

Suicide and Self-Harm in Australia: Conceptual Map

Melissa Raven,¹ Anthony Smith,² & Jon Jureidini¹

1 Critical and Ethical Mental Health research group, University of Adelaide

2 Australian Institute of Male Health & Studies

RANZCP Conference, May 2017, Adelaide SA

SUICIDE DEATHS

MALES

FEMALES

SELF-HARM

RATES

The majority of suicide deaths are of adult men. Males account for at least 75% of suicides in Australia – 2,292 of 3,027 total suicide deaths in 2015.¹

Suicide is generally considered to be significantly under-reported in Australia (and internationally).²

Suicide rates are higher among rural and remote males.³

LETHALITY

Many men who kill themselves do so at their first attempt.⁴

Suicide attempts are more lethal in men.⁵ This includes choice of methods, how lethally methods are used,⁶ and intentionality.⁷

Men are more likely to use guns,^{8,9} and to use them lethally.¹⁰

Men are more likely to hang themselves.^{11,12}

ALCOHOL AND OTHER DRUGS

For both lethal and non-lethal suicide attempts, men are more likely than women to have alcohol and other drug problems.^{13,14}

Alcohol use disorders are very common in suicide,¹⁵ particularly among men.¹⁶

Alcohol intoxication increases suicide risk,¹⁷ sometimes by increasing method lethality.^{18,19,20}

HEALTH CARE

Men have lower overall rates of contact with the formal health care system, including primary health care²¹ and mental health services.²²

Males are often not well served by health/mental health, welfare, or social services.^{23,24}

Contact with mental health services prior to suicide is much less common among men than women.²⁵

Many men who suicide have no psychiatric history or known mental disorder.²⁴

The duration of the suicidal process is much shorter in men than in women, limiting the opportunities for intervention.²⁶

OVERLAP

Although there is some overlap between people who attempt suicide and those who complete suicide, these groups are characterised by significant demographic and clinical differences.^{27,28}

Although people who intentionally self-harm (including incomplete suicide attempts) have an elevated risk of going on to kill themselves, the majority do not do so.^{29,30}

RATES

The majority of non-fatal self-harm incidents, including suicide attempts, involve women and girls.³¹

Compared with males, a larger proportion of females make a non-fatal suicide attempt.³²

Females have higher rates of reported non-fatal suicidal behaviour,³³ but not as much higher as generally thought.³⁴ They are more likely to seek help for their injuries,³⁵ and more likely to be hospitalised.³⁶

Females accounted for 63% of hospitalised self-harm cases in Australia in 2010-11 (16,314 female and 9,748 male cases).³⁷

LETHALITY

Intentional self-harm is not necessarily a suicide attempt.³⁸

Although females attempt suicide at higher rates, they are more likely to use methods that are less likely to be lethal.^{39,40}

Women tend to have higher rates of poisoning and drug-overdoses, which are often not fatal.^{41,42}

In Australia, there are almost twice as many hospitalisations due to poisoning for women as there are for men: 13,892 vs 7,124 (2010-2011).⁴³

ALCOHOL AND OTHER DRUGS

Alcohol problems contribute to both lethal and non-lethal suicide attempts by women.^{44,45}

HEALTH CARE

The majority of those who self-harm or attempt but do not complete suicide, and then come in contact with health services, are female.^{46,47}

This is particularly the case for hospitalisations related to poisoning.⁴⁸

Women are more likely than men to use services for mental health problems.^{49,50}

Suicide and Self-Harm in Australia

Differentiating and understanding suicide, attempted suicide and non-fatal self-harm in Australia (and beyond): a conceptual map

Anthony Smith, Melissa Raven, & John Ashfield (2017)

http://malesuicidepreventionaustralia.com.au/wp-content/uploads/2017/03/MSP_Table_Mar17_FINAL.pdf

Male Suicide Prevention Australia (MSPA)

<http://malesuicidepreventionaustralia.com.au/>

Intended audience: health/welfare workers, industry (e.g. life insurance, superannuation industry), and community

SUICIDE AND SELF-HARM IN AUSTRALIA

Differentiating and understanding suicide, attempted suicide and non-fatal self-harm in Australia (and beyond): a conceptual map

SUICIDE DEATHS

MALES

FEMALES

SELF-HARM

RATES

The majority of suicide deaths are of adult men. Males account for at least 75% of suicides in Australia – 2,292 of 3,027 total suicide deaths in 2015.¹

Suicide is generally considered to be significantly under-reported in Australia (and internationally).²

Suicide rates are higher among rural and remote males.³

LETHALITY

Many men who kill themselves do so at their first attempt.⁴

Suicide attempts are more lethal in men.⁵ This includes choice of methods, how lethally methods are used,⁶ and intentionality.⁷

Men are more likely to use guns,^{8,9} and to use them lethally.¹⁰

Men are more likely to hang themselves.^{11,12}

ALCOHOL AND OTHER DRUGS

For both lethal and non-lethal suicide attempts, men are more likely than women to have alcohol and other drug problems.^{13,14}

Alcohol use disorders are very common in suicide,¹⁵ particularly among men.¹⁶

Alcohol intoxication increases suicide risk,¹⁷ sometimes by increasing method lethality.^{18,19,20}

HEALTH CARE

Men have lower overall rates of contact with the formal health care system, including primary health care²¹ and mental health services.²²

Males are often not well served by health/mental health, welfare, or social services.^{23,24}

Contact with mental health services prior to suicide is much less common among men than women.²⁵

Many men who suicide have no psychiatric history or known mental disorder.²⁴

The duration of the suicidal process is much shorter in men than in women, limiting the opportunities for intervention.²⁶

OVERLAP

Although there is some overlap between people who attempt suicide and those who complete suicide, these groups are characterised by significant demographic and clinical differences.^{27,28}

Although people who intentionally self-harm (including incomplete suicide attempts) have an elevated risk of going on to kill themselves, the majority do not do so.^{29,30}

RATES

The majority of non-fatal self-harm incidents, including suicide attempts, involve women and girls.³¹

Compared with males, a larger proportion of females make a non-fatal suicide attempt.³²

Females have higher rates of reported non-fatal suicidal behaviour,³³ but not as much higher as generally thought.³⁴ They are more likely to seek help for their injuries,³⁵ and more likely to be hospitalised.³⁶

Females accounted for 63% of hospitalised self-harm cases in Australia in 2010-11 (16,314 female and 9,748 male cases).³⁷

LETHALITY

Intentional self-harm is not necessarily a suicide attempt.³⁸

Although females attempt suicide at higher rates, they are more likely to use methods that are less likely to be lethal.^{39,40}

Women tend to have higher rates of poisoning and drug-overdoses, which are often not fatal.^{41,42}

In Australia, there are almost twice as many hospitalisations due to poisoning for women as there are for men: 13,892 vs 7,124 (2010-2011).⁴³

ALCOHOL AND OTHER DRUGS

Alcohol problems contribute to both lethal and non-lethal suicide attempts by women.^{44,45}

HEALTH CARE

The majority of those who self-harm or attempt but do not complete suicide, and then come in contact with health services, are female.^{46,47}

This is particularly the case for hospitalisations related to poisoning.⁴⁸

Women are more likely than men to use services for mental health problems.^{49,50}

Important caveats

Many commonly used statistics about suicide, suicide attempts, and self-harm are problematic, for multiple reasons including:

- Suicide, suicide attempts, and self-harm are *significantly under-reported* in Australia (and internationally)
- Inappropriate generalisation from *clinical samples*
- Inappropriate generalisation from *hospitalised cases*
- Inappropriate generalisation *across regions/countries and over time*, decontextualising evidence and ignoring secular differences and trends
- Uncritical reliance on psychological autopsy studies
- Biases in reporting by significant others

References

1. Australian Bureau of Statistics. 3303.0 - Causes of Death, Australia, 2015 Canberra: Australian Bureau of Statistics; 2016. (Table 11.4)
<http://www.abs.gov.au/AUSSTATS/abs@.nsf/allprimarymainfeatures/47F19CA150368048CA25775700146688?opendocument>.
2. De Leo D, Dudley MJ, Aebbersold CJ, Mendoza JA, Barnes MA, Harrison JE, et al. Achieving standardized reporting of suicide in Australia: rationale and program for change. *Med J Aust*. 2010;192(8):452-6. (pp. 452-453)
3. 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)
4. Isometsa ET, Lonnqvist JK. Suicide attempts preceding completed suicide. *Br J Psychiatry*. 1998;173:531-5. (p. 531)
5. Elnour AA, Harrison J. Lethality of suicide methods. *Inj Prev*. 2008;14(1):39-45. (p. 43)
6. Elnour & Harrison (2008) (reference 5) (pp. 40-41, 43)
7. Schrijvers DL, Bollen J, Sabbe BG. The gender paradox in suicidal behavior and its impact on the suicidal process. *J Affect Disord*. 2012;138(1-2):19-26. (p. 24)
8. Elnour & Harrison (2008) (reference 5) (pp. 42-43)
9. Varnik A, Kolves K, van der Feltz-Cornelis CM, Marusic A, Oskarsson H, Palmer A, et al. Suicide methods in Europe: a gender-specific analysis of countries participating in the "European Alliance Against Depression". *J Epidemiol Community Health*. 2008;62(6):545-51. (Table 1, p. 546)
10. Elnour & Harrison (2008) (reference 5) (Figure 2, p. 42)
11. Elnour & Harrison (2008) (reference 5) (pp. 42-43)
12. Varnik et al. (2008) (reference 9) (Table 1, p. 546)
13. 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)
14. Schneider B. Substance use disorders and risk for completed suicide. *Arch Suicide Res*. 2009;13(4):303-16. (p. 304)
15. 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)
16. Schneider B. Substance use disorders and risk for completed suicide. *Arch Suicide Res*. 2009;13(4):303-16. (pp. 303, 307)
17. Sher L. Alcohol consumption and suicide. *QJM*. 2006;99(1):57-61. (p. 59)
18. Sher (2006) (reference 17) (p. 57)
19. 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)
20. 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)
21. Smith JA, Braunack-Mayer A, Wittert G. What do we know about men's help-seeking and health service use? *Med J Aust*. 2006;184(2):81-3. (p. 81)
22. Slade T, Johnston A, Teesson M, Whiteford H, Burgess P, Pirkis J, et al. The Mental Health of Australians 2. Report on the 2007 National Survey of Mental Health and Wellbeing. Canberra; 2009. (p. xiii)
23. McPhedran S, De Leo D. Miseries suffered, unvoiced, unknown? Communication of suicidal intent by men in "rural" Queensland, Australia. *Suicide Life Threat Behav*. 2013;43(6):589-97. (p. 595)
24. Macdonald J, Monaem A, Sliwka G, Smith A, Trezise E. Pathways to despair: The social determinants of male suicide (aged 25-44), Central Coast, NSW. Penrith: Men's Health Information & Resource Centre; 2010. (pp. 20-21)
25. Luoma JB, Martin CE, Pearson JL. Contact with mental health and primary care providers before suicide: a review of the evidence. *Am J Psychiatry*. 2002;159(6):909-16. (p. 912)
26. Schrijvers et al. (2012) (reference 7) (pp. 19, 24)
27. Beautrais AL. Suicides and serious suicide attempts: two populations or one? *Psychol Med*. 2001;31(5):837-45. (p. 837)
28. Nock MK, Borges G, Bromet EJ, Cha CB, Kessler RC, Lee S. Suicide and suicidal behavior. *Epidemiol Rev*. 2008;30:133-54. (p. 144)
29. Owens D, Horrocks J, House A. Fatal and non-fatal repetition of self-harm. Systematic review. *Br J Psychiatry*. 2002;181:193-9. (p. 193)
30. Suominen K, Isometsa E, Suokas J, Haukka J, Achte K, Lonnqvist J. Completed suicide after a suicide attempt: a 37-year follow-up study. *Am J Psychiatry*. 2004;161(3):562-3. (p. 563)
31. Canetto SS, Sakinofsky I. The gender paradox in suicide. *Suicide Life Threat Behav*. 1998;28(1):1-23. (p. 1)
32. Harrison JE, Henley G. Suicide and hospitalised self-harm in Australia: trends and analysis. Canberra: Australian Institute of Health and Welfare; 2014. Cat. no. INICAT 169. (Figure 11.1, p. 58)
33. Martin G, Swannell S, Harrison J, Hazell P, Taylor A. The Australian National Epidemiological Study of Self-injury (ANESSI). Brisbane: Centre for Suicide Prevention Studies; 2009. (Table 7, p. 22)
34. Martin et al. (2009) (reference 33) (p. 44)
35. Martin et al. (2009) (reference 33) (p. 44)
36. Harrison & Henley (2014) (reference 32) (Table 11.1, p. 58)
37. Harrison & Henley (2014) (reference 32) (Table 11.1, p. 58)
38. Martin et al. (2009) (reference 33) (p. 11)
39. Elnour & Harrison (2008) (reference 5) (p. 43)
40. Schrijvers et al. (2012) (reference 7) (pp. 19, 24)
41. Harrison & Henley (2014) (reference 32) (Table 11.1, p. 58)
42. Callanan VJ, Davis MS. Gender differences in suicide methods. *Soc Psychiatry Psychiatr Epidemiol*. 2012;47(6):857-69. (p. 858)
43. Harrison & Henley (2014) (reference 32) (Table 11.1, p. 58)
44. Gombert ES. Suicide risk among women with alcohol problems. *Am J Public Health*. 1989;79(10):1363-5. (p. 1363)
45. Conner et al. (2006) (reference 15) (p. 95)
46. Canetto SS, Sakinofsky I. The gender paradox in suicide. *Suicide Life Threat Behav*. 1998;28(1):1-23. (p. 1)
47. McKenna K, Harrison JE. Hospital separations due to injury and poisoning, Australia 2008-09. Canberra: Australian Institute of Health and Welfare; 2012. Cat. no. INICAT 141. (p. 92)
48. Harrison & Henley (2014) (reference 32) (Table 11.1, p. 58)
49. Slade et al. (2009) (reference 22) (p. xiii)
50. Australian Bureau of Statistics. National Survey of Mental Health and Wellbeing: Summary of results. Canberra; 2008. (Table 12, p. 44)

Anthony Smith, Melissa Raven, John Ashfield

February 2017

Suicide, attempted suicide, self-harm

- ▶ Suicide, attempted suicide, and intentional self-harm are related events, but there are important differences
- ▶ *Some* overlap between people who attempt suicide and people who complete suicide
- ▶ But significant demographic/clinical differences, particularly gender differences, between attempters and completers
- ▶ People who self-harm (including suicide attempts) have elevated risk of killing themselves later, but most do not

Rates of suicide

- ▶ Majority of suicide deaths are of adult men
- ▶ Males account for at least 75% of suicides in Australia – 2,292 / 3,027 total suicide deaths in 2015
- ▶ Suicide rates are higher among rural/remote males
- ▶ Standardised suicide rates are much higher among ATSI people (25.5 / 100,000 versus 12.5 / 100,000 non-ATSI) (ABS 2016)

Rates of self-harm

- ▶ Majority of non-fatal self-harm incidents, including suicide attempts, involve women and girls
- ▶ Larger proportion of females than males make non-fatal suicide attempts
- ▶ Females have higher rates of reported non-fatal suicidal behaviour – but not as much higher as generally thought
- ▶ Females more likely to seek help for injuries, and more likely to be hospitalised
- ▶ Females accounted for 63% of hospitalised self-harm cases in Australia in 2010–11 (16,314 female and 9,748 male cases)

Lethality (1)

- ▶ Many men who kill themselves do so at their first attempt
- ▶ Suicide attempts tend to be more lethal in men
- ▶ This includes choice of methods, how lethally methods are used, and intentionality
- ▶ Men are more likely to use guns, and to use them lethally
- ▶ Men are more likely to hang themselves

Lethality (2)

- ▶ Females attempt suicide at higher rates, but they are more likely to use less lethal methods
- ▶ Women tend to have higher rates of poisoning/drug-overdoses, which are often not fatal
- ▶ Nearly twice as many Australian women as men are hospitalised due to poisoning: 13,892 vs 7,124 (2010–2011)
- ▶ Intentional self-harm is not necessarily a suicide attempt, but lethality can be misjudged

Alcohol & other drugs

- ▶ For both lethal/non-lethal suicide attempts, men are more likely than women to have AOD problems
- ▶ Alcohol problems are very common in suicide, particularly among men
- ▶ Alcohol problems contribute to both lethal and non-lethal suicide attempts by women
- ▶ Alcohol *intoxication* increases suicide risk, sometimes by increasing method lethality

Health-care (1)

- ▶ Men have lower overall rates of contact with the health-care system, including primary health care and mental health services
- ▶ Males are often not well served by health/mental health, welfare, or social services
- ▶ Women are more likely than men to use services for mental health problems

Health-care (2)

- ▶ Most people who self-harm or attempt but do not complete suicide, *then come in contact with health services*, are female
- ▶ Particularly for hospitalisations related to poisoning

Health-care (3)

- ▶ Contact with mental health services prior to suicide is much less common among men than women
- ▶ Many men who kill themselves have no psychiatric history or known mental disorder
- ▶ The duration of the suicidal process is much shorter in men than women, limiting opportunities for intervention

Implications for prevention (1)

Broad range of inter-related prevention strategies needed, to address:

- ▶ Suicide
- ▶ Attempted suicide
- ▶ Self-harm
- ▶ Men
- ▶ Women
- ▶ Specific demographic groups

Implications for prevention (2)

Need to focus on broad range risk factors in addition to depression and anxiety disorders, including:

- ▶ Acute distress
- ▶ Alcohol & other drug problems, including intoxication in the absence of dependence
- ▶ Social determinants of suicide

Social determinants of suicide

- ▶ Housing adequacy/security, food security
- ▶ Income, employment, education, opportunity
- ▶ Meaningful participation and status in society (including meaningful employment)
- ▶ (Non)discrimination

Economic crisis and suicide

Greek economic crisis as 'natural experiment' in social determinants of suicide

Antonakakis et al. (2014):

- ▶ 'Suicide rates in Greece and other European countries have been on a **remarkable upward trend** following the **global recession** of 2008 and the **European sovereign debt crisis** of 2009'
 - ▶ '**fiscal austerity, higher unemployment rates, negative economic growth ... lead to significant increases in overall suicide rates in Greece**'
 - ▶ '**numerous empirical studies ... indicate that recessions and rises in unemployment rates are associated with suicide rates**'
- 

Implications for health-care services

- ▶ Strategies focusing on increasing mental health treatment are unlikely to engage many high-risk people, particularly men
- ▶ Strategies focusing on increasing mental health treatment after suicide attempts are more likely to engage women than men
- ▶ GPs /PHC services need to consider broad range of risk factors, including social determinants

Contact details

Melissa Raven

Critical and Ethical Mental Health research group, University of Adelaide

melissa.raven@adelaide.edu.au

Anthony Smith

asmith@aimhs.com.au

www.aimhs.com.au

Conceptual map references

1. Australian Bureau of Statistics. 3303.0 – Causes of Death, Australia, 2015 Canberra: Australian Bureau of Statistics; 2016. (Table 11.4) <http://www.abs.gov.au/AUSSTATS/abs@.nsf/allprimarymainfeatures/47E19CA15036B04BCA2577570014668B?opendocument>.
2. De Leo D, Dudley MJ, Aebersold CJ, Mendoza JA, Barnes MA, Harrison JE, et al. Achieving standardised reporting of suicide in Australia: rationale and program for change. *Med J Aust*. 2010;192(8):452-6. (pp. 452-453)
3. 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)
4. Isometsa ET, Lonnqvist JK. Suicide attempts preceding completed suicide. *Br J Psychiatry*. 1998;173:531-5. (p. 531)
5. Elnour AA, Harrison J. Lethality of suicide methods. *Inj Prev*. 2008;14(1):39-45. (p. 43)
6. Elnour & Harrison (2008) (reference 5) (pp. 40-41, 43)
7. Schrijvers DL, Bollen J, Sabbe BG. The gender paradox in suicidal behavior and its impact on the suicidal process. *J Affect Disord*. 2012;138(1-2):19-26. (p. 24)
8. Elnour & Harrison (2008) (reference 5) (pp. 42-43)
9. Varnik A, Kolves K, van der Feltz-Cornelis CM, Marusic A, Oskarsson H, Palmer A, et al. Suicide methods in Europe: a gender-specific analysis of countries participating in the “European Alliance Against Depression”. *J Epidemiol Community Health*. 2008;62(6):545-51. (Table 1, p. 546)
10. Elnour & Harrison (2008) (reference 5) (Figure 2, p. 42)
11. Elnour & Harrison (2008) (reference 5) (pp. 42-43)
12. Varnik et al. (2008) (reference 9) (Table 1, p. 546)
13. 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)
14. Schneider B. Substance use disorders and risk for completed suicide. *Arch Suicide Res*. 2009;13(4):303-16. (p. 304)
15. 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)
16. Schneider B. Substance use disorders and risk for completed suicide. *Arch Suicide Res*. 2009;13(4):303-16. (pp. 303, 307)
17. Sher L. Alcohol consumption and suicide. *QJM*. 2006;99(1):57-61. (p. 59)
18. Sher (2006) (reference 17) (p. 57)
19. 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)
20. 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)
21. Smith JA, Braunack-Mayer A, Wittert G. What do we know about men’s help-seeking and health service use? *Med J Aust*. 2006;184(2):81-3. (p. 81)
22. Slade T, Johnston A, Teesson M, Whiteford H, Burgess P, Pirkis J, et al. The Mental Health of Australians 2. Report on the 2007 National Survey of Mental Health and Wellbeing. Canberra; 2009. (p. xiii)
23. McPhedran S, De Leo D. Miseries suffered, unvoiced, unknown? Communication of suicidal intent by men in “rural” Queensland, Australia. *Suicide Life Threat Behav*. 2013;43(6):589-97. (p. 595)

Conceptual map references

24. Macdonald J, Monaem A, Sliwka G, Smith A, Tresize E. Pathways to despair: The social determinants of male suicide (aged 25-44), Central Coast, NSW. Penrith: Men's Health Information & Resource Centre; 2010. (pp. 20-21)
25. Luoma JB, Martin CE, Pearson JL. Contact with mental health and primary care providers before suicide: a review of the evidence. *Am J Psychiatry*. 2002;159(6):909-16. (p. 912)
26. Schrijvers et al. (2012) (reference 7) (pp. 19, 24)
27. Beautrais AL. Suicides and serious suicide attempts: two populations or one? *Psychol Med*. 2001;31(5):837-45. (p. 837)
28. Nock MK, Borges G, Bromet EJ, Cha CB, Kessler RC, Lee S. Suicide and suicidal behavior. *Epidemiol Rev*. 2008;30:133-54. (p. 144)
29. Owens D, Horrocks J, House A. Fatal and non-fatal repetition of self-harm. Systematic review. *Br J Psychiatry*. 2002;181:193-9. (p. 193)
30. Suominen K, Isometsa E, Suokas J, Haukka J, Achte K, Lonnqvist J. Completed suicide after a suicide attempt: a 37-year follow-up study. *Am J Psychiatry*. 2004;161(3):562-3. (p. 563)
31. Canetto SS, Sakinofsky I. The gender paradox in suicide. *Suicide Life Threat Behav*. 1998;28(1):1-23. (p. 1)
32. Harrison JE, Henley G. Suicide and hospitalised self-harm in Australia: trends and analysis. Canberra: Australian Institute of Health and Welfare; 2014. Cat. no. INJCAT 169. (Figure 11.1, p. 58)
33. Martin G, Swannell S, Harrison J, Hazell P, Taylor A. The Australian National Epidemiological Study of Self-injury (ANESSI). Brisbane: Centre for Suicide Prevention Studies; 2009. (Table 7, p. 22)
34. Martin et al. (2009) (reference 33) (p. 44)
35. Martin et al. (2009) (reference 33) (p. 44)
36. Harrison & Henley (2014) (reference 32) (Table 11.1, p. 58)
37. Harrison & Henley (2014) (reference 32) (Table 11.1, p. 58)
38. Martin et al. (2009) (reference 33) (p. 11)
39. Elnour & Harrison (2008) (reference 5) (p. 43)
40. Schrijvers et al. (2012) (reference 7) (pp. 19, 24)
41. Harrison & Henley (2014) (reference 32) (Table 11.1, p. 58)
42. Callanan VJ, Davis MS. Gender differences in suicide methods. *Soc Psychiatry Psychiatr Epidemiol*. 2012;47(6):857-69. (p. 858)
43. Harrison & Henley (2014) (reference 32) (Table 11.1, p. 58)
44. Gomberg ES. Suicide risk among women with alcohol problems. *Am J Public Health*. 1989;79(10): 1363-5. (p. 1363)
45. Conner et al. (2006) (reference 15) (p. 95)
46. Canetto SS, Sakinofsky I. The gender paradox in suicide. *Suicide Life Threat Behav*. 1998;28(1):1-23. (p. 1)
47. McKenna K, Harrison JE. Hospital separations due to injury and poisoning, Australia 2008-09. Canberra: Australian Institute of Health and Welfare; 2012. Cat. no. INJCAT 141. (p. 92)
48. Harrison & Henley (2014) (reference 32) (Table 11.1, p. 58)
49. Slade et al. (2009) (reference 22) (p. xiii)
50. Australian Bureau of Statistics. National Survey of Mental Health and Wellbeing: Summary of results. Canberra; 2008. (Table 12, p. 44)

Other references

- ▶ Antonakakis N, & Collins A. (2014). The impact of fiscal austerity on suicide: On the empirics of a modern Greek tragedy. *Social Science & Medicine*, 112, 39–50.
<http://www.sciencedirect.com/science/article/pii/S0277953614002433>
- ▶ Australian Bureau of Statistics (2016) Intentional Self-Harm in Aboriginal and Torres Strait Islander People. 3303.0 – Causes of Death, Australia, 2015. Canberra: Australian Bureau of Statistics.
<http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/3303.0~2015~Main%20Features~Intentional%20self-harm%20in%20Aboriginal%20and%20Torres%20Strait%20Islander%20people~9>