Milner A, De Leo D (2010). Who seeks treatment where? Suicidal behaviors and health care: Evidence from a community survey. *Journal of Nervous and Mental Disease* 198, 412-419.
- Moorey S (2010). Managing the unmanageable: cognitive behaviour therapy for deliberate self-harm. *Psychoanalytic Psychotherapy* 24, 135-149.
- Morey LC, Lowmaster SE, Hopwood CJ (2010). A pilot study of manual-assisted cognitive therapy with a therapeutic assessment augmentation for borderline personality disorder. *Psychiatry Research* 15, 531-535.
- Mork E, Mehlum L, Fadum EA, Rossow I (2010). Collaboration between general hospitals and community health services in the care of suicide attempters in Norway: A longitudinal study. *Annals of General Psychiatry* 9, 6.
- Murphy E, Steeg S, Cooper J, Chang R, Turpin C, Guthrie E, Kapur N (2010). Assessment rates and compliance with assertive follow-up after self-harm: Cohort study. *Archives of Suicide Research* 14, 120-134.
- Neacsiu AD, Rizvi SL, Linehan MM (2010). Dialectical behavior therapy skills use as a mediator and outcome of treatment for borderline personality disorder. *Behaviour Research and Therapy* 48, 832-839.
- Newton AS, Hamm MP, Bethell J, Rhodes AE, Bryan CJ, Tjosvold L, Ali S, Logue E, Manion IG (2010). Pediatric suicide-related presentations: A systematic review of mental health

- care in the emergency department. *Annals of Emergency Medicine*. Published online: 12 April 2010. doi: 10.1016/j.annemergmed.2010.02.026.
- Owens C, Farrand P, Darvill R, Emmens T, Hewis E, Aitken P (2010). Involving service users in intervention design: A participatory approach to developing a text-messaging intervention to reduce repetition of self-harm. *Health Expectations*. Published online: 23 September 2010. doi: 10.1111/j.1369-7625.2010.00623.x.
- Pae C-U (2010). Follow-up study of suicide attempters who were given crisis intervention during hospital stay: Pilot study. *Psychiatry and Clinical Neurosciences* 64, 107.
- Plawecki LH, Amrhein DW (2010). Someone to talk to: The nurse and the depressed or suicidal older patient. *Journal of Gerontological Nursing* 36, 15-18.
- Posmontier B (2010). The role of midwives in facilitating recovery in postpartum psychosis. *Journal of Midwifery and Women's Health* 55, 430-437.
- Prymachuk S, Trainor G (2010). Helping young people who self-harm: Perspectives from England. *Journal of Child and Adolescent Psychiatric Nursing* 23, 52-60.
- Redley M (2010). The clinical assessment of patients admitted to hospital following an episode of self-harm: A qualitative study. *Sociology of Health & Illness* 32, 470-485.
- Rentrop M, Martius P, Bäuml J, Buchheim P, Döring S, Hörz S (2010). Patients with borderline personality disorder not participating in an RCT: Are they different? *Psychopathology* 43, 369-372.
- Roadset JO, Bjorkly S (2010). Patients' own statements of their future risk for violent and self-harm behaviour: A prospective inpatient and post-discharge follow-up study in an acute psychiatric unit. *Psychiatry Research* 178, 153-159.
- Rossov I, Wichstrøm L (2010). Receipt of help after deliberate self-harm among adolescents: Changes over an eight-year period. *Psychiatric Services* 61, 783-787.
- Russell G, Owens D (2010). Psychosocial assessment following self-harm repetition of nonfatal self-harm after assessment by psychiatrists or mental health nurses. *Crisis* 31, 211-216.
- Ryan CJ, Callaghan S (2010). Legal and ethical aspects of refusing medical treatment after a suicide attempt: The Wooltorton case in the Australian context. *Medical Journal of Australia* 193, 239-242.
- Scheerder G, Reynders A, Andriessen K, Van Audenhove C (2010). Suicide intervention skills and related factors in community and health professionals. *Suicide and Life Threatening Behavior* 40, 115-124.
- Selekman MD (2010). Collaborative strengths-based brief therapy with self-injuring adolescents and their families. *Prevention Researcher* 17, 18-20.
- Sipkoff M (2010). Health plans walk a clinical tightrope when treating adolescents for depression. *Managed care (Langhorne, Pa.)* 19, 8-10.
- Sorsdahl K, Flisher AJ, Ward C, Mertens J, Bresick G, Sterling S, Weisner C (2010). The time is now: missed opportunities to address patient needs in community clinics in Cape Town, South Africa. *Tropical Medicine & International Health* 15, 1218-1226.
- Spirito A, Simon V, Cancelliere MK, Stein R, Norcott C, Loranger K, Prinstein MJ (2010). Out-patient psychotherapy practice with adolescents following psychiatric hospitalization for suicide ideation or a suicide attempt. *Clinical Child Psychology and Psychiatry*. Published online: 19 April 2010. doi: 10.1177/1359104509352893.
- Suldo S, Loker T, Friedrich A, Sundman A, Cunningham J, Saari B, Schatzberg T (2010). Improving school psychologists' knowledge and confidence pertinent to suicide prevention through professional development. *Journal of Applied School Psychology* 26, 177-197.
- Tofthagen R, Fagerstrom L (2010). Clarifying self-harm through evolutionary concept analysis. *Scandinavian Journal of Caring Sciences* 24, 610-619.

- Toste JR, Heath NL (2010). School response to non-suicidal self-injury. *Prevention Researcher* 17, 14-17.
- Tseng KC, Chang CM, Liao SC, Chen YY, Lee MB (2010). Factors of early suicide after discharge: A national linkage study for suicide victims in Taiwan. *Suicide and Life-Threatening Behavior* 40, 353-368.
- Tzeng WC, Yang CI, Tzeng NS, Ma HS, Chen L (2010). The inner door: Toward an understanding of suicidal patients. *Journal of Clinical Nursing* 19, 1396-1404.
- Vanderpool D, Fine EW (2010). Psychiatric malpractice exposure: Separating fact from fiction. *American Journal of Forensic Psychiatry* 31, 5-16.
- Weinberg I, Ronningstam E, Goldblatt MJ, Schechter M, Wheelis J, Maltsberger JT (2010). Strategies in treatment of suicidality: identification of common and treatment-specific interventions in empirically supported treatment manuals. *Journal of Clinical Psychiatry* 71, 699-706.
- Westerman T (2010). Engaging Australian Aboriginal youth in mental health services. *Australian Psychologist* 45, 212-222.
- Wheelis J (2010). Mending the mind. *Psychoanalytic Dialogues* 20, 325-336.
- Wittouck C, De Munck S, Portzky G, Van Rijsselberghe L, Van Autreve S, van Heeringen K (2010). A comparative follow-up study of aftercare and compliance of suicide attempters following standardized psychosocial assessment. *Archives of Suicide Research* 14, 135-145.
- Woodward TC, Tafesse E, Quon P, Lazarus A (2010). Cost effectiveness of adjunctive quetiapine fumarate extended-release tablets with mood stabilizers in the maintenance treatment of bipolar I disorder. *Pharmacoeconomics* 28, 751-764.
- Wurst FM, Mueller S, Petitjean S, Euler S, Thon N, Wiesbeck G, Wolfersdorf M (2010). Patient suicide: A survey of therapists' reactions. *Suicide and Life-Threatening Behavior* 40, 328-336.
- Zaidner E, Sewell RA, Murray E, Schiller A, Price BH, Cunningham MG (2010). New-onset dissociative disorder after electroconvulsive therapy. *The Journal of ECT* 26, 238-241.
- Zeller SL (2010). Treatment of psychiatric patients in emergency settings. *Primary Psychiatry* 17, 35-41.

CASE REPORTS

- Ahmed AIA, van der Heijden FMMA, van den Berkmortel H, Kramers K (2010). A man who wanted to commit suicide by hanging himself: An adverse effect of ciprofloxacin. *General Hospital Psychiatry*. Published online: 23 August 2010. doi:10.1016/j.genhosppsych.2010.07.002.
- Ajape AA, Issa BA, Buhari OIN, Adeoye PO, Babata AL, Abiola OO (2010). Genital self-mutilation. *Annals of African Medicine* 50, 1362-1363.
- Badano LP, Daleffe E, Miani D, Livi U (2010). Multiple intracardiac sewing needles in a schizophrenic woman with self-injurious behavior. *Journal of the American College of Cardiology* 55, 1997-1997.
- Bell J, Stanley N, Mallon S, Manthorpe J (2010). The role of perfectionism in student suicide: Three case studies from the UK. *Omega: Journal of Death and Dying* 61, 251-267.
- Bez Y, Donmezdil S, Sir A (2010). Suicide attempt with paliperidone overdose: A case report. *Klinik Psikofarmakoloji Bulteni — Bulletin of Clinical Psychopharmacology* 20, 155-157.
- Borja-Santos N, Trancas B, Pinto PS, Lopes B, Gamito A, Almeida S, Ferreira B, Luengo A, Vieira C, Martinho J, Pereira B, Cardoso G (2010). 48,XXYY in a general adult psychiatry department. *Psychiatry* 7, 32-36.
- Buchanan JA, Alhelail M, Cetaruk EW, Schaeffer TH, Palmer RB, Kulig K, Brent J (2010). Massive ethylene glycol ingestion treated with fomepizole alone — A viable therapeutic option. *Journal Medical Toxicology* 6, 131-134.
- Chacko J, Elangovan A (2010). Late onset, prolonged asystole following organophosphate poisoning: A case report. *Journal of Medical Toxicology* 6, 311-314.
- Corkery JM, Button J, Vento AE, Schifano F (2010). Two UK suicides using nicotine extracted from tobacco employing instructions available on the Internet. *Forensic Science International* 199, 402-438.
- Cullen EF, Luckasevic TM (2010). Suicide with a homemade shotgun: Case report and review of literature. *The American Journal of Forensic Medicine and Pathology* 31, 255-257.
- Degner D, Porzig J, Rütther E, Lewinski DV (2010). Serotonin syndrome with severe hyperthermia after ingestion of tranlycypromine combined with serotonin reuptake inhibitors and tyramine-rich food in a case of suicide. *Pharmacopsychiatry*. Published online: 9 September 2010. doi: 10.1055/s-0030-1263176.
- Dell'Aglio DM, Sutter ME, Schwartz MD, Koch DD, Algren DA, Morgan BW (2010). Acute chloroform ingestion successfully treated with intravenously administered n-acetylcysteine. *Journal of Medical Toxicology*. Published online: 25 August 2010. doi: 10.1007/s13181-010-0071-0.
- Diaz-Martinez AM, Interian A, Waters DM (2010). The integration of CBT, multicultural and feminist psychotherapies with Latinas. *Journal of Psychotherapy Integration* 20, 312-326.
- Disis-Oliveira RJ, Carvalho F, Duarte JA, Dias R, Magalhaes T, Santos A (2010). Suicide by hanging under the influence of ketamine and ethanol. *Forensic Science International* 202, e23-e27.
- Emet M, Saritas A, Aslan S, Uzkeser M, Cakir ZG, Coskun S (2010). Cervical spinal injury and hyoid fracture in a near-hanging victim. *Hong Kong Journal of Emergency Medicine* 17, 384-387.
- Eshuis EJ, Magnin KMMY, Stokkers PCF, Bemelman WA, Bartelsman J (2010). Suicide attempt in ulcerative colitis patient after 4 months of infliximab therapy - A case report. *Journal of Crohn's and Colitis*. Published online: 16 June 2010. doi:10.1016/j.crohns.2010.04.001.

- Eskandarlou M, Moaddab AH (2010). Chest wall necrosis and empyema resulting from attempting suicide by injection of petroleum into the pleural cavity. *Emergency Medical Journal* 27, 616-618.
- Fry E, Counselman FL (2010). A right scrotal abscess and foreign body ingestion in a schizophrenic patient. *Journal of Emergency Medicine* 38, 587-592.
- Germerott T, Jaenisch S, Hatch G, Albrecht U-V, Guenther D (2010). Planned complex suicide: Self-strangulation and plaster ingestion. *Forensic Science International* 202, 35-37.
- Ginwalla M, Battula S, Dunn J, Lewis WR (2010). Termination of electrocution-induced ventricular fibrillation by an implantable cardioverter defibrillator. *PACE - Pacing and Clinical Electrophysiology* 33, 510-512.
- Griffith R, Tegnah C (2010). Preparing for future incapacity. *British Journal of Community Nursing* 15, 386-390.
- Grosse Perdekamp M, Kneubuehl BP, Ishikawa T, Nadjem H, Kromeier J, Pollak S, Thierauf A (2010). Secondary skull fractures in head wounds inflicted by captive bolt guns: Autopsy findings and experimental simulation. *International Journal of Legal Medicine*. Published online: 15 April 2010. doi: 10.1007/s00414-010-0450-8.
- Gunay N, Kecec Z, Cete Y, Eken C, Demiryurek AT (2010). Oral deltamethrin ingestion due in a suicide attempt. *Bratislava Medical Journal* 111, 303-305.
- Hady HR, Mikucka A, Gołaszewski P, Trochimowicz L, Puchalski Z, Dadan J (2010). Fatal necrotizing fasciitis following two suicide attempts with petroleum oil injection. *Langenbeck's Archives of Surgery*. Published online: 8 August 2010. doi: 10.1007/s00423-010-0596-3.
- Hassan S, Shaikh MU, Ali N, Riaz M (2010). Copper sulphate toxicity in a young male complicated by methemoglobinemia, rhabdomyolysis and renal failure. *Journal of the College of Physicians and Surgeons Pakistan* 20, 490-491.
- Hejna P, Havel R (2010). Vehicle-assisted decapitation: A case report. *American Journal of Forensic Medicine and Pathology* 31, 205-301.
- Huang CC, Wu HS, Lee YC (2010). Extensive tracheobronchitis and lung perforation after alkaline caustic aspiration. *Annals of Thoracic Surgery* 89, 1670-1673.
- Huang MF, Yeh YC, Tsang HY, Chen CS (2010). Alexithymia associated with bilateral globus pallidus lesions after carbon monoxide poisoning. *Kaohsiung Journal of Medical Sciences* 26, 333-336.
- Hyatt L (2010). A case study of the suicide of a gifted female adolescent: Implications for prediction and prevention. *Journal for the Education of the Gifted* 33, 514-535.
- Jang DH, Hoffman RS, Nelson LS (2010). Attempted suicide, by mail order: Abrus precatorius. *Journal of Medical Toxicology*. Published online: 19 June 2010. doi: 10.1007/s13181-010-0099-1.
- Karam-Hage M, Shah KR, Cinciripini PM (2010). Addition of bupropion SR to varenicline alleviated depression and suicidal ideation: A case report. *Primary Care Companion to the Journal of Clinical Psychiatry* 12, 2.
- Kato H, Yoshimoto K, Ikegaya H (2010). Two cases of oral aspirin overdose. *Journal of Forensic and Legal Medicine* 17, 280-282.
- Kavalci C, Guldiken S, Taskiran B (2010). Fatal lactic acidosis due to metformine. *Internet Journal of Internal Medicine* 30, 826-833.
- Klampf K, Quattlander A, Burger R, Pfuhlmann B, Warnke A, Gerlach M (2010). Case report: intoxication with high dose of long-acting methylphenidate (Concerta®) in a suicidal 14-year-old girl. *ADHD Attention Deficit and Hyperactivity Disorders*. Published online: 14 September 2010. doi: 10.1007/s12402-010-0032-0.

- Kornreich C, Dan B, Vandriette Y (2010). Suicidal risk in a patient receiving tamoxifen treatment for breast cancer. *Primary Care Companion to the Journal of Clinical Psychiatry* 12, 2.
- Koseoglu Z, Satar S, Kara B, Sebe A, Kosenli O (2010). An unusual case of mesalazine intoxication: Oral and rectal overloading of the rectal suppository form. *Human & Experimental Toxicology*. Published online: 29 July 2010. doi: 10.1177/0960327110379249.
- Kucera J, Kofronova K (2010). Determination of As by instrumental neutron activation analysis in sectioned hair samples for forensic purposes: Chronic or acute poisoning? *Journal of Radioanalytical and Nuclear Chemistry*. Published online: 16 September 2010. doi: 10.1007/s10967-010-0822-z.
- Kunz A, Marty H, Nohl F, Schmitt W, Schiemann U (2010). Mixed intoxication with aconitum nappellans (monkshood) and digitalis grandiflora (large yellow foxglove). *Case Reports and Clinical Practice Review* 16, 8.
- Lech T (2010). Fatal cases of acute suicidal sodium and accidental zinc fluorosilicate poisoning. Review of acute intoxications due to fluoride compounds. *Forensic Science International*. Published online: 22 July 2010. doi:10.1016/j.forsciint.2010.06.027.
- Lee CS, Park KH (2010). Six nails in the head: Multiple pneumatic nail gun head injury. *British Journal of Neurosurgery* 24, 493-494.
- Lee YP, Lee JYY (2010). Recurrent factitious subcutaneous emphysema: Report of a complex case in a young woman and a literature review. *The Kaohsiung Journal of Medical Sciences* 26, 377-383.
- Lester D (2010). The final hours: A linguistic analysis of the final words of a suicide. *Psychological Reports* 106, 791-797.
- Lester D, McSwain S (2010). Poems by a suicide: Sara Teasdale. *Psychological Reports* 106, 811-812.
- Llado A, Fortea J, Ojea T, Bosch B, Sanz P, Valls-Sole J, Clarimon J, Molinuevo JL, Sanchez-Valle R (2010). A novel PSEN1 mutation (K239N) associated with Alzheimer's disease with wide range age of onset and slow progression. *European Journal of Neurology* 17, 994-996.
- Lombardi R (2010). Flexibility of the psychoanalytic approach in the treatment of a suicidal patient: stubborn silences as 'playing dead'. *Psychoanalytic Dialogues* 20, 269-284.
- LoVecchio F, Ramos L (2010). Suicide by Duragesic transdermal fentanyl patch toxicity. *American Journal of Emergency Medicine*. Published online: 30 April 2010. doi: 10.1016/j.ajem.2010.01.035.
- Lu M, Inboriboon PC (2010). Lantus insulin overdose: A case report. *Journal of Emergency Medicine*. Published online: 19 May 2010. doi:10.1016/j.jemermed.2010.04.007.
- Malhotra RC, Ghia DK, Cordato DJ, Beran RG (2010). Glyphosate-surfactant herbicide-induced reversible encephalopathy. *Journal of Clinical Neuroscience* 17, 1472-1473.
- Mario AI, Tare M (2010). Deliberate self harm with mercury injection in forearm. *Journal of Hand Surgery European* 35, 426-427.
- Martinez-Mier G, Avila-Pardo SF, Guraieb-Barragan E, Jimenez-Lopez LA, Mendoza-Urrieta ML, Irigoyen-Castillo A, Rodriguez-Fernandez A (2010). Successful renal transplantation from a deceased donor with pesticide intoxication: A case report. *Transplantation Proceedings* 42, 2397-2398.
- Maryam A, Elham B (2010). Deaths involving natural gas inhalation. *Toxicology and Industrial Health* 26, 345-347.
- Mizukami H, Nagai T, Mori S, Hara S, Fukunaga T, Endo T (2010). An autopsy case in which self-bloodletting via a cervical blood access led to a fatal outcome. *Journal of Forensic Science*. Published online: 8 June 2010. doi: 10.1111/j.1556-4029.2010.01471.x.

- Moran M, Bilgic I, Dilektasli E, Gundogdu E, Oruc MT, Ozmen MM (2010). A case of gall-bladder perforation in elderly who attempted suicide. *Turkish Journal of Geriatrics-Turk Geriatri Dergisi* 13, 133-135.
- Motz A (2010). Self-harm as a sign of hope. *Psychoanalytic Psychotherapy* 24, 81-92.
- Musshoff F, Kirschbaum KM, Madea B (2010). An uncommon case of a suicide with inhalation of hydrogen cyanide. *Forensic Science International*. Published online: 10 June 2010. doi:10.1016/j.forsciint.2010.05.012.
- Nielsen SU, Rasmussen M, Hoegberg LCG (2010). Ingestion of six cylindrical and four button batteries. *Clinical Toxicology* 48, 469- 470.
- Nikoli S, Zivkovi V, Jukovi F (2010). Planned complex occupation-related suicide by captive-bolt gunshot and hanging. *Journal of Forensic Science*. Published online: 26 July 2010. doi: 10.1111/j.1556-4029.2010.01507.x.
- Nisse P, Humbert L, Flahaut G, Riviere A, Cezard C, Mathieu-Nolf M (2010). Voluntary ingestion of dextropropoxyphene-paracetamol: A severe two-step intoxication not to be underestimated. *Acta Clinica Belgica* 65, 38-41.
- Ogden RD (2010). Observation of two suicides by helium inhalation in a prefilled environment. *American Journal of Forensic Medicine & Pathology* 31, 156-161.
- Oki T, Asamura H, Hayashi T, Ota M (2010). Unusual intracranial stab wounds inflicted with metal tent stakes for a case involving a family murder suicide. *Forensic Science International*. Published online: 26 July 2010. doi: 10.1111/j.1556-4029.2010.01507.x.
- Omali BI, Bailes J, Hammers JL, Fitzsimmons RP (2010). Chronic traumatic encephalopathy, suicides and parasuicides in professional American athletes: The role of the forensic pathologist. *American Journal of Forensic Medicine and Pathology* 31, 130-132.
- Ozdemir E, Karaman MG, Yurteri N, Erdogan A (2010). A case of suicide attempt with long-acting methylphenidate (Concerta). *ADHD Attention Deficit and Hyperactivity Disorder*. Published online: 25 May 2010. doi: 10.1007/s12402-010-0026-y.
- Penzner JB, Kelly KV, Sacks MH (2010). Religious conversion in a psychotic individual. *Journal of Religion and Health* 49, 351-360.
- Poulos CK, Peterson BL (2010). Two cases of firearm grip impressions on the hands of suicide victims. *The American Journal of Forensic Medicine and Pathology*. Published online: 21 July 2010. doi: 10.1097/PAF.0b013e3181ee3194.
- Santos MTBR, De Souza Merli LA, Guare RO, Ferreira MCD (2010). The association of low and high laser treatments on self-inflicted lip injury: A case report. *Photomedicine and Laser Surgery* 28, 565-568.
- Sarikaya S, Karcioğlu O, Ay D, Cetin A, Aktas C, Serinken M (2010). Acute mercury poisoning: A case report. *BMC Emergency Medicine* 10, 7.
- Sauvageau A, Ambrosi C, Kelly S (2010). Autoerotic nonlethal filmed hangings: A case series and comments on the estimation of the time to irreversibility in hanging. *American Journal of Forensic Medicine and Pathology*. Published online: 18 June 2010. doi: 10.1097/PAF.0b013e3181ea1aa6.
- Schyma C, Hagemeyer L, Madea B (2010). Suicide by head explosion: Unusual blast wave injuries to the cardiovascular system. *International Journal of Legal Medicine*. Published online: 12 May 2010. doi: 10.1007/s00414-010-0452-6.
- Seeman MV (2010). Sleepwalking, a possible side effect of antipsychotic medication. *Psychiatric Quarterly*. Published online: 24 August 2010. doi: 10.1007/s11126-010-9149-8.
- Sinani F, Vyshka G, Ymaj B (2010). Self-infliction of faked gunshot wounds in absence of overt psychopathology. *Forensic Science International*. Published online: 29 June 2010. doi:10.1016/j.forsciint.2010.06.002.

- Solarino B, Leonardi S, Grattagliano I, Tattoli L, Di Vella G (2010). An unusual death of a masochist: Accident or suicide? *Forensic Science International*. Published online: 14 June 2010. doi:10.1016/j.forsciint.2010.05.021
- Wale J, Yadav P, Garg S (2010). Elemental mercury poisoning caused by subcutaneous and intravenous injection: An unusual self-injury. *Indian Journal of Radiology and Imaging* 20, 147-149.
- Watanabe K, Hasegawa K, Suzuki O (2010). A double-suicide autopsy case of potassium poisoning by intravenous administration of potassium aspartate after intake of some psychopharmaceuticals. *Human & Experimental Toxicology*. Published online: 29 July 2010. doi: 10.1177/09603271110379250.
- Wildenauer R, Kobbe P, Waydhas C (2010). Is the osmole gap a valuable indicator for the need of hemodialysis in severe ethanol intoxication? *Technology and Health Care* 18, 203-206.
- Woodward J (2010). Internal state of emergency — working with an international student suffering from trauma in a student counselling service. *Psychodynamic Practice* 16, 257-271.
- Zivkovic V, Jukovic E, Nikolic S (2010). Suicidal asphyxiation by propane-butane mixture inside a plastic bag: Case report. *Srpski Arhiv za Celokupno Lekarstvo* 138, 376-378.

MISCELLANEOUS

- Adshead G (2010). Written on the body: Deliberate self-harm as communication. *Psychoanalytic Psychotherapy* 24, 69-80.
- Althoff RR, Rettew DC, Ayer LA, Hudziak JJ (2010). Cross-informant agreement of the Dysregulation Profile of the Child Behavior Checklist. *Psychiatry Research* 178, 550-555.
- Amanvermez R, Baydin A, Yardan T, Basol N, Gunay M (2010). Emergency laboratory abnormalities in suicidal patients with acute organophosphate poisoning. *Turkish Journal of Biochemistry* 35, 29-34.
- Anonymous (2010). Pediatric mental health care dysfunction disorder? *The New England Journal of Medicine* 363, 1187-1189.
- Balon R (2010). Myths about suicide. *Annals of Clinical Psychiatry* 22, 207-208.
- Ben-Zeev D, Young MA (2010). Accuracy of hospitalized depressed patients' and healthy controls' retrospective symptom reports: An experience sampling study. *Journal of Nervous Mental Disease* 198, 280-285.
- Boekholdt SM, Peters RJG (2010). Rimonabant: Obituary for a wonder drug. *The Lancet* 376, 489-90.
- Braillon A, Bernardy-Prud'homme A, Dubois G (2010). Will evidence be enough to promote interactive communication for the benefit of patients? *Annals of Internal Medicine* 153, 2.
- Brent D (2010). What family studies teach us about suicidal behavior: Implications for research, treatment, and prevention. *European Psychiatry* 25, 260-263.
- Breshears RE, Brenner LA, Harwood JE, Gutierrez PM (2010). Predicting suicidal behavior in veterans with traumatic brain injury: The utility of the personality assessment inventory. *Journal of Personality Assessment* 92, 349-355.
- Bridges FS, Tankersley WB (2010). Mean ages of homicide victims and victims of homicide-suicide. *Psychological Reports* 106, 163-169.
- Byard RW, Austin A (2010). The role of forensic pathology in suicide. *Forensic Science, Medicine, and Pathology*. Published online: 20 July 2010. doi: 10.1007/s12024-010-9186-5.
- Byard RW, Veldhoen D, Kobus H, Heath K (2010). 'Murder-Suicide' or 'Murder-Accident'? Difficulties with the analysis of cases. *Journal of Forensic Sciences*. 55, 1375-1377.
- Cavard S, Alvarez JC, De Mazancourt P, Tilotta F, Brousseau P, de la Grandmaison GL, Charlier P (2010). Forensic and police identification of 'X' bodies. A 6-years French experience. *Forensic Science International*. Published online: 23 July 2010. doi: 10.1016/j.forsciint.2010.05.022.
- Chappell D (2010). From sorcery to stun guns and suicide: The eclectic and global challenges of policing and the mentally ill. *Police Practice and Research* 11, 289-300.
- Clarke L (2010). Imitative suicide: An issue for psychiatric and mental health nursing? *Journal of Psychiatric and Mental Health Nursing* 17, 741-749.
- Cohen IL, Tsiouris JA, Flory MJ, Kim S-Y, Freedland R, Heaney G, Pettinger J, Brown WT (2010). A large scale study of the psychometric characteristics of the IBR modified overt aggression scale: Findings and evidence for increased self-destructive behaviors in adult females with autism spectrum disorder. *Journal of Autism and Developmental Disorders* 40, 599-609.
- Cole-King A, Leppina P (2010). Will the new UK government change our approach to risk? *British Medical Journal* 341, c3890.
- Collings SC, Kemp CG (2010). Death knocks, professional practice, and the public good: The media experience of suicide reporting in New Zealand. *Social Science and Medicine* 71, 244-248.

- Darke S, Duflou J, Torok M (2010). Comparative toxicology of intentional and accidental heroin overdose. *Journal of Forensic Sciences* 55, 1015–1018.
- De Leo D, Dudley MJ, Aebersold, CJ Mendoza JA, Barnes MA, Harrison JE, Ranson, DL (2010). Achieving standardised reporting of suicide in Australia: Rationale and program for change. *Medical Journal of Australia* 192, 452-456.
- De Silva V, Rathnayake A (2010). Cost of the paracetamol overdose epidemic. *The Ceylon Medical Journal* 55, 33.
- Defife JA, Drill R, Nakash O, Westen D (2010). Agreement between clinician and patient ratings of adaptive functioning and developmental history. *American Journal of Public Health*. Published online: 15 July 2010. doi: 10.1176/appi.ajp.2010.09101489.
- Deshauer D (2010). Suicide in a world that is unsure how to value life. *Canadian Medical Association Journal* 182, 1083-1084.
- Diamond G, Levy S, Bevans KB, Fein JA, Wintersteen MB, Tien A, Creed T (2010). Development, validation, and utility of internet-based, behavioral health screen for adolescents. *Pediatrics* 126, 163-170.
- Dickens G (2010). Imitative suicide: An issue for psychiatric and mental health nursing? *Journal of Psychiatric and Mental Health Nursing* 17, 741-749.
- Fallucco EM, Hanson MD, Glowinski AL (2010). Teaching pediatric residents to assess adolescent suicide risk with a standardized patient module. *Pediatrics* 125, 953-959.
- Fang L, Zhang J (2010). Validity of proxy data obtained by different psychological autopsy information reconstruction techniques. *Journal of International Medical Research* 38, 833-843.
- Fiedorowicz JG, Weldon K, Bergus G (2010). Determining suicide risk (Hint: A screen is not enough). *Journal of Family Practice* 59, 256-260.
- Freedenthal S, Breslin L (2010). High school teachers' experiences with suicidal students: A descriptive study. *Journal of Loss and Trauma* 15, 83-92.
- Gibbons CJ, Stirman SW, Brown GK, Beck AT (2010). Engagement and retention of suicide attempters in clinical research challenges and solutions. *Crisis* 31, 62-68.
- Glazer WM (2010). U.S. 'way behind' on clozapine's benefits. *Behavioral Healthcare* 30, 41-42.
- Granello D (2010). The process of suicide risk assessment: Twelve core principles. *Journal of Counseling and Development* 88, 363-370.
- Hall H (2010). The Mythbusters of psychology. *Skeptic* 15, 68-72.
- Halliday R (2010). The roadside burial of suicides: An east Anglian study. *Folklore* 121, 81-93.
- Hamrin V, Magorno M (2010). Assessment of adolescents for depression in the pediatric primary care setting. *Pediatric Nursing* 36, 103-111.
- Hashmi S, Kapoor R (2010). Degree of proof necessary to establish proximate causation of suicide. *Journal of the American Academy of Psychiatry and the Law* 38, 130-132.
- Heilbron N, Compton JS, Daniel SS, Goldston DB (2010). The problematic label of suicide gesture: Alternatives for clinical research and practice. *Professional Psychology: Research and Practice* 41, 221-227.
- Heisel MJ (2010). Suicidal behavior. *Canadian Psychology-Psychologie Canadienne* 51, 216-218.
- Hejna P (2010). Amussat's sign in hanging - a prospective autopsy study. *Journal of Forensic Science*. Published online: 14 September 2010. doi: 10.1111/j.1556-4029.2010.01548.x.
- Hendin H, Al Jurdi RK, Houck PR, Hughes S, Turner JB (2010). Evidence for significant improvement in prediction of acute risk for suicidal behavior. *Journal of Nervous and Mental Disorders* 198, 604-605.

- Howe E (2010). Core ethical questions: What do you do when your obligations as a psychiatrist conflict with ethics? *Psychiatry* 7, 19-26.
- Jaworski K (2010). The author, agency and suicide. *Social Identities* 16, 675-687.
- Jie Z, Fei W (2010). Suicide and justice: A Chinese perspective. *The China Quarterly* 202, 455-456.
- Jornvall H (2010). Opening words. *European Psychiatry* 25, 250-251.
- Kahl KG, Alte C, Sipos V, Kordon A, Hohagen F, Schweiger U (2010). A randomized study of iterative hypothesis testing in undergraduate psychiatric education: Brief communication. *Acta Psychiatrica Scandinavica* 122, 334-338.
- Kane MN, Green D, Jacobs RJ (2010). Perceptions of students about younger and older men and women who may be homeless. *Journal of Social Service Research* 36, 261-277.
- Kapur N, Clements C, Bateman N, Foëx B, Mackway-Jones K, Huxtable R, Gunnell D, Hawton K (2010). Advance directives and suicidal behaviour. *British Journal of Medicine* 341, c4557.
- Karam EG, Andrews G, Bromet E, Petukhova M, Ruscio AM, Salamoun M, Sampson N, Stein DJ, Alonso J, Andrade LH, Angermeyer M, Demyttenaere K, de Girolamo G, de Graaf R, Florescu S, Gureje O, Kaminer D, Kotov R, Lee S, Lepine JP, Medina-Mora ME, Browne MAO, Posada-Villa J, Sagar R, Shalev AY, Takeshima T, Tomov T, Kessler RC (2010). The role of criterion A2 in the DSM-IV diagnosis of posttraumatic stress disorder. *Biological Psychiatry* 68, 465-473.
- Kene-Allampalli P, Hovey JD, Meyer GJ, Mihura JL (2010). Evaluation of the reliability and validity of two clinician-judgment suicide risk assessment instruments. *Crisis* 31, 76-85.
- Khan MM, Mian AI (2010). 'The one truly serious philosophical problem': Ethical aspects of suicide. *International Review of Psychiatry* 22, 288-293.
- Kilroy-Findley A (2010). Tissue viability in mental health. *Nursing Standard* 24, 45.
- Kutcher S, Szumilas M (2010). Controlling for known risk factors for suicide in multivariate models. *Canadian Journal of Psychiatry* 55, 269-269.
- Laidlaw J, Pugh D, Riley G, Hovey N (2010). The use of Section 136 (Mental Health Act 1983) in Gloucestershire. *Medicine, Science, and the Law* 50, 29-33.
- Large M, Smith G, Nielszen O (2010). Comment on murder-suicide: A review of the recent literature. *The Journal of the American Academy of Psychiatry and the Law* 38, 1.
- Large MM (2010). No evidence for improvement in the accuracy of suicide risk assessment. *Journal of Nervous and Mental Disease* 198, 604-604.
- Lasky-Su J, Lange C (2010). Statistical challenges for genome-wide association studies of suicidality using family data. *European Psychiatry* 25, 307-309.
- Launiainen T, Rasanen I, Vuori E, Ojanpera I (2010). Fatal venlafaxine poisonings are associated with a high prevalence of drug interactions. *International Journal of Legal Medicine*. Published online: 30 April 2010. doi: 10.1007/s00414-010-0461-5.
- Law CK, Yip PS, Huo Y (2010). Assessing the quantitative impact of suicide on life expectancy in Hong Kong: 1986-2006. *Archives of Suicide Research* 14, 284-290.
- Lee NK, Jenner L (2010). Development of the PsyCheck screening tool: An instrument for detecting common mental health conditions among substance use treatment clients. *Mental Health and Substance Use: Dual Diagnosis* 3, 56-65.
- Leenaars AA, Girdhar S, Dogra TD, Wenckstern S, Leenaars L (2010). Suicide notes from India and the United States: A thematic comparison. *Death Studies* 34, 426-440.
- Lemstra M (2010). Reply: Controlling for known risk factors for suicide in multivariate models. *Canadian Journal of Psychiatry* 55, 270.

- Lester D (2010). Linguistic analysis of a blog from a murder-suicide. *Psychological Reports* 106, 342.
- Lester D (2010). Letters from a suicide: Van Gogh and his sister. *Psychological Reports* 106, 381-382.
- Lester D, Fleck J (2010). What is suicide? Will suicidologists ever agree? *Psychological Reports* 106, 189-192.
- Lester D, Haines J, Williams CL (2010). Content differences in suicide notes by sex, age, and method: A study of Australian suicide notes. *Psychological Reports* 106, 475-476.
- Lester D, Voracek M, Loib LM (2010). Correlates of the belief in the inheritance of suicide. *Psychological Reports* 106, 216-216.
- Levine D (2010). Suicide and euthanasia paradox: A question of rights. *British Medical Journal* 341, 7771-7474.
- Li X, Phillips MR (2010). The acceptability of suicide among rural residents, urban residents, and college students from three locations in China. *Crisis* 31, 183-193.
- Lord VB (2010). The role of mental health in police-reported suicides. *Journal of Police Crisis Negotiations* 10, 191-204.
- MacCormick IJ (2010). Ruling on mercy killing: Suicide and euthanasia paradox. *British Medical Journal* 341, 318.
- Maccormick IJ (2010). Suicide and euthanasia paradox. *British Medical Journal* 341, c4291.
- MacCormick IJ (2010). Suicide and euthanasia paradox: Author's reply. *British Medical Journal* 341, 7771-7474.
- Malpass A, Shaw A, Kessler D, Sharp D (2010). Concordance between PHQ-9 scores and patients' experiences of depression: A mixed methods study. *British Journal of General Practice* 60, 231-238.
- Mao S-W, Lester D (2010). Sex differences in the height from which suicides jump. *Psychological Reports* 106, 358.
- McCafferty S, Doherty T, Sinnott RO, Watt J (2010). e-Infrastructures supporting research into depression, self-harm and suicide. *Philosophical Transactions. Series A, Mathematical, Physical, and Engineering Sciences* 368, 3845-3858.
- McHale J, Felton A (2010). Self-harm: what's the problem? A literature review of the factors affecting attitudes towards self-harm. *Journal of Psychiatric and Mental Health Nursing* 17, 732-740.
- Meyer RE, Salzman C, Youngstrom EA, Clayton PJ, Goodwin FK, Mann JJ, Alphas LD, Broich K, Goodman WK, Greden JF, Meltzer HY, Normand SL, Posner K, Shaffer D, Oquendo MA, Stanley B, Trivedi MH, Turecki G, Beasley CM, Beautrais AL, Bridge JA, Brown GK, Revicki DA, Ryan ND, Sheehan DV (2010). Suicidality and risk of suicide-definition, drug safety concerns, and a necessary target for drug development: A brief report. *Journal of Clinical Psychiatry* 7, 1040-1046.
- Miller I (2010). Representations of suicide in urban North-West England c.1870-1910: The formative role of respectability, class, gender and morality. *Mortality* 15, 191-204.
- Moore J (2010). The hazmat suicides. *Occupational Health & Safety* 79, 7.
- Morton HC, Vasdev N, Ali ASM, Haslam PJ, Thorpe AC (2010). The successful urological management of self-injection of Petroleum Distillate (WD40 TM) to the scrotum. *British Journal of Medical and Surgical Urology*. Published online: 21 August 2010. doi:10.1016/j.bjmsu.2010.07.002.
- Mundt JC, Greist JH, Gelenberg AJ, Katzelnick DJ, Jefferson JW, Modell JG (2010). Feasibility and validation of a computer-automated Columbia-Suicide severity rating scale using

- interactive voice response technology. *Journal of Psychiatric Research*. Published online: 30 May 2010. doi:10.1016/j.jpsychires.2010.04.025.
- Niederkrotenthaler T, Voracek M, Herberth A, Till B, Strauss M, Etzersdorfer E, Eisenwort B, Sonneck G (2010). Role of media reports in completed and prevented suicide: Werther v. Papageno effects. *British Journal of Psychiatry* 197, 234-243.
- Nielsen O, Large M (2010). Australian suicide rates and the National Survey of Mental Health and Wellbeing. *Australian and New Zealand Journal of Psychiatry* 44, 490-492.
- Osman A, Gutierrez PM, Wong JL, Freedenthal S, Bagge CL, Smith KD (2010). Development and psychometric evaluation of the Suicide Anger Expression Inventory-28. *Journal of Psychopathology and Behavioral Assessment*. Published online: 22 April 2010. doi: 10.1007/s10862-010-9186-5.
- Oviedo-Joekes E, Marchand K, Guh D, Marsh DC, Brissette S, Krausz M, Anis A, Schechter MT (2010). History of reported sexual or physical abuse among long-term heroin users and their response to substitution treatment. *Addictive Behaviors*. Published online: 30 August 2010. doi:10.1016/j.addbeh.2010.08.020.
- Ozawa-de Silva C (2010). Shared death: Self, sociality and internet group suicide in Japan. *Transcult Psychiatry* 47, 392-418.
- Papoutsis II, Athanaselis SA, Nikolaou PD, Pistos CM, Spiliopoulou CA, Maravelias CP (2010). Development and validation of an EI-GC-MS method for the determination of benzodiazepine drugs and their metabolites in blood: Applications in clinical and forensic toxicology. *Journal Pharmaceutical Biomedical Analysis* 52, 609-614.
- Pearse JD (2010). Reply: Achieving standardised reporting of suicide in Australia: Rationale and program for change. *Medical Journal of Australia* 193, 191.
- Pinals DA (2010). Veterans and the justice system: The next forensic frontier. *The Journal of the American Academy of Psychiatry and the Law* 38, 163-167.
- Pirkis J (2010). Contribution to knowledge about media professionals' experiences with reporting suicide. A commentary on Collings and Kemp. *Social Science and Medicine* 71, 249-250.
- Pirkis J, Blood RW, Skehan J, Dare A (2010). Suicide in the news: Informing strategies to improve the reporting of suicide. *Journal of Health Communication* 25, 576-577.
- Pridmore S (2010). Suicide and mental disorder: the legal perspective. *Medical Journal of Australia* 193, 184-185.
- Proschan MA, Brittain EH, Fay MP (2010). Does treatment effect depend on control event rate? Revisiting a meta-analysis of suicidality and antidepressant use in children. *Clinical trials (London, England)* 7, 109-117.
- Purington A, Whitlock J (2010). Non-suicidal self-injury in the media. *Prevention Researcher* 17, 11-13.
- Range LM (2010). A sadly troubled history: The meanings of suicide in the modern age. *Death Studies* 8, 764-767.
- Reichhart T, Kissling W (2010). Societal costs of non-adherence in schizophrenia: Homicide/Suicide. *Mind & Brain, the Journal of Psychiatry* 1, 29-32.
- Rizvi SL (2010). Development and preliminary validation of a new measure to assess shame: The shame inventory. *Journal of Psychopathology and Behavioral Assessment* 32, 438-447.
- Rockett IR, Wang S, Stack S, De Leo D, Frost JL, Ducatman AM, Walker RL, Kapusta ND (2010). Race/ethnicity and potential suicide misclassification: Window on a minority suicide paradox? *BMC Psychiatry* 10, 35.
- Rodrigues M (2010). Reply: STN DBS and suicide: Is tangential evidence, evidence enough? *European Neurology* 63, 373-373.

- Sakalauskas L (2010). On the empirical bayesian approach for the poisson-gaussian model. Methodology and computing in applied probability. *Methodology and Computing in Applied Probability* 12, 247-259.
- Sansone RA, Sansone LA (2010). Measuring self-harm behavior with the self-harm inventory. *Psychiatry (Edgmont)* 7, 16-20.
- Sassi RB (2010). Abstract thinking: assessing the risk of suicide through prospective studies. *Journal of the American Academy of Child and Adolescent Psychiatry* 49, 87-88.
- Sayin A, Leenaars AA, Candansayar S, Leenaars L, Taner A, Demirel B (2010). Erratum to Suicide in different cultures: A thematic comparison of suicide notes from Turkey and the United States. *Journal of Cross-Cultural Psychology* 41, 478-478.
- Schurtz DR, Cerel J, Rodgers P (2010). Myths and facts about suicide from individuals involved in suicide prevention. *Suicide and Life-Threatening Behavior* 40, 346-352.
- Scott M, Wilcox H, Huo Y, Turner JB, Fisher P, Shaffer D (2010). School-based screening for suicide risk: Balancing costs and benefits. *American Journal of Public Health* 100, 1648-1652.
- Selby EA, Smith AR, Bulik CM, Olmsted MP, Thornton L, McFarlane TL, Berrettini WH, Brandt HA, Crawford S, Fichter MM, Halmi KA, Jacoby GE, Johnson CL, Jones I, Kaplan AS, Mitchell JE, Nutzinger DO, Strober M, Treasure J, Woodside DB, Kaye WH, Joiner TE (2010). Habitual starvation and provocative behaviors: Two potential routes to extreme suicidal behavior in anorexia nervosa. *Behaviour Research and Therapy* 48, 634-645.
- Selim N (2010). An extraordinary truth? The Ädam'suicide' notes from Bangladesh. *Mental Health, Religion and Culture* 13, 223-244.
- Shamim MS, Shamim MS (2010). Medical Ethics: A slow but sustained revolution in Pakistan's healthcare. *Journal of the Pakistan Medical Association* 60, 706-707.
- Shaw DM (2010). Transatlantic issues: Report from Scotland. *Cambridge Quarterly of Healthcare Ethics (CQ): The International Journal of Healthcare Ethics Committees* 19, 310-320.
- Slater AJ (2010). Suicide and euthanasia paradox: Between blind rebuttal and the knacker's bolt. *British Medical Journal* 341, 7771-7474.
- Smith EG, Blier P (2010). The value of data on suicidality by treatment arm/Reply to Smith letter . *The American Journal of Psychiatry* 167, 995-996.
- Spadone C (2010). Liaison psychiatry: Which psychiatry, for which liaison? *Annales Medico-Psychologiques* 168, 205-208.
- Stensland MD, Zhu B, Ascher-Svanum H, Ball DE (2010). Costs associated with attempted suicide among individuals with bipolar disorder. *Journal of Mental Health Policy and Economics* 13, 87-92.
- Studdert DM, Corder SM (2010). Impact of coronial investigations on manner and cause of death determinations in Australia 2002-2007. *Medical Journal of Australia* 192, 444-447.
- Sutter O, Kuhlmann B, Weimann E (2010). Levothyroxine ingestion with suicidal intent. *Swiss Medical Weekly* 140, 24.
- Tebb B (2010). Coroners too slow on suicide verdicts. *Community Care* 1820, 12.
- Toth SA (2010). The Contard affair: Private power, state control, and paternal authority in Fin-de-Siècle France. *Journal of Historical Sociology* 23, 185-215.
- Trepal H (2010). Exploring self-injury through a relational cultural lens. *Journal of Counseling and Development* 88, 492-499.
- Van Orden KA, Witte TK, Cukrowicz KC, Braithwaite SR, Selby EA, Joiner TE (2010). The interpersonal theory of suicide. *Psychological Review* 117, 575-600.
- Vandevoorde J, Andronikof A, Baudoin T (2010). Dynamic of ideation and preparatory behavior in the suicidal act: Concerning a standardised and qualitative methodology. *Encephale* 36, 22-31.

- Värnik P, Sisask M, Värnik A, Laido Z, Meise U, Ibelshäuser A, Van Audenhove C, Reynders A, Kocalevent RD, Kopp M, Dosa A, Arensman E, Coffey C, van der Feltz-Cornelis CM, Gusmão R, Hegerl U (2010). Suicide registration in eight European countries: A qualitative analysis of procedures and practices. *Forensic Science International* 202, 86-92.
- Waern M, Dombrowski AY, Szanto K (2010). Is the proposed DSM-V Suicide Assessment Dimension suitable for seniors? *International Psychogeriatrics*. Published online: 20 September 2010. doi: 10.1017/S1041610210001857.
- Waern M, Sjostrom N, Marlow T, Hetta J (2010). Does the suicide assessment scale predict risk of repetition? A prospective study of suicide attempters at a hospital emergency department. *European Psychiatry*. Published online: 9 July 2010. doi:10.1016/j.eurpsy.2010.03.014.
- Warden D (2010). Erratum: Early adverse events and attrition in selective serotonin reuptake inhibitor treatment: A suicide assessment methodology study report. *Journal of Clinical Psychopharmacology* 30, 380-380.
- Warden D (2010). Adverse events and attrition in selective serotonin reuptake inhibitor treatment: A suicide assessment methodology study report. *Journal of Clinical Psychopharmacology* 30, 380-380.
- Wasserman D, Carli V, Wasserman C, Apter A, Balazs J, Bobes J, Bracale R, Brunner R, Bursztein-Lipsicas C, Corcoran P, Cosman D, Durkee T, Feldman D, Gadoros J, Guillemin F, Haring C, Kahn J-P, Kaess M, Keeley H, Marusic D, Nemes B (2010). Saving and Empowering Young Lives in Europe (SEYLE): A randomized controlled trial. *BMC Public Health* 10, 192.
- Wasserman D, Terenius L (2010). The role of genetics in promoting suicide prevention and the mental health of the population, Nobel Conference: The role of genetics in promoting suicide prevention and the mental health of the population: Preface. *European Psychiatry* 25, 249.
- Witte TK, Smith AR, Joiner TE (2010). Reason for cautious optimism? Two studies suggesting reduced stigma against suicide. *Journal of Clinical Psychology* 66, 611-626.
- Wolfe D (2010). To see for one's self. *American Scientist* 98, 228-235.
- Yadav A, Kumath M, Khanna M, Mishra A, Khakha A, Kumar A (2010). Psychological autopsy — A need of the future. *Medico-Legal Update* 10, 73-76.
- Yan HC, Cao X, Das M, Zhu XH, Gao TM (2010). Behavioral animal models of depression. *Neuroscience Bulletin* 26, 327-337.
- York S (2010). A sadly troubled history: The meanings of suicide in the modern age. *History of Psychiatry* 21, 336-367.
- Young AS, Shiels WE, Murakami JW, Coley BD, Hogan MJ (2010). Self-embedding behavior: Radiologic management of self-inserted soft-tissue foreign bodies. *Radiology* 257, 233-239.
- Zargoushi R, Asghari F, Zeraati H, Fotouhi A (2010). Treating patients differently: Comparison of medical-staff behaviour and attitudes towards cases of self-immolation and unintentional burns. *Burns*. Published online: 20 August 2010. doi: 10.1016/j.burns.2010.06.001.
- Zigmond J (2010). Searching for answers. Suicide experts point to risk factors, but say problem 'knows no boundary'. *Modern Healthcare* 40, 36-38.

