

SPRC & ICRC-S Research to Practice Webinar
A Surprising Health Disparity: Suicide among Men in the Middle Years
Q&A with the Panelists

On March 11, 2014, SPRC and ICRC-S co-sponsored a “Research to Practice” webinar entitled, “A Surprising Health Disparity: Suicide among Men in the Middle Years.” The panelists generously agreed to respond to selected questions from people who attended the webinar and people who submitted questions on the SPRC Training Institute website. We hope that you find this information helpful in your suicide prevention efforts.

Research to Practice Panelists



Thomas R. Simon, PhD
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, PhD
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, MD
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

Rates and Methods

Why the “Middle Years?”

Thomas R. Simon (TS): We focused the panel on the “middle years” because this age group has seen substantially increasing suicide rates in recent years and because much less is known about the etiology of suicide and effective suicide prevention strategies for this age group. We want to raise awareness about this important public health problem.

Eric D. Caine (EC): As well, we have no defined prevention programs that address the many and diverse needs of the men and women who populate the middle years. To date, efforts in the US have been focused on youth and elders.

What is the percentage of attempt vs completion rates by middle-aged men? Do the 'attempts' and 'completion' rates by middle-aged men differ from those of other age groups?

TS: National data on suicide rates and nonfatal attempts that are treated in U.S. emergency departments are available online at CDC's Web-Based Injury Statistics Query and Reporting System ([WISQARS](#)).

For Dr. Simon - does the MMWR article include data from the NVDRS? Can you talk about the value of those data for a better understanding of suicide?

TS: No, the data are from the National Vital Statistics System Mortality data. The National Violent Death Reporting System or NVDRS integrates data from law enforcement, coroner/medical examiner reports, death certificates, and crime labs. The system includes rich circumstance information, including information about life stressors, but the system is not yet national. NVDRS currently includes 18 states. [NVDRS](#)

What is the suicide rate in this age group by race /ethnicity?

TS: The MMWR article includes this information overall and for males and females. It is available online at the [CDC MMWR website](#).

Is there any specific geographic location in the USA or occupation associated with a higher than usual suicide rate for middle aged men?

TS: The highest suicide rates for middle-aged males and females are in the West, but increases in suicide rates were significant in all four regions. We were not able to look at occupation in the study presented.

What percentage of this group is military or retired military? Was there any research with regard to returning combat veterans and/or the aging community of Vietnam veterans? Did the CDC data exclude veterans from the data?

TS: The data used do not include a variable for military status. Veterans were not excluded.

EC: Data released by the VA suggest that changes in the suicide rates among veterans have paralleled those of the general population, when considering veterans who are not cared for by the Veterans Health Administration (that is, veterans who do not go to VHA facilities). In

contrast, veterans who have received care in VA settings did not show the same dramatic increase after 2003, though there was an uptick in 2011.

What constitutes "suffocation?" Why is hanging an increased method of suicide?

TS: Suffocation includes strategies that deprive access to air and include suspension/hanging. It is not clear why suffocation suicides rates are increasing.

What is the cohort effect related to suicide among men in the middle years?

TS: The "baby boomer" generation or cohort had higher suicide rates at younger ages than other cohorts so some have suggested that recent increase in suicide rates among middle-aged adults could be due to this cohort moving into this age group.

What are the data on women in the middle years and suicide?

TS: The MMWR includes data on suicide rates among women in the middle years, including breakdowns by age group, method, race/ethnicity, and census region. ([MMWR](#))

Risk, Precipitating, and Protective Factors

Has the reason for loss of work or the length of time out of work made any difference in outcomes?

EC: There are no specific studies that I know that examine the reason for losing work, or the duration of unemployment, as definitive factors in suicide. Such studies would be very difficult, given the great variation among individual circumstances.

It is very clear that there is a close correlation between substantial changes in the unemployment rate and the suicide rate, both up and down. When looking more closely, it is clear that economic changes affect *both unemployed and employed persons*, and that the unemployment rate is best considered an indicator of overall economic distress. For example, during a recession someone may still be "employed" but have fewer work hours, or, as we saw during our Great Recession, some find that their homes are "underwater" or in foreclosure.

What is the correlation between substance use and suicide among middle-year men?

EC: Substance use is a major factor contributing to suicide among these men, often long-lasting and 'corrosive' at work, interpersonally, and individually. Alcohol plays a major role but there has been a rise in use of powerful prescription drug abuse as well. Indeed, the dramatic rise in "unintentional" poisoning deaths during the past 10+ years likely obscures many suicides that were classified incorrectly due to uncertainty or social stigma, despite the deliberate (intended) nature of the substance misuse.

Are there any protective factors/learnings from the men in this demographic who do NOT complete suicide, that we may use to enhance the protective factors for all in the age group?

EC: That is the \$64M question!

Where can I find resources pertaining to the role of religion and religious leaders in suicide prevention?

Suicide Prevention Resource Center (SPRC): A good starting place would be here:
<http://actionallianceforsuicideprevention.org/task-force/faith-communities>.

Any update on in vivo biochemical research (i.e., basic research to screen post-suicide or post-attempt, using blood platelets that might identify high-risk bioamines titers)?

EC: Nothing has emerged that has been reproduced with sufficient size or regularity, and certainly not anything with potential clinical utility. These studies, understandably, have been very challenging given the relatively small number of participants or brain samples (when post-mortem tissue has been used). Moreover, as genetic and epigenetic studies are being done in the arena of mental disorders and brain functioning, it is becoming clearer how much more complex and heterogeneous these conditions are. Standard psychiatric diagnoses describe symptom clusters, not delineated pathobiological entities. Suicide likely is a 'final common pathway' rather than any specific condition, and the challenge involves thinking about integrated brain systems and processes, as much as their chemical signaling agents.

What about what we have heard lately about sports injuries from high school and college causing later brain problems that may trigger suicidal feelings? Do you have any documentation about the effect of earlier sports head injuries on the suicides of this age group?

EC: There is a growing body of work on what is called “chronic traumatic encephalopathy” (CTE). The most useful starting place may be: Brain 2012, doi: 10.1093/aww307. This is an area of current investigation and controversy, but it seems that persons relatively early in the disease course may manifest depressive symptoms, impulsivity, less controlled substance use, and there have been some noted suicides.

Is there evidence that women who are heads of households are also at increased risk as a result of economic/employment issues?

EC: Nothing specific that I have seen published, and I don’t know of any unpublished data.

Common Risk Approach

What is the “common risk approach”?

EC: Fundamental factors that contribute to the contexts for suicide, especially during the early and middle years of life, also relate to unintentional deaths owing to alcohol poisoning, drug overdose, and motor vehicle accidents as well as to interpersonal violence and homicide. Identifying and mitigating or preventing such common risks potentially serve as the foundation for public health and injury prevention approaches to preventing suicide and attempted suicide.

The Air Force study from the late 1990s and early 2000s showed that a broad spectrum approach was associated not only with a reduced suicide rate, but also reduced homicide, domestic violence, and accidental death rate. Have there been other programs that have demonstrated such a broad spectrum approach?

EC: Unfortunately, this has been unique, to date.

Programs

Does the MOJO Programme have a stress reduction (meditation) aspect?

Derek McDonnell (DM): Yes. We run workshops on managing anxiety, stress reduction and mindfulness. In addition, the men have access to auricular acupuncture.

Does the Mojo Programme provide crisis response such as a crisis line and a walk-in crisis support service?

DM: No, but we provide information on available crisis lines and we have developed a fast track referral process to an organisation that specifically deals with suicide ideation and self-harm (<http://www.pieta.ie/>).

Is gatekeeper training or universal screening part of the Mojo project?

DM: Staff working on Mojo are ASSIST-trained (<http://www.nosp.ie/html/training.html>)

Other than gender and age, were there criteria for participating in Mojo (e.g., unemployment, substance use, domestic violence)?

DM: Criteria for Mojo participants:

- Directly affected by the recession and/or unemployment;
- 20 years or older;
- living in South County Dublin;
- Motivated to change;
- Able to participate in the programme for two mornings per week for 12 weeks.

Any effective tips for reaching that age group?

DM: Targeting men can be difficult, but from working on Mojo I have learned that utilising a number of approaches is important. The approaches that we have found useful include:

- Linking in with frontline staff (mental health professionals, GPs, social workers) and service providers to promote the programme.
- It is important that the programme is attractive and useful to men (e.g., its design, branding, location, and content).
- For the first cycle it was challenging to recruit 10 participants, but now that we are on

our fourth cycle we have up to 37 referrals for 13 places. This is due to referrers seeing significant results for their clients and from participants recommending the programme to their peers.

How can we increase help seeking among this population?

DM: A strategic focus on developing peer-led approaches that engage this often hard-to-reach population would be helpful. I believe that men need to be supported to move beyond the notion that 'boys don't cry' and that seeking help does not equate to weakness, but is, in fact, a sign of strength. This could be supported by a shift in public discourse that encourages men to talk about their issues and to access help before they end up in crisis.

Dr. Caine - would you discuss your thoughts/suggestions for screening and assessment tools best suited for identifying suicide risk in primary care settings?

EC: There are no tools that can be described as the "gold standard" for screening in primary care settings — unfortunately. This relates to several complex (and unavoidable) problems.

1. The vast majority of people with "risk factors," which really are retrospectively defined correlates gleaned from studies comparing suicide samples with community comparison samples, never attempt suicide. Thankfully! Factors such as major depression, drinking, family turmoil, or job stress, are common; suicide is rare. Common factors cannot predict rare events. Another way to think of this: Major depression may increase the prevalence of suicide 50-fold. While that risk is much greater, comparing the rate from 12 per 100,000 persons in the general population per year to 600 per 100,000 per year among a population of persons with major depression, it means that 99,400 *with major depression will not die by suicide in the year*. That is, a suicide screen using major depression as the identifier — if it were possible to assess all 100,000 — would include 99,400 'false positives' and 400 true positives, and thus would have no predictive validity.
2. As well, we know that many individuals who kill themselves obscure their intentions, especially as they age. While we often think of suicide among youth as "impulsive," that tag does not fit well on persons in the middle years and elders. Sadly, and too often, the suicide event occurs without apparent forewarning because interference is the last thing that is desired. My own experience from reviewing medical records taken from general practice settings often showed that the primary care doc was thoughtful and attentive, but the patient was generally unrevealing of his intentions. Indeed, the necessary 'sensitivity' may need to be focused on functional decline, family problems,

life difficulties, and depression too — not as “screening for suicide” but seeking to help someone improve her/his health. Rather than trying to pick a needle out of the haystack, it would be better for the care provider to treat those in need, irrespective of “risk,” since we really are poor at accurately judging real risk.

3. In that vein, there are several tools that now are being used. Perhaps the most popular derives from the PHQ-9; for example, some clinicians like the PHQ-2. I am less inclined to be concerned about the specific tool, as health systems are picking their own, and more focused on identifying those persons with problems involving mental health and substance use (in primary care, I think especially of alcohol and prescribed drugs), and facilitating access to proper care. I know that amongst these persons, someone will die by suicide even as I cannot know which one. So, my thoughts are less about identifying the most likely individuals and more about assuring treatment for all in need.

Any suggestions for engaging business/ human resources people in this topic? I work with a Chamber of Commerce that has an active substance abuse prevention committee. We have decided to host a seminar on depression and suicide and its impact at the workplace.

SPRC: Resources for workplace professionals can be found at the bottom of this page:
<http://www.sprc.org/for-professionals>.