Austin Health

Prevention of suicide in middle aged males

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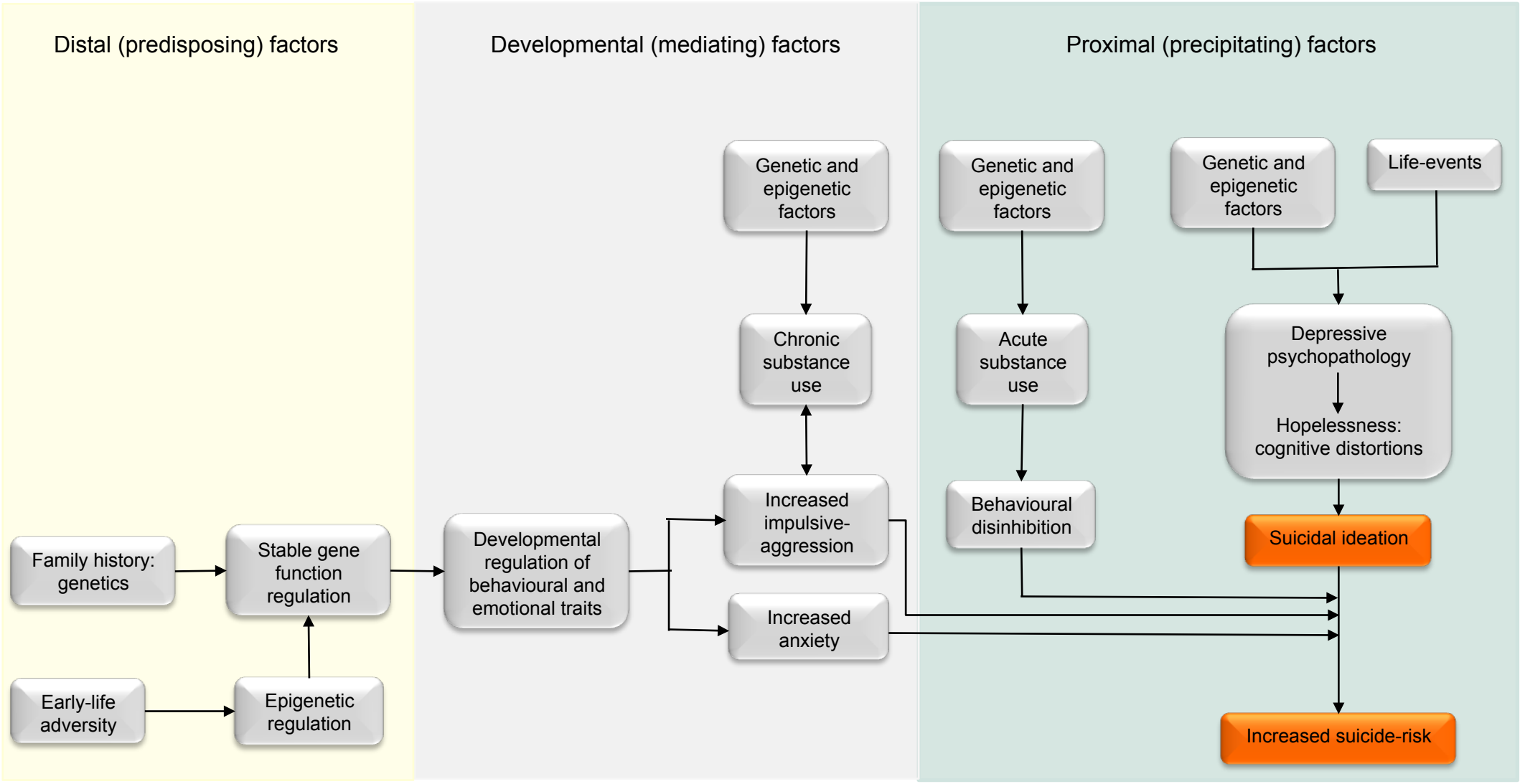
Prevention of suicide in middle aged males

- Social and biological models of suicide
- Review of Victorian Mental Health Service specific data on sudden and unexpected deaths
- Selected literature review
  - Gender differences
  - Role of alcohol
  - Social and psychological aspects of Suicidal activity
- Implications for Prediction of suicide
- Clinical vignettes to illustrate mental health service system issues
- Implications for Prevention of suicide

Le Suicide Durkheim 1897

- *Egoistic suicide*
  - reflects a prolonged sense of not belonging. It is the result of breakdown of social integration.
  - Those individuals who were not sufficiently bound to social groups are left with little social support or guidance, and therefore commit suicide on an increased basis.
  - An example Durkheim discovered was that of unmarried people, particularly males, who, with less to bind and connect them to stable social norms and goals, committed suicide at higher rates than married people.[5]
- *Altruisitic suicide*
  - characterized by a sense of being overwhelmed by a group's goals and beliefs.
  - It occurs in societies with high integration, where individual needs are seen as less important than the society's needs as a whole.
- *Anomic suicide*
  - reflects an individual's moral confusion and lack of social direction related to dramatic social and economic upheaval
  - It is the product of moral deregulation and a lack of definition of legitimate aspirations through a restraining social ethic, which could impose meaning and order on the individual conscience.
  - People do not know where they fit in within their societies.
- *Fatalistic suicide*
  - occurs when a person is excessively regulated, and appears in overly oppressive societies,.
  - is an extremely rare reason for people to take their own lives, but a good example would be within a prison.



Nature Reviews | Neuroscience

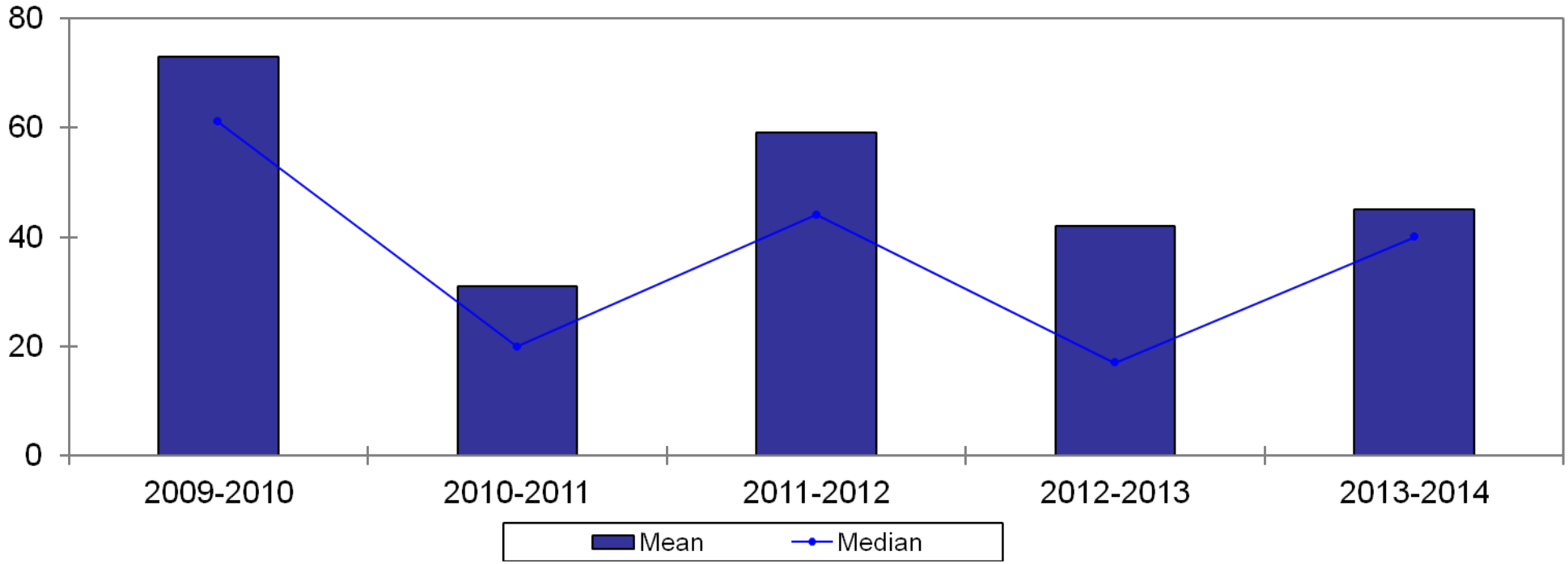
Summary of Reportable Deaths 2009 -2014

	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
No. of reportable deaths	137	127	130	141	128
• suicides	81	64	60	67	59
• not suicides	26	23	26	25	26
• unknown	30	40	44	49	43
Reportable deaths per 100,000 catchment population	4.0	3.7	3.8	4.1	4.7

Community completed suicides 18-20 per 100000 population

Mental Health Services therefore only in contact with 20-25% of people who commit suicide

Days since discharged from Service 2009 - 2014



Days since the case was closed, for those clients who died within 6 months of being discharged from the service

2009 - 2010
Mean = 73 days
Median = 61 days

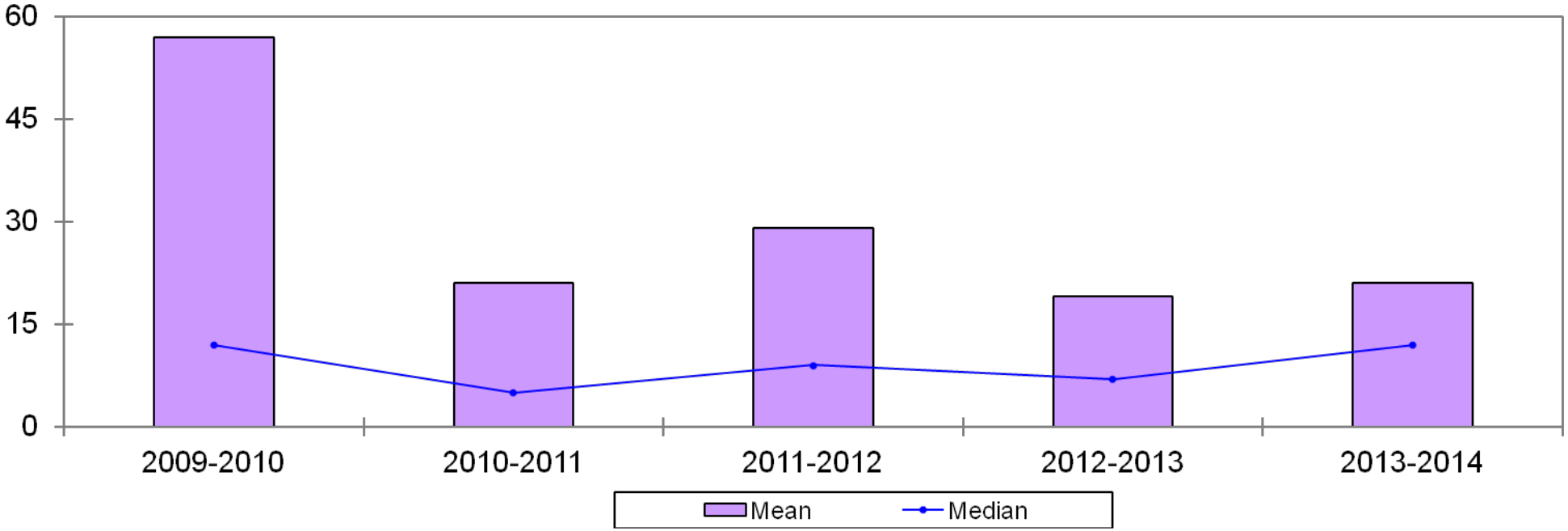
2010-2011
Mean = 31 days
Median = 20 days

2011-2012
Mean = 59 days
Median = 44 days

2012-2013
Mean = 42 days
Median = 17 days

2013-2014
Mean = 45 days
Median = 40 days

Days since last face to face contact 2009 - 2014

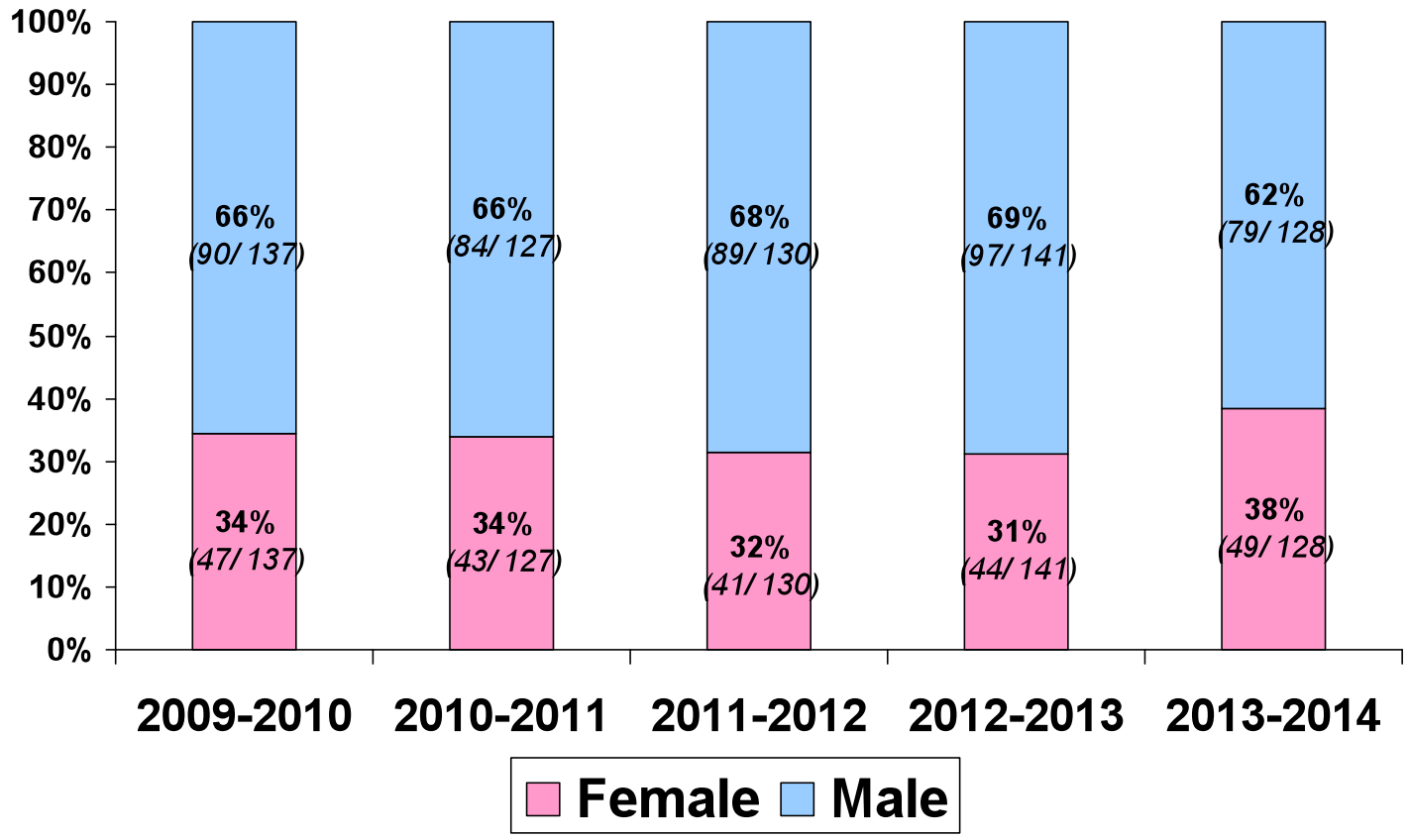


Please note:

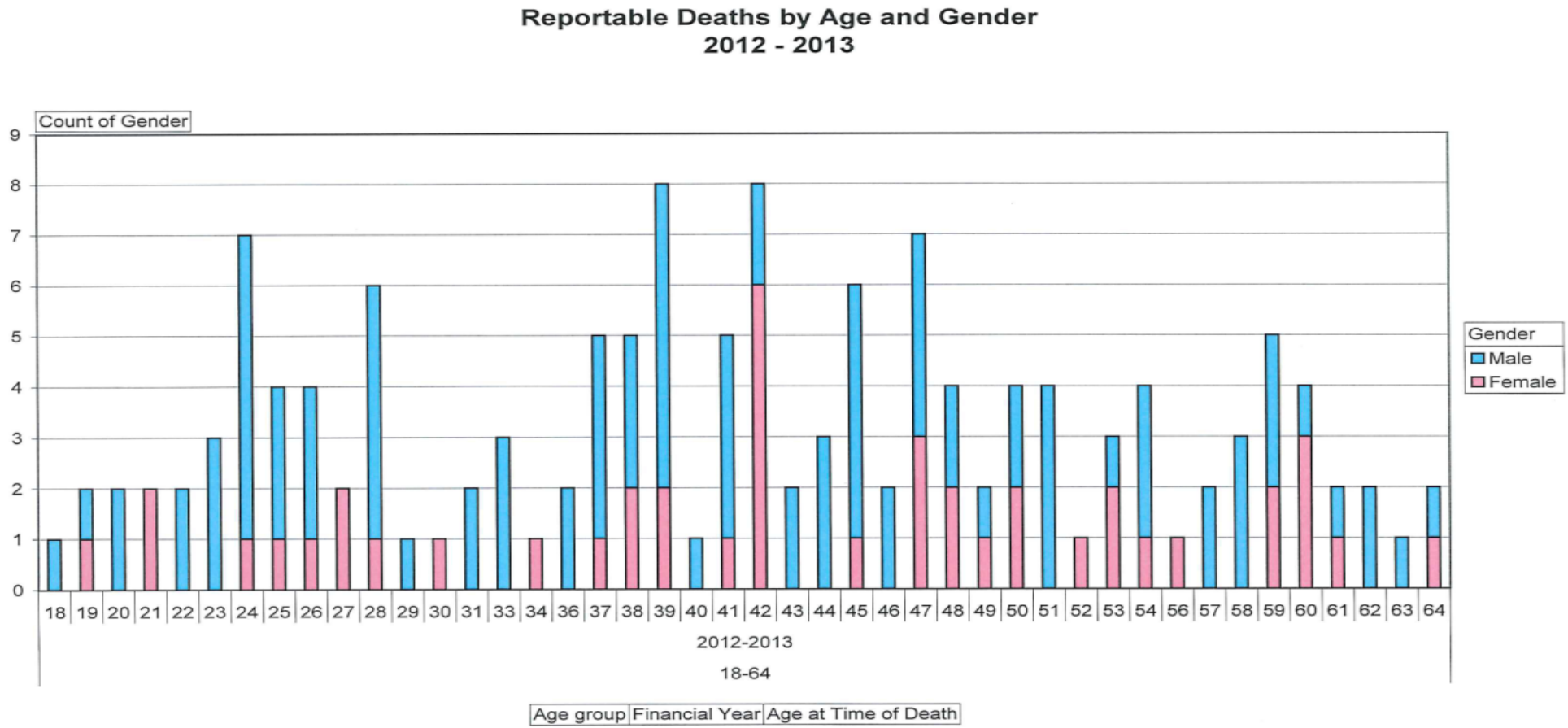
- *data excludes those clients who were discharged from service at time of death*
- *high outliers have been removed*
- *2011/12 and 2012/13 data impacted by Industrial Action banning the recording of community contacts*

2009 – 2010	2010 - 2011	2011 – 2012	2012 – 2013	2013 – 2014
Mean = 57 days	Mean = 21 days	Mean = 29 days	Mean = 19 days	Mean = 21 days
Median = 12 days	Median = 5 days	Median = 9 days	Median = 7 days	Median = 12 days

Gender 2009 - 2014



Suicide rates in men versus women at different ages



Gender Differences

- Men have lower rates of health service seeking than women prior to suicide
- Men more likely to have attended primary health care than mental health services

Gender differences

- Men's lack of social support, relative to that available to women, has been implicated as a risk factor in male suicide.
- Social stressors—
    - family breakdown,
    - overwork,
    - employment insecurity—
    - often combined with alcohol or drug abuse,

    are understudied contributors to male suicide.
- Occupational stress may contribute more strongly to male than female suicide.

- Houle J, Mishara BL, Chagnon F. An empirical test of a mediation model of the impact of the traditional male gender role on suicidal behavior in men. J Affect Disord 2008;107:37-43.
- University of Western Sydney Media Unit. Social factors, not mental illness, to blame for high male suicide rate. 12 January 2008. Accessed 12 August 2011. http://pubapps.uws.edu.au/news/index.php?act=view&story_id=2350.

Men who reach the point of suicidal action may be:

- More hopeless.
- More clearly resolved to die.
- More likely to be intoxicated and thus more disinhibited.
- More willing to carry out actions that might leave them injured or disfigured.
- More unconcerned with consequences because of a high risk-taking orientation.
- More likely to have a greater capacity to enact lethal self-injury.
- “Our findings suggest that factors responsible for the increased suicide rate in older men operate largely during the suicidal crisis itself: once a depressed older man develops serious suicidal intent, he tends to realize it with little hesitation.”

Dombrovski AY, Szanto K, Duberstein P, et al. Sex differences in correlates of suicide attempt lethality in late life. Am J Geriatr Psychiatry 2008;16:905-913.

Alcohol is largely involved in suicidal risks

- The lifetime prevalence of suicide in individuals with alcohol dependence ranges from 7% to 15%[1]
- Postmortem psychological autopsy studies demonstrated alcohol use disorders in 25% to 35% of suicide victims[2]
- Alcohol was detected in the blood of 20% to 48% suicide completers in different American and European samples[3]

1. Inskip et al., 1998
2. Chen 1995; Pirkola et al., 2000
3. Garlow 2002; Pirkola et al., 2003; Varnik et al., 2007

Male Female alcohol use in Australia

		12-Month Drinkers Only		
Country	**Age Category**	**High Frequency (M/F)**	**High Volume (M/F)**	**Any HED (M/F)**
Australia	18 – 34	2.23	2.92	1.37
	35 – 49	2.06	3.33	1.67
	50 – 65	1.37	4.42	4.15
	Total	1.68	3.43	1.73

High frequency = 5+ days per week. High volume = 8468+ grams of pure ethanol in a year. HED = 60+ grams of pure ethanol in a day

Risk factors for SA in alcohol dependent patients in the literature

- Associated
  - Depressive disorder (substance induced or not)
  - Drug use disorder and other addictions
- Family history of suicidal acts
- AUD severity
- Low social support
- Aggression
- Interpersonal stressful life events
- Medical illness or complaints
- Unemployment or other economic adversity

Effects of unemployment on suicide

- After the 2008 economic crisis, rates of suicide increased in the European and American countries studied, particularly in men and in countries with higher levels of job loss.
- Suicide rates increased as the level of unemployment increased in various countries, especially in countries where the pre-crisis unemployment levels were low.
- Similar less robust changes seen in Australia
- *Impact of 2008 global economic crisis on suicide: Time trend study in 54 countries. Chang SS, Stuckler D, Yip P, Gunnell D (China, UK, Taiwan). British Medical Journal 347, f5239*

Prediction of suicide in men

- Certain variables are more predictive of suicidal acts in men than in women:
  - a family history of suicidal behavior,
  - drug and alcohol use,
  - early parental separation.
  - Unemployment or job instability
  - Retirement
  - Physical illness
  - Lack of social supports
  - Male suicides are more likely to occur in the context of substance use disorders than are female suicides.

Suicide prediction and protective factors

Protective factors are important to consider in any comprehensive suicide risk assessment, and evidence suggests that protective factors may differ for men and women.

– being married appears to be a greater protective factor for men than for women.

– Good Social Networks

– Stable occupation and finances

– Family closeness

➢ *Murphy GE. Psychiatric aspects of suicidal behavior: Substance abuse. In: The international handbook of suicide and attempted suicide. Hawton K, Van Heer-ingen K (eds). Chichester: John Wiley & Sons; 2000:135-146*.

Rates of completed suicide versus attempted suicide 2008-2009

Not all attempted suicides will be admitted
At all ages more attempted than completed
In middle aged males 5-6 times more attempts th an completed suicides.
Females 15 times more attempts than completed
Any attempted suicide in males should be considered an indica tor of risk for completed suicide relative to attempted suicide in women

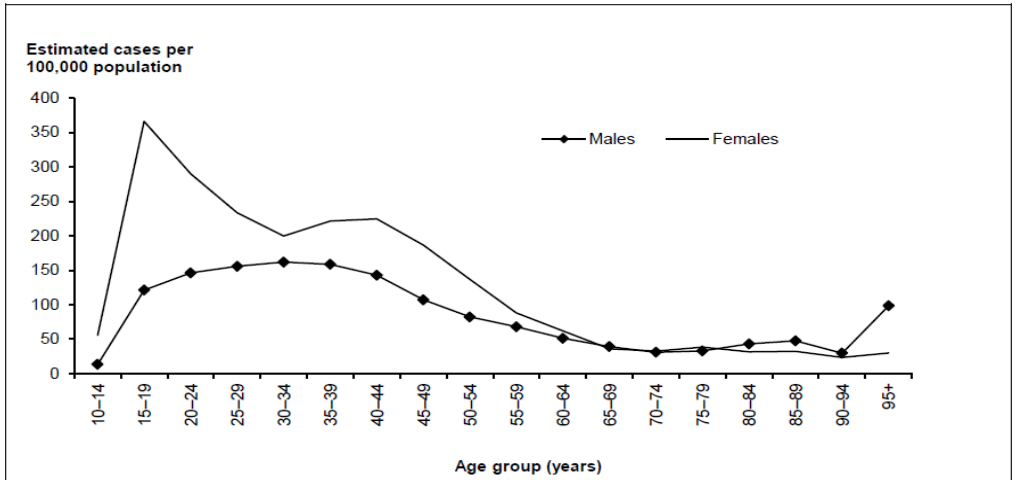


Figure 2.9.1: Age-specific estimated cases of intentional self-harm by sex, Australia, 2008–09

Contacts with health professionals before suicide: Missed opportunities for prevention?

- The psychological autopsy method was utilised to investigate suicides of individuals over the age of 35 years. A case-control study design was applied using sudden death cases as controls. Odds ratios with a 95% confidence interval were calculated.
- Results: 261 suicides and 182 sudden deaths
- 89.4% of people who died by suicide had at least one contact with a health professional in the preceding three months before their death;
- 76.9% of these cases had contact with a General Practitioner (GP).
- Individuals from both groups displayed a similar prevalence of assistance seeking to GPs.
- Cases due to sudden death contacted fewer mental health oriented sources as they had significantly less mental health problems (35.9% with a mental health diagnosis) compared to cases involving suicide (74.9% with a mental health diagnosis).
- A greater proportion of individuals that died by suicide had contact with a psychiatrist compared to those cases involving sudden death (29.8% and 3.9% respectively).

De Leo D, Draper BM, Snowdon J, Kõlves K (Australia Comprehensive Psychiatry. Published online: 12 June 2013.

Opportunities for prevention

Men who commit suicide in the context of depression

- More hopeless.
- More clearly resolved to die.
- More likely to be intoxicated and thus more disinhibited.
- More willing to carry out actions that might leave them injured or disfigured.
- More unconcerned with consequences because of a high risk-taking orientation.
- More likely to have a greater capacity to enact lethal self-injury.
- "Our findings suggest that factors responsible for the increased suicide rate in older men operate largely during the suicidal crisis itself: once a depressed older man develops serious suicidal intent, he tends to realize it with little hesitation."

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Attitudes and stigma in relation to help-seeking intentions for psychological problems in low and high suicide rate regions

- Where suicide rates are low, people have more positive attitudes toward help seeking and experience less self stigma and shame compared people where suicide rates are relatively high.
- These attitudinal factors predicted professional as well as informal help seeking intentions.
- Perceived stigma was negatively associated with informal help seeking.
- Shame was positively associated with higher intention to use psychotropic drugs and perceived stigma was negatively associated with the intention to seek help from a psychotherapist in Flanders but not in the Netherlands.

Reynders A, Social Psychiatry and Psychiatric Epidemiology 2013

Restrictions in alcohol consumption

"Perestroika" in the former USSR: history's most effective suicide-preventive program for men 1984-1986

- 2,762,694 deaths analysed by cause of death
- Suicides for men decreased by 40%
- Suicide decreased most for males in the workforce aged 24 – 54
- Decline of suicide in all 15 republics of the former USSR
- In Europe during the same time period, suicide decreased for men by only 3.0%

Examples of prevention activities for middle aged men

- US Air Force developed an innovative population-level suicide prevention strategy that was designed to change norms around help-seeking, improve community-wide awareness of suicide risks, and increase the use of lo-cal re-sources.

- This systematic effort, which targeted the whole community, was associated with a sustained decline in suicide rates, providing some preliminary support for a multilevel, early intervention approach.

Knox K, Litts D, Talcott G, et al. Risk of suicide and related adverse outcomes after exposure to a suicide prevention programme in the US air force: Cohort study. BMJ 2003;327:1376-1378.

Gun control 1996-1997

Year(b)	Poisoning by drugs	Poisoning by other(c)	Hanging(d)	Firearms(e)	Other(f)	Total
			MALES			
1995	194	455	585	366	273	1 873
1996	163	486	672	369	241	1 931
1997	160	555	812	309	307	2 143
1998	157	499	1 035	218	241	2 150
1999	158	492	868	257	227	2 002
2000	144	472	807	213	224	1 860
2001	151	427	855	242	260	1 935
2002	156	362	846	207	246	1 817
2003	148	340	820	185	243	1 736
2004	127	331	822	164	217	1 661
2005	128	286	885	136	222	1 657

Sport

- FIFA World Cup 1998 10% decrease in suicide rate strongest effect in males aged 30-44
- Olympic Games – 2000 games significant drop in suicide rate. Strongest effect in males 55-64

Prevention strategies for male suicide

- Improving awareness of the specific risks for middle aged men
  - Primary care
  - Specialist services
  - Community at large
- enhancing social support
  - Linkage with family
  - Friends
  - Formal social support

Prevention strategies for male suicide

- Enhancing community connectedness, How?
    - Men's sheds
    - Other novel support groups acceptable to men
- improving access to mental health services,
- Improved primary health care
- reducing the stigma and barriers associated with seeking help.

➢ Other prevention strategies include programs to help those at increased risk of suicide, such as those struggling with financial challenges, job loss, intimate partner problems or violence, stress of care giving for children and aging parents, substance abuse, and serious or chronic health problems.

Service response to suicidal acts

- Not Just Mental Health
- 63% or more of suicide survivors not in contact
- Identification of high risk groups
- Education of agencies likely to be in contact
- Action in response
  - Assertive follow up
  - Community Linkage
  - Family linkage
  - Specific treatments – Depression, Substance use

Service response to suicide risk

- Remove environmental risks
- Educate at risk patients on specific prevention strategies
- Consider risk at all times
- Consider risk when predictable stressors operate
  - » Intoxication
  - » Interpersonal stressors
  - » Frustration
- Maintain contact until risk likely to remain low in presence of these predictable stressors

Service response to prevent suicide

- Manage times of High Risk
  - Transitions eg discharge
  - Limit discharge medication
  - Involve family or carers
  - Bereavement and loss
  - Physical illness
    - » Acute health
    - » Oncology
    - » Aged care

Clinical Vignettes

- Suicide after discharge from IP care
  - 58 year old man, married 35 yrs, 2 children left home, warehouse manager,
  - Heavy alcohol use in teens and twenties
  - Social network limited to family and work, however limited contact with children, family or friends
  - Presented after attempted electrocution in context of wife moving out
  - Flat, hopeless, angry, increased alcohol
  - Admitted, LoS 4 weeks because of ongoing hopelessness in context of separation from wife
  - Over admission wife visited, showed concern, agreed to couple counselling, suicidal ideation improved, hope returned, agreed to attempt abstinence
  - Discharged to GP and agreed to see a psychologist for individual counselling.
  - During couples counselling it became clear that wife was determined to separate.
  - Killed self by hanging whilst intoxicated 2 weeks post discharge
  - Texted wife just before suicide event.
  - No contact with GP or psychologist post discharge

Clinical Vignettes

➢ Suicide after OP care

- 51 year old man, divorced, little contact with kids,
- Suicidal ideas in context of learning that de facto of 5 years unfaithful, she called CATS as worried about his risk to her and himself.
- Significant heavy alcohol and cannabis use, past history of depression treated by GP. One OD in twenties when his then wife tried to leave marriage.
- Agreed to CATS follow up and felt would be safe. De Facto agreed
- Over next 4 days seen twice with defacto.
- Reported that he still felt hopeless, could not see a future without defacto, felt it was all too much but 'No active suicidal ideas' documented in file.
- Discharged to GP with diagnosis of situational crisis
- Shot self 4 weeks later whilst intoxicated. De facto had left to pursue another relationship. Last contact had been with GP who prescribed sleeping tablets 4 days before.
- His sister had been in regular contact as she was very worried about him but had not had any contact from the service. She was angry with service and felt that his death was highly avoidable as his wider family all would have been very supportive

Opportunities for prevention in these vignettes???

- Recognition of significant short term versus immediate risk
  - in context of high likelihood of ongoing relationship difficulties and substance use
- Active clinical management of mood disorder
- Active clinical management of substance use
- Active contact post clinical care to ensure follow up arrangements are acceptable, in place and addressing the issues.
- Community linkages. Need to actively support connection to effective and acceptable social and family supports.
- ??? Others ???

Research directions

- One line of research might focus upon clinical indicators that are specifically predictive for male suicide.
- Recognition of suicide indicators in clinical practice is especially problematic, given the disinclination of male patients to talk about emotional distress and their greater propensity for impulsive behavior.
- The development and validation of protocols for male-appropriate suicide assessment and intervention would greatly support health care providers in responding effectively to men's suicide risk.

"Laws of Mount Misery“ by Samuel Shem

- "I. There are no laws in psychiatry."
- "II. Psychiatrists specialize in their defects."
- "III. At a psychiatric emergency, the first procedure is to check your own mental status."
- "IV. The patient is not the only one with the disease, or without it."
- "V. In psychiatry, first comes treatment, then comes diagnosis."
- "VI. The worst psychiatrists charge the most, and world experts are the worst."
- "VII. Medical school is a liability in becoming a psychotherapist."
- "VIII. Your colleagues will hurt you more than your patients."
- "IX. You can learn everything about a person by the way he or she plays a sport."
- "X. Medical patients don't take their medications fifty percent of the time, and psychiatric patients don't take their medication much at all."
- "XI. Therapy is part of life, and vice versa."
- ***"XII. Healing in psychotherapy has nothing to do with psychology; connection, not self, heals."***
- "XIII. The delivery of psychiatric care is to know as little as possible, and to understand as much as possible, about living through sorrow with others."