SPRC & ICRC-S Webinar

A Surprising Health Disparity:
Suicide among Men in the Middle Years

March 11, 2014
3:00 pm – 4:30 pm EST
Moderator

Jerry Reed, Ph.D., MSW
Vice President, Center for the Study and Prevention of Injury, Violence and Suicide
Director, Suicide Prevention Resource Center
Presenters

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Acting Associate Director for Science, Science Division of Violence Prevention, National Center for Injury Prevention and Control (NCIPC), Centers for Disease Control and Prevention (CDC)

Ella Arensman, Ph.D.
Director of Research, National Suicide Research Foundation; Adjunct Professor, Department of Epidemiology and Public Health at University College Cork, Ireland; President, International Association for Suicide Prevention

Eric D. Caine, M.D.
John Romano Professor and Chair, Department of Psychiatry, University of Rochester Medical Center

Derek McDonnell, LLM, BSc,
Programme Manager, Mojo Programme, South Dublin County Partnership
Suicide Trends Among Middle-Aged Adults

Thomas R. Simon
Acting Associate Director of Science
Division of Violence Prevention
CDC/NCIPC
Acknowledgements

- Erin Sullivan
- Lee Annest
- Feijun Luo
- Linda Dahlberg
Suicide as a Public Health Problem

- One suicide every 15 minutes in the U.S.
- Over 480,000 self-harm injuries treated in U.S. emergency departments each year
- Estimated total lifetime medical and work loss costs over $55 billion annually
Suicide as a Public Health Problem

- Prevention efforts have traditionally focused on suicide prevention among youth and older adults
- Recent evidence suggests that there has been an increase among middle-aged adults
Methods

- National Vital Statistics Data on suicides reported between 1999-2010
- U.S. residents aged >10 years
- Focused on adults aged 35-64 years
- Looked at changes by state and region
- Examined rates by sex, age group, race/ethnicity, and mechanism of suicide
Results

1999-2010

- No significant change for other age groups
  - Age 10-34 saw 7% increase
  - Age 65 and older saw 5.9% decrease
- Significant increase for those aged 35-64
  - Rate increased 28.4%
  - From 13.7/100,000 to 17.6/100,000
- Increases held across the country
  - Significant in all 4 regions
  - Significant in 39 states
# Ten Leading Causes of Death, Ages 35-64, U.S. 1999 & 2010

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<th>Cause of Death 1999</th>
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<th>Cause of Death 2010</th>
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<tr>
<td>Cancer</td>
<td>152,480</td>
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<td>171,521</td>
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<td>Heart Disease</td>
<td>112,761</td>
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<td>115,400</td>
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<td>Unintentional injury</td>
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<td>Cerebrovascular</td>
<td>17,789</td>
<td>Suicide</td>
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<td>Diabetes</td>
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<td>Lower Respiratory Disease</td>
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<td>Lower Respiratory Disease</td>
<td>15,297</td>
<td>Diabetes</td>
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<tr>
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<td>14,443</td>
<td>Cerebrovascular</td>
<td>18,507</td>
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<tr>
<td>HIV</td>
<td>11,288</td>
<td>Nephritis</td>
<td>8,030</td>
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<tr>
<td>Homicide</td>
<td>5,596</td>
<td>Septicemia</td>
<td>7,704</td>
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Results

- Significant increase for males and females
- Rate for men in 2010 was over 3 times higher than the rate for women (27.3 versus 8.1 per 100,000)
- Among males, largest increases were:
  - For those aged 50-54 (49%) and those aged 55-59 (48%)
  - Among non-Hispanic White (40%) and AI/AN (60%)
Results

- Increases in three primary mechanisms used by men
  - Firearms: 15%
  - Poisoning: 18.5%
  - Suffocation: 75%

Mechanisms, 1999

Mechanisms, 2010
Summary

- Suicide rates increased significantly for adults aged 35-64 between 1999 and 2010
- Increases were geographically widespread
- Rate for males is consistently 3x higher than rate for females
- Particularly high increases for non-Hispanic White and AI/AN subgroups, widening racial/ethnic gap
- Increase in all major methods but suffocation showed the greatest increase
Limitations

- Suicide rates are likely an underestimate
- Potential variation among state coroners and medical examiners
- Do not have data on contributing factors in National Vital Statistics System
Next Steps

- Need additional research to understand why
  - Cohort effect of “baby boomer” generation
  - Economic pressures
  - Prescription drug addiction, especially opioids
Prevention

- National Strategy for Suicide Prevention
  - Risk factors, prevention opportunities, and existing resources

- Prevention across the lifespan
  - Enhanced social support, access to mental health and prevention services, reduce stigma and barriers to help

- Need to address risks for middle-aged adults, particularly males
  - Job loss, financial challenges, intimate partner problems or violence, substance abuse, and chronic health issues
Thank you

For more information about the data used and CDC’s suicide prevention work visit: www.cdc.gov/violenceprevention/suicide/index.html

Confidential help is available at the SAMHSA funded National Suicide Prevention Lifeline www.suicidepreventionlifeline.org or by calling 1-800-273-TALK (8255)

For more information please contact Centers for Disease Control and Prevention

1600 Clifton Road NE, Atlanta, GA 30333
Telephone: 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348
Visit: www.cdc.gov | Contact CDC at: 1-800-CDC-INFO or www.cdc.gov/info

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.
SPRC/ICRC-S Research to Practice Webinar on
Men in the Middle Years of Life
11th March 2014

Risk factors associated with suicide among men in the middle years in Ireland

Prof Ella Arensman

National Suicide Research Foundation, University College Cork
Department of Epidemiology & Public Health, University College Cork
Ireland
Suicide and medically treated deliberate self-harm in Ireland: the tip of the iceberg

- Suicide: Approx. 550 p.a.
- Medically treated self-harm: Approx. 12,000 p.a.
- “Hidden” cases of self-harm: Approx. 60,000 p.a.
National Registry of Deliberate Self-Harm

Key objectives:

- To establish the incidence of hospital treated deliberate self-harm
- To describe the pattern of presentations and the nature of the self-harm behaviour involved
- To estimate the risk of repeated self-harm presenting to hospital

Since 2003 there have been 111,682 presentations of self harm recorded by the Registry
Trends in rates of self-harm and suicide in Ireland

Trends in rate of suicide
Suicide Support and Information System (SSIS)

Objectives:

1) Improve access to support for the bereaved
2) Better define the incidence and pattern of suicide in Ireland
3) Identify and improve the response to clusters of suicide
4) Identify and better understand causes of suicide
5) Reliably identify those individuals who present to the Emergency Department due to deliberate self-harm and who subsequently die by suicide

The objectives are in line with Reach Out, the Irish National Strategy for Action on Suicide Prevention, 2005-2014

Arensman et al, 2013
A systematic approach to accessing real-time data on suicide cases and identifying emerging suicide clusters

Suicide Support and Information System (SSIS)

Coroner's Inquest concluded involving cases of suicide / open verdicts

Step 1 : SRP* facilitates support for families bereaved by suicide / other sudden deaths after conclusion of inquest

Step 2 : Research: SRP approaches next of kin and health care professional(s) after conclusion of inquest

*SRP: Senior Research Psychologist
Innovative aspects of the SSIS methodology:
Obtaining a complete picture of suicide cases and open verdicts by accessing multiple sources

- 307 cases based on coroners’ verdict records and post mortem records.
- 246 male deaths by suicide during a four year period from September 2008 to June 2012.

Coroners' verdict records & Post mortem reports
Response rate: 100%

GP/Psychiatrist/Psychologist
Response rate: 77%

Close family members/friends
Response rate: 66%
Socio-demographic characteristics

Men < 40  n=131 (54%)
- Single (75%)
- Married (21%)
- Paid employment (43%)
- Unemployed (39%)
- Construction / Production sector (56%)

Men ≥ 40  n=115 (47%)
- Married (47%)
- Single (36%)
- Paid employment (44%)
- Unemployed (32%)
- Construction / Production sector (42%)
Characteristics of suicide acts

Drugs in toxicology*
- ≥ 40: 36
- < 40: 24

Alcohol in toxicology
- ≥ 40: 18
- < 40: 29

Hanging
- ≥ 40: 57
- < 40: 79

* P≤0.05
Drugs in toxicology

Antidepressants*
- ≥ 40: 46
- < 40: 24

Benzodiazepines
- ≥ 40: 39
- < 40: 58

Street drugs*
- ≥ 40: 18
- < 40: 62

* P≤0.05
Mental and physical health problems

Psychiatric illness*
- ≥ 40: 48
- < 40: 33

Depression*
- ≥ 40: 36
- < 40: 20

Physical illness*
- ≥ 40: 39
- < 40: 22

* P≤0.05
Opportunities to engage with men

- Previous act of DSH: 16% (≥ 40), 31% (< 40)
- Family member / friend DSH*: 7% (≥ 40), 18% (< 40)
- Suicide of family member / close friend*: 10% (≥ 40), 30% (< 40)
- Visit to GP in last year: 38% (≥ 40), 31% (< 40)

* P≤0.05
Suicide cluster of middle aged men

- Expected versus observed N: 1.86 versus 13
- Suicide rate: 301 per 100,000
- Self-harm rate: 416 per 100,000
Cluster occurred in April-June 2011

Majority (5 or more):
- were men, aged between 45 and 54 years
- had died by hanging
- had been diagnosed with depression
- had been diagnosed with a physical illness
- had worked in: sales/business, construction/production, law/commerce

One third had left a suicide note/message

Majority of cases had alcohol and/or drugs in toxicology
Recommendations

- Develop innovative ways of engaging with men at risk of suicide, specifically at an early stage.

- Monitoring of prescriptions by healthcare professionals.

- Alternative treatments for men who have concerns regarding their physical and emotional well-being.

- Uniform assessment and aftercare procedures for self-harm patients.

- National strategies to increase awareness of the risks involved in the use and misuse of alcohol should be intensified.

- Prioritise suicide prevention programmes during times of economic recession.
For further information, please contact:

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Suicide among Men in the Middle Years

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The “New Public Health” (NPH) – WHO

• Public health includes the health of the individual in addition to the health of the population.
• The health of individuals and groups depend upon social policies & programs (e.g., access to care), and national, regional, and community efforts that are, at once, coordinated and diffuse.
• NPH promotes the building of healthy communities.
• NPH includes, and far exceeds, the scope of traditional public health (e.g., flood & water safety; communicable disease control; emergency response).
US Trends in Suicide, by Means, 1999-2010
(rate per 100,000; MMWR, 3 May 2013)
Suicides and suicide rates among all persons – United States, 2009

Source: CDC vital statistics
Life expectancy of men who had “self-harmed” compared with age-matched English general population

Total years of life lost among men and women who had “self-harmed”

*Assault and other external or unknown causes, musculoskeletal-system disease, other neoplasms, genitourinary-system disease, or diseases of the blood or immune systems.

Ecological model: Mental health & social risks for violence to self and others

Societal

Community

Relationship*

Individual*

Poverty; poor education systems
Bullying; high local crime levels
High residential instability; low community cohesion
High unemployment
Local illicit drug trade
Weak community institutional policies
Inadequate victim care services
Local ethnic or religious conflicts

Psychological & personality disturbances
Severe psychopathology
Alcohol/substance misuse
Victim of child maltreatment, trafficking, or current abuse; orphaned or abandoned
Violent or suicidal behavior—past or current
Access to lethal means

Unstable social infrastructure
Economic insecurity
Stigma regarding mental distress & help-seeking; cultural norms that support violence
Discrimination: gender; race; other
Policies that increase inequalities
Poverty; weak economic safety nets
Access to lethal methods (firearms)
National or regional armed conflict

Exposure to poor parenting or violent parental conflict; fractured family structures; families exposed to civil strife
Family history of violence or suicide
Current relationship/marital turmoil; participant in intimate violence
Financial, work stress; under- or unemployed
Friends & family that engage in violence
Unsafe storage of lethal substances or means

*Risks depend upon age, sex & gender, and developmental challenges
Suicide in the Middle Years: Framing

- Cohort effect vs. developmental challenges; distinctive implications but overlapping phenomena
- Broad societal changes – e.g., increasing gaps in “well-being” across society
- Near-term challenges associated with current crisis & longer term projections
- Likelihood that economic improvement will ameliorate circumstances
Suicide in the Middle Years: Barriers

• The middle years are the prime of life; in contrast to children, youth, & elders, these are autonomous adults who can care for themselves. *It is not society’s responsibility.*

• The “middle years” ≠ a single, coherent group!

• White men already are privileged and don’t deserve the necessary resources. (What about white women?)

• Suicide is viewed as a rare, isolated event. There is little recognition that there can be a ‘path to death,’ often littered with distress and misery.

• Suicide is not recognized as one of several adverse outcomes of common risks.
Suicide in the Middle Years: More Barriers

- No federal or state governmental agencies own the policy or implementation responsibility for persons of this age.
- There is no clarity about what should be done that is not being done.
- The costs of suicide in the middle years are not visible.
- Suicide, accidental death, and homicide (and their antecedents) are not measured as important health outcomes. Moreover, health system measures focus on mortality metrics rather than measures of burden of disease—missing the impact of conditions contributing to suicide and related premature deaths.
- Many vulnerable persons ‘reside’ outside medical, mental health, and chemical dependency treatment systems.
Where to begin for the current generation? (common risk approach)

“Nodal issues” (rhetorical ?: Is this suicide prevention?)

• Intimate partner violence (the thread into the family and the next generation)
• Substance use and abuse across the life course
• Enhancing the health of employees (& unemployed)
• Systematically and systemically improving clinician-patient interactions
• Policy development
Where to begin *for the current generation?* (common risk approach)

**Formal Institution Settings**

- EAP; courts (including civil) & criminal justice; primary care; chemical dependency treatment settings
- Training – skill development to complement attitudes and knowledge; doing as well as knowing
- Routine practices with briefly administered tools (e.g., SBIRT+; PHQ) – measurement
- Data dashboards for quality enhancement
Where to begin *for the current generation?* (common risk approach)

**Communities** (social norming – connectedness & meaning)

- Variably defined: geographically; virtually; aggregated-dispersed; interest-specific
- Faith based; local community betterment organizations (e.g., Rotary; United Way; the Volunteer Fire Dept)
- Partnership development processes to create processes capable of instituting & sustaining change
- Measurement & evaluation
Suicide prevention efforts must form a mosaic...

...built within the contexts of local geography and the social ecology of populations – and of individuals, as well as families and their communities.

The mosaic cannot be built or effectively sustained outside the domains of people’s lives!
The Health Impact Pyramid

Increasing Population Impact

Counseling and Education

Clinical Interventions

Long-Lasting Protective Interventions

Changing the Context to Make Individuals' Default Decisions Healthy

Socioeconomic Factors

Increasing Individual Effort Needed

What will be the *speed bumps* for suicide prevention?

Speed bumps *create context*!

“Context” regarding suicide prevention includes macro-economic and social factors, community conditions, and family and personal interactions. Suicide prevention has focused on discerning *uniquely vulnerable individuals*. This approach has not lowered suicide rates—even as these persons require treatment! *Speed bumps act indiscriminately to promote everyone’s well-being.*
Eric D. Caine, M.D.
eric_caine@urmc.rochester.edu
Presentation overview

• Background and rationale for Mojo
• Training programme structure and outcomes
• Next steps
Background to Mojo

- An interagency response for men ‘in distress’
- Pilot programme funded by NOSP
- 4 phases to the programme
- Formative evaluation has shaped development
Programme phases

1. Action research
2. Developing interagency working agreements/protocols
3. Participant recruitment
4. Facilitating Mojo
Organisational structure

South Dublin County Partnership
Management

Advisory Group
Programme Team

Programme Participants
Training programme
2 mornings per week – 12 weeks

Day 1

• Adult Guidance

Day 2

• Wellness and Resilience

• Fitness Programme
Mojo participants & facilitators
Training update

• Three training courses: 37 men with 83% retention

• Age range 27 to 62 with an average age of 44

• Tracking showed 70% progressed

• On completion participants report a high level of satisfaction

• Referrals increased from 17 (Mojo 1) to 33 (Mojo 3)
Mojo participant quotes

“I learnt that it’s ok to be myself. I can let things out”.

“A lot of information is out there. That is evident from the Thursday sessions”.

“I share things here that I don’t share with anybody else, not even family and friends”.

Quotes from participants May 2013.
Outcomes - Participants

- Moved on to education, training and employment
- Mutual support – reduced feeling of isolation
- More connected to family
- Stress and anxiety levels have been reduced
- More optimistic for the future
- Better able to deal with substance use
- Training Mojo alumni to offer peer support
Outcomes - Organisations

- Interagency working protocols developed
- Increased referrals between participating organisations
- Mojo is a trusted referral point for mental health professionals
- AG meetings are used to discuss emerging issues
- Frontline staff received WRAP & Outcome Star training
Programme Staff

- Programme Manager (21 hours)
  - Wellness & Resilience Facilitator (7 hours)
  - Adult Guidance Facilitator (9 hours)
  - Fitness Instructor (1 hour)
Next Steps

• Secure continued funding for Mojo in SCD
• Commission an SROI evaluation
• Write a Mojo manual
• Induct a new programme manager
• Scoping exercise to replicate Mojo
• Develop a strategy to upscale Mojo
Thank you!

www.mojoper programme.org
Moderator

Jerry Reed, Ph.D., MSW
Vice President, Center for the Study and Prevention of Injury, Violence and Suicide
Director, Suicide Prevention Resource Center
Q&A
Announcements

• Evaluation

• Submit Your Questions on the SPRC Web site
## Contact Us

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<tr>
<th>Name</th>
<th>Title</th>
<th>Institution</th>
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[www.sprc.org](http://www.sprc.org)  
[http://suicideprevention-icrc-s.org/](http://suicideprevention-icrc-s.org/)
Thank you!