AIMHS
AUSTRALIAN INSTITUTE OF MALE HEALTH & STUDIES

WESTERN SYDNEY UNIVERSITY

CREATING A NATIONAL DATA MATRIX – FOR EFFECTIVE SITUATIONAL SUICIDE PREVENTION

TOWARDS AN INTEGRATED, CROSS-REFERENCED DATA FACILITY, AS A BASIS FOR TARGETED AND EFFECTIVE SUICIDE PREVENTION STRATEGIES

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A SITUATIONAL APPROACH TO SUICIDE PREVENTION*

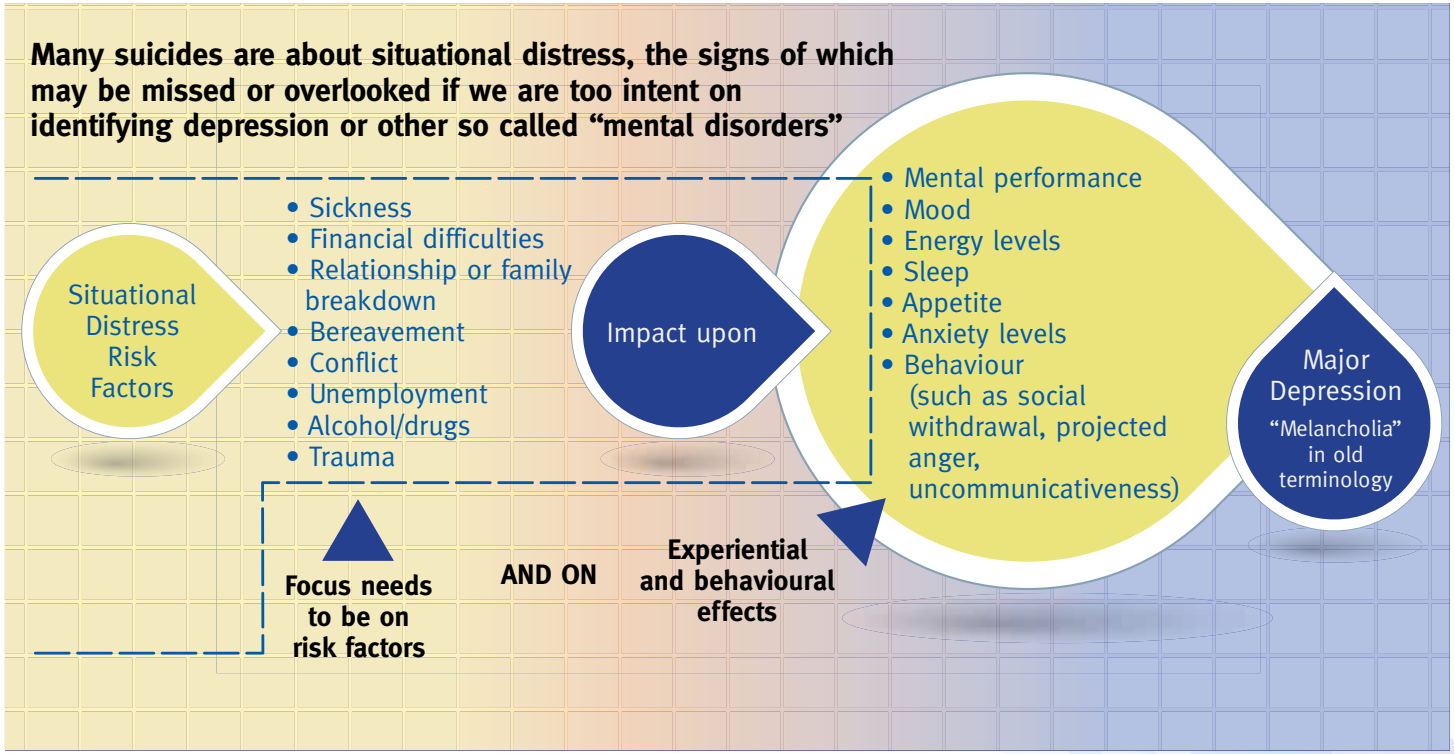
Situational suicide prevention is a new approach that acknowledges the predominant association of *situational distress*, rather than mental illness, with suicide (though in some cases the two are linked), and is principally informed by and responds to risk factors of a broad spectrum of difficult human experiences across the life span. This approach is also mindful of and wherever possible seeks to address: contextual, systemic, and socio-cultural risk and protective factors and determinants; the real world of individuals lived experience.

Suicide prevention initiatives in Australia have often predominantly focused on crisis intervention – with people who are experiencing suicidal ideation or have attempted suicide. Such initiatives have also tended to see suicide in continuity with mental illness. This has resulted in a preoccupation with the detection of illness or disorder – like major depression, with the result of distracting attention away from forms of distress that don't constitute illness or disorder, and yet which can result in suicidal ideation and suicide. A useful corrective term that can help counter the current preoccupation with mental illness in suicide prevention, and can provide a sounder basis for prevention efforts, is *situational distress*.

*Situational distress encompasses a significantly challenging or troubling mixed experience of mind, thoughts, emotions, bodily sensations, or behaviours, associated with an apparent decompensating event, such as bereavement, a change in health status, relationship breakdown, financial, or occupational difficulties. This distress may significantly overlap with many of the symptoms usually taken to suggest mental 'illness' or 'disorder' (such as those associated with depression and anxiety). Even when distress is sometimes inexplicable, there is no good reason to automatically assume illness or disorder.**

The intention of creating a national data matrix, is not only to provide an evidence driven approach to suicide prevention, but also to refocus suicide prevention initiatives in a way that properly reflect the risk factors associated with suicide, and shifts the emphasis away from exclusively crisis intervention, and onto primary prevention and early intervention.

*For a comprehensive overview of **Situational Suicide Prevention**, see: Ashfield, J., Macdonald, J., & Smith, A. (2017). A 'Situational Approach' to Suicide Prevention: Why we need a paradigm shift for effective suicide prevention. Adelaide: Australian Institute of Male Health and Studies & Western Sydney University. Retrieved from http://malesuicidepreventionaustralia.com.au/papers/

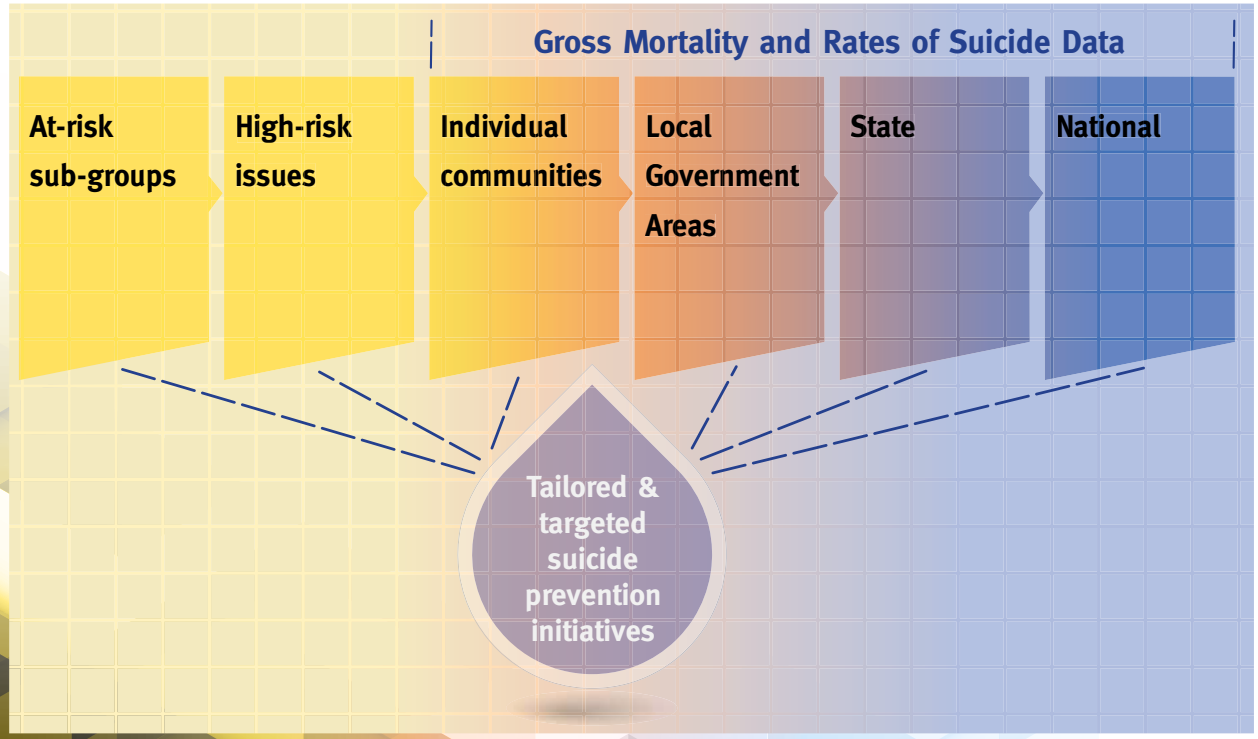


GATHERING, CROSS-REFERENCING, AND VISUALISING DATA FOR EFFECTIVE SUICIDE PREVENTION

Situational suicide prevention requires a different approach to the use of available suicide data

Adopting a *situational suicide prevention* model requires a new approach to data collection, integration, and cross-referencing – one that provides a data set encompassing: National, State, and local government areas (and any available individual community data), as well as ranked (where possible) high-risk issues and at-risk sub-groups. This allows for drawing-down visualised data (including with graphs and cross-referenced representations) to inform and guide any one or a combination of different suicide prevention strategies. This facility will provide for the targeting of:

- Particular local government areas and their communities with known high suicide mortality. This provides a basis for identifying and prioritising conspicuous local high risk issues and at-risk sub-groups, cross referenced with ranked high-risk and at-risk sub-group data.



- One or more high-risk issues and at-risk sub-groups across the whole population (or a sub-population). However, such a focus still needs to be referenced to data on local government areas (and their communities). An approach to suicide prevention that simply targets known high risk issues or at-risk sub-groups in *a general way,* can be wasteful of resources, and can make it more difficult to evaluate the effectiveness of programs. Focussing prevention efforts generally on sub-groups like unemployed or aboriginal youth, or issues like unemployment or aboriginal youth suicide, may not be appropriate in communities with little or no suicide mortality history. For example, a community with high unemployment, or a large indigenous male youth population may have no history of suicide because of historically effective local support and socio-cultural characteristics that mitigate suicide risk.

- Events (such as adverse climatic events, and industry closure) that are known to escalate suicide risk for certain cohorts, in regions, local government areas, or communities that are affected.

Whilst we need to innovate and do a better job of bringing together and cross-referencing existing credible sources of data germane to suicide prevention, just as important is admitting what we don't know in order to set a useful new agenda for researchers in this field, and to avoid wasting precious resources on initiatives that are not clearly indicated or justified by available data.

Better data, better suicide prevention practice

Effective suicide prevention depends on us knowing all that we can about the factors that put people at risk. The most useful suicide risk data should ideally be drawn from robust longer term studies in cohorts of individuals that do not have an identified psychiatric disorder. Not to do so will impair our ability to formulate prevention responses that can have an impact on suicide mortality. Much research in the past has been over-reliant on categories of mental illness or has been corrupted by speculative psychological autopsy data, and has been deficient due to its failure to take into consideration socio-cultural factors and common dimensional indicators of distress.**

There needs to be a progressive endeavour of data gathering and knowledge enhancement, as a basis for ongoing suicide prevention activities, if they are to have integrity.

Industry data may contribute to us identifying high risk issues and at-risk sub-groups, as well as highlighting historical spikes (for pro-active predictive purposes) in suicide associated with events like industry closure, mass redundancies, drought, and bushfire disaster.

Wherever risk factor data are sourced they should be referenced to NDIS and coronial data. Another important source of local data that isn't generally available in the ABS or NDIS gross national data, may in some instances be available from a local coroner.

Ranking high risk issues and at-risk sub-groups can only be done on the basis of the best evidence available. In some instances, there is little available data. One form of evidence (albeit not definitive) that is of relevance and should not be overlooked, is that which can be obtained from a consensus of local opinion about local suicide incidents and observation of contextual associated risk factors. Though this level of evidence may not be immediately available, it can be gleaned from community engagement in the process of suicide prevention initiatives design.

Data for ranking risk issues and at-risk sub-groups, and relating to suicide by postcode will require considerable mining of a variety of data sources.

Use of computer data visualisation software for drawing down data from a data base for practical use

Data gathered and entered into a data base (Office Excel will likely suffice) will need to be available in a range of visual and cross-referenced modes, facilitated by the visualisation tools of an appropriate software package (such as SISENSE). Various dashboard and graphic representation formats of this software can be pre-set to provide exactly the combinations of data (and how they are graphically displayed) for practical use.

The data base will need to be managed and updated with any pertinent information that comes to hand, if its relevance is to be maintained. In addition to ongoing emerging sources of formal data (such as from published research), much will be learned and should be recorded in the course of executing and evaluating suicide prevention initiatives.

**Knox, K. (2014). Approaching Suicide as a Public Health Issue. *Annals Of Internal Medicine, 161(2),* 151. http://dx.doi.org/10.7326/m14-0914

A SIMPLE REPRESENTATION OF THE DATA MATRIX (AND SOME OF ITS DATA CATEGORIES) THAT WILL BE DEVELOPED, FROM WHICH DATA CAN BE DRAWN DOWN IN VISUAL FORM FOR PRACTICAL USE

RECOMMENDED PREVENTION STRATEGIES Plus any supporting references	**AT-RISK SUB-GROUPS**	**HIGH RISK ISSUES**	**REFERENCES SUPPORTING IDENTIFICATION AND RANKING OF HIGH RISK ISSUES AND AT-RISK SUB-GROUPS**	**SUICIDE MORTALITY BY POSTCODE** Plus any supporting references	**SUICIDE MORTALITY BY LGA**	**NATIONAL & STATE RATES OF SUICIDE**	**GROSS NATIONAL SUICIDE MORTALITY**
Greater spending on ALMP and levels of social capital appeared to mitigate suicide risks. Reeves, A., McKee, M., Gunnell, D., Chang, S., Basu, S., Barr, B., & Stuckler, D. (2014).	– **Unemployed males** – **Unemployed females**	**Loss of Employment**	Milner, A., Morrell, S., & LaMontagne, A. (2014). Economically inactive, unemployed and employed suicides in Australia by age and sex over a 10-year period: what was the impact of the 2007 economic recession?. International Journal Of Epidemiology, 43(5), 1500-1507. http://dx.doi.org/10.1093/ije/dyu148 Haw, C., Hawton, K., Gunnell, D., & Platt, S. (2014). Economic recession and suicidal behaviour: Possible mechanisms and ameliorating factors. International Journal Of Social Psychiatry, 61(1), 73-81. http://dx.doi.org/10.1177/0020764014536545 Nordt, C., Warnke, I., Seifritz, E., & Kawohl, W. (2015. Modelling suicide and unemployment: a longtitudinal analysis covering 63 countries, 2000-11. The Lancet Psychiatry, 2 (3), 239-245. http://dx.doi.org/10.1016/s2215-0366(14)00118-7			**National rates:** Unemp Males 4.62 Unemp Females 8.44	**Employed – Not Employed (2001 – 2013)** **Total 26,779** **Male**
Economic shocks, resilience, and male suicides in the Great Recession: cross-national analysis of 20 EU countries. The European Journal Of Public Health, 25(3), 404-409. http://dx.doi.org/10.1093/eurpub/cku168							**Total 20,680** **Female 6,099**
	– **Young females**	**Individuals with a history of self-harm**	Ashfield, J. (2017). Teenagers and Self-Harm: What every parent and teacher needs to know (3rd ed.). South Australia: YouCanHelp Publishing.				
	– **Teenage aboriginal males & females** – **Incarcerated males**	**Indigenous or Torres Strait Islander Heritage**	Ashfield, J. (2016). Preventing Suicide in Indigenous Communities: Essential reading for those who aim to make a difference (1st ed.). Australia: YouCanHelp Publishing.				
	– **Separated males** – **Males experiencing loss of access to children**	**Relationship & Family Breakdown**	Kõlves, K., Ide, N., & De Leo, D. (2012). Fluctuations of suicidality in the aftermath of a marital separation: 6-month follow-up observations. Journal of Affective Disorders, 142(1-3), 256-263. https://www.ncbi.nlm.nih.gov/pubmed/19428116 Kposowa, A. (2000). Marital status and suicide in the National Longitudinal Mortality Study. Journal Of Epidemiology & Community Health, 54(4), 254-261. http:// dx.doi.org/10.1136/jech.54.4.254				
		Financial Difficulties					
	– **Male farmers and pastoralists**	**Living in a rural or remote community**	Hirsch, J. K. (2006) A Review of the Literature on Rural Suicide. Crisis, 27(4), 189-199. Bryant, L. & Garnham, B. (2014). Economies, ethics and emotions: Farmer distress within the moral economy of agribusiness. Journal Of Rural Studies, 34, 304- 312. http://dx.doi.org/10.1016/j.jrurstud.2014.03.006 Renwick, M.Y., Olsen, G. G., & Tyrrell, M. S. (1982) Suicide in rural New South Wales: Comparison with metropolitan experience. Medical Journal of Australia, 1, 377-380.				

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	Continued: – **Male farmers and pastoralists**	*Continued:* **Living in a rural or remote community**	*Continued:* Davey, M. (2017). Social isolation a key risk factor for suicide among Australian men – study. The Guardian. Retrieved 5 February 2017, from https://www.theguardian.com/society/2015/jun/25/loneliness-a-key-risk-factor-for-suicide-among-australian-men-study Player, M., Proudfoot, J., Fogarty, A., Whittle, E., Spurrier, M., & Shand, F. et al. (2015). What Interrupts Suicide Attempts in Men: A Qualitative Study. PLOS ONE, 10(6), e0128180. http://dx.doi.org/10.1371/journal.pone.0128180 Kolves K, Milner A, McKay K, De Leo D. Suicide in rural and remote areas of Australia. Brisbane: Australian Institute for Suicide Research and Prevention; 2012. (pp. 1, 4) Page, A., Morrell, S., Taylor, R., Dudley, M. & Carter, G (2007). Further increases in rural suicide in young Australian adults: Secular trends, 1979-2003. Social Science and Medicine, 65(3),442-453.				
		Alcohol and substance abuse	Sher, L. (2005). Alcohol consumption and suicide. QJM, 99(1), 57-61. http://dx.doi.org/10.1093/qjmed/hci146 Pompili M, Serafini G, Innamorati M, Dominici G, Ferracuti S, Kotzalidis GD, et al. Suicidal behavior and alcohol abuse. Int J Environ Res Public Health. 2010;7(4):1392-431. (p. 1394) Schneider B. Substance use disorders and risk for completed suicide. Arch Suicide Res. 2009;13(4):303-16. (p. 304) Conner KR, Hesselbrock VM, Schuckit MA, Hirsch JK, Knox KL, Meldrum S, et al. Precontemplated and impulsive suicide attempts among individuals with alcohol dependence. J Stud Alcohol. 2006; 67(1):95-101. (p. 95) Schneider B. Substance use disorders and risk for completed suicide. Arch Suicide Res. 2009;13(4):303-16. (pp. 303, 307) Brent DA, Perper JA, Allman CJ. Alcohol, firearms, and suicide among youth. Temporal trends in Allegheny County, Pennsylvania, 1960 to 1983. JAMA. 1987;257(24):3369-72. (p. 3371) Pirkola SP, Isometsa ET, Heikkinen ME, Lonnqvist JK. Suicides of alcohol misusers and non-misusers in a nationwide population. Alcohol Alcohol. 2000;35(1):70-5. (p. 73)				
	– **Women**	**Post-partum mental health difficulties**					
	– **Males in distress**	**Little or no access to appropriate counselling or mental health support services**	Macdonald J, Monaem A, Sliwka G, Smith A, & Trezise E. (2010). Pathways to Despair: The Social Determinants of Male Suicide (aged 25-44), Central Coast, NSW. MHIRC Paper no. 2. Penrith: MHIRC. http://www.uws.edu.au/__data/assets/pdf_file/0015/217032/MHIRC_2.Pathways.pdf McPhedran, S. & De Leo, D. (2013). Miseries Suffered, Unvoiced, Unknown? Communication of Suicidal Intent by Men in "Rural" Queensland, Australia. Suicide And Life-Threatening Behavior, 43(6), 589-597. http://dx.doi.org/10.1111/sltb.12041 Ashfield, J. (2010). Doing psychotherapy with men (1st ed.). S. Australia: Australian Institute of Male Health and Studies. Ashfield, J. (2009). Matters for men (1st ed.). Norwood, S. Aust.: Peacock Publications. Player, M., Proudfoot, J., Fogarty, A., Whittle, E., Spurrier, M., & Shand, F. et al. (2015). What Interrupts Suicide Attempts in Men: A Qualitative Study. PLOS ONE, 10(6), e0128180. http://dx.doi.org/10.1371/journal.pone.0128180				

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	– Male widows	Being elderly – especially if isolated and/or bereaved	Luoma, J. & Pearson, J. (2002). Suicide and Marital Status in the United States, 1991–1996: Is Widowhood a Risk Factor?. American Journal Of Public Health, 92(9), 1518-1522. http://dx.doi.org/10.2105/ajph.92.9.1518 Kposowa, A. (2000). Marital status and suicide in the National Longitudinal Mortality Study. Journal Of Epidemiology & Community Health, 54(4), 254-261. http:// dx.doi.org/10.1136/jech.54.4.254				
	– Male farmers and pastoralists	Adverse climatic events & disasters	Bryant, L. and Garnham, B. (2013). Beyond Discourses of Drought: The micropolitics of the wine industry and the mental health of farmers. Journal of Rural Studies. 3, 2, pp.1-9.				
	– Male farmers and pastoralists	Farm/station property succession conflict					
	– Male farmers and pastoralists	Access to means of suicide					
	– Middle aged males	Collapse of local industry or employing organisation	Haw, C., Hawton, K., Gunnell, D., & Platt, S. (2014). Economic recession and suicidal behaviour: Possible mechanisms and ameliorating factors. International Journal Of Social Psychiatry, 61(1), 73-81. http://dx.doi.org/10.1177/0020764014536545				
	– People with life limiting illness, or chronic pain issues – People with debilitating or disabling health conditions	Major change in health status					
	– Unemployed – People with high intensity mental health difficulties	Homelessness	Bonner, A. & Luscombe, C. (2009). Suicide and homelessness. Journal Of Public Mental Health, 8(3), 7-19. http://dx.doi.org/10.1108/17465729200900016				
		Individuals who attempted but did not complete suicide					

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	– People with major depression, or bio-polar or psychotic mental health difficulty	People with poorly treated, untreated or refractory high intensity mental health difficulties	ATYPICAL ANTIPSYCHOTIC MEDICATIONS: USE IN ADULTS. (2013). Retrieved 20 January 2017, from http://www.cms.gov/Medicare-Medicaid-Coordination/ Fraud-Prevention/ Medicaid-Integrity-Education/Pharmacy-Education-Materials/Downloads/atyp-antipsych-adult-factsheet. Australian Bureau of Statistics. (2016). Causes of Death, Australia, 2015. Catalogue No. 3303.0. Belconnen, ACT: Commonwealth of Australia. Accessed September 28, 2016 from:http://www.abs.gov.au/AUSSTATS/abs@.nsf/allprimarymainfeatures /47E19CA15036B04BCA2577570014668B?opendocument Large, M. & Ryan, C. (2014). Disturbing findings about the risk of suicide and psychiatric hospitals. Social Psychiatry And Psychiatric Epidemiology, 49(9), 1353- 1355. http://dx.doi.org/10.1007/s00127-014-0912-2				
	– Indigenous teenagers and children	Suicide contagion – 'copy-cat'	Ashfield, J. (2016). Preventing Suicide in Indigenous Communities: Essential reading for those who aim to make a difference (1st ed.). Australia: YouCanHelp Publishing. Hanssens, L. (2007) 'The search to identify contagion operating within suicide clusters in indigenous communities, Northern Territory. Australia', Aboriginal and Islander Health Worker Journal 31, 27-33.				
	– Homosexual and trans-sexual individuals	Sexual identity issues	Corboz, J. (2008). Feeling queer and blue (1st ed.). Hawthorn West, Vic.: Beyondblue.				
	– Doctors and medical students – Police	Specific occupations	Milner, A., Maheen, H., Bismark, M., & Spittal, M. (2016). Suicide by health professionals: a retrospective mortality study in Australia, 2001–2012. The Medical Journal Of Australia, 205(6), 260-265. http://dx.doi.org/10.5694/mja15.01044				
	– Veterans	Abuse, sexual assault, trauma					
		Bereavement by suicide	Pekker, M. & profile, V. (2017). Bereavement Leading to Suicide: Statistical Analysis. Depressivedisorder.blogspot.com.au. Retrieved 5 February 2017, from http://depressivedisorder.blogspot.com.au/2011/03/bereavement-leading-to-suicide.html				
		Other					
		Other					
		Other					