

COMMENTARY

The value of a longer life cut short by suicide: Something to YELL about

Commentary on the theme issue, suicide in older adults

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The loss of life to suicide at any age is a tragedy rooted in unendurable pain and suffering. Although the suffering may end for the person who dies at their own hand, the pain of loss may continue to adversely impact the person's family and friends who are left behind, and the communities of which they were a part, for many years thereafter. Suicides of older people get less attention in our culture than those of youth and younger adults, but they are an equal tragedy further compounded by the loss of access to the lessons learned over the long histories of each. In the words of an African proverb, "Whenever an old person dies, it is the equivalent of a library burning down."

Worldwide, this is a time of rapid demographic transitions. Japan, Europe, China, and the United States as well face a future with aging populations, fewer younger persons to contribute to the workforce, growing healthcare costs, and policies that fail to take advantage of the accumulated knowledge and skills of so-called "post-retirement" men and women. A third or more of persons older than age 65 years in the USA have a paying job (a higher rate than teenagers). Over 80% of older adults rate themselves as involved in personally meaningful activities, contributing to their own well-being and others around them (Oh *et al.*, 2021). Although the contributions of social capital by older people are high and increasing, the impact of suicides on societies where rapidly growing, older populations are a central demographic feature has not been fully considered.

There has been an increasing awareness and study of the problem of suicide among older adults during the past two decades, including in this and prior issues of *International Psychogeriatrics* (e.g. Conwell and Lutz, 2021; Okolie *et al.*, 2017; Zwar *et al.*, 2023). Epidemiological data indicate that rates of suicide in later life have trended downward in recent decades in many parts of the world. Research has increased our understanding of the factors that

place older people at risk for suicide, pointing to potentially effective approaches to its prevention (Hedna *et al.*, *in press*; Sharwood *et al.*, *in press*; Sinyor *et al.*, 2017). Risk factors include what we have referred to as the 5Ds (Conwell and Lutz, 2021) – depression (and other psychiatric illnesses), physical illness (disease) and disability, social disconnectedness, and access to deadly means (older adults who die by suicide use a firearm in higher proportions than do younger and middle-aged people) – as well as life histories of trauma (Chang *et al.*, *in press*), constitutional or acquired deficits in coping skills, and prior episodes of suicidal ideation and behavior (Conwell and Lutz, 2021). Although there is much yet to do, research on the biological, psychological, and social mechanisms that underlie suicide risk is progressing as well.

Yet such "good news" is tempered by other factors. Old age is associated with higher rates of suicide than younger age groups in many countries of the world, called the "age effect" in epidemiological terms. Demographic estimates are for a dramatic increase in coming decades in the proportion of the world's population that is over age 60, placing many more people in the age group at highest risk. Furthermore, each group of people born in a particular time frame carries with it a characteristic propensity to suicide across their life course (the "cohort effect"). The middle-age and young-old cohorts, including the post-WWII baby boom generation, are very large and have had elevated rates of suicide relative to the current older adult cohort at each life stage. That pattern is likely to continue as middle-aged adults progress into later life with the probable result that both rates and absolute numbers of older people dying by suicide will increase in the coming decades (Gunnell *et al.*, 2003; Phillips, 2014).

Attitudes and biases about aging, old age, and suicide constitute more insidious threats to our

efforts to reduce the burden of suicide in later life. Ageism in varied forms is pervasive across many cultures, reducing the perceived value and visibility of older people, including the older person himself or herself. Suicide has historically been highly stigmatized as well, for example treated for centuries as a sinful or criminal act. While that is no longer the case, the person who takes his own life is ordinarily said to have “committed suicide,” as if it were still a crime. Feelings of guilt and shame may prevent people with suicidal thoughts from seeking help or hinder survivors of the loss from dealing openly with their grief. Stigma applies to suicide at all ages – when combined with ageism, it may become a potentially toxic mix.

Work by my colleagues and me has entailed psychological autopsy interviews with hundreds of family members and friends of individuals of all ages who took their own lives (Conner *et al.*, 2004; Conwell *et al.*, 2000). It reveals a distinct pattern of responses when the decedent was an older person. Many bereaved adult children find solace in shaping an understanding of their parent’s self-inflicted death as an act of self-determination and autonomy, rather than a function of unremitting psychological pain and hopelessness. While suicide may be a rational, self-affirming act for some, seeing a parent’s decision to die as an expression of power and integrity, rather than intolerable emotional pain, may be a comforting notion that mitigates the sense of loss. It is an empirical question whether that defense is helpful in reducing the grief among the offspring of older adults who take their own lives. At a societal level, however, labeling suicides among older persons as “understandable” may diminish the perceived importance of these tragedies, serving to reduce the social and political will needed to address such premature deaths of older adults as aggressively as we see for efforts to eliminate the tragedy of suicide at younger ages.

Various metrics have been used, primarily in public health contexts, to quantify the burdens on society of premature deaths due to major causes, including suicide. Such measures are important for decision-making about policy priorities that determine the allocation of finite health resources. The number of deaths due to a particular illness per 100,000 people in a given population each year is a metric of disease burden with which we are all familiar. It has been criticized, however, for its reliance solely on the numbers of deaths without also accounting for variations in the social or economic “value” of lives lost at different stages of the life course. Rates of all-cause mortality, for example, are highest in later life when the burden of disease is greatest and may obscure the need and opportunities for potentially actionable preventive

interventions to save lives in younger age groups. In response to this concern, alternative approaches have been developed that apply variable “weights” to deaths at different ages in order to reflect social values that may differ as a function of age or other demographic characteristics. Measures rooted in social values can be fraught, however, with unintended consequences.

Years of Potential Life Lost (YPLL) is one such measure. Introduced by Dempsey in 1947, YPLL has been promoted as a means to assign societal or economic value to life, and therefore enable quantification of the cost to society of lives lost prematurely to any cause (Dempsey, 1947). Many variations in the methods by which YPLL is calculated have been developed over time. The general approach, however, remains the same. YPLL due to suicide in a given year, for instance, is calculated as the sum, for all people who died by suicide that year, of the differences for each suicide decedent between their actual age at death and the average life expectancy of people at that age. Even though the rate per 100,000 population is highest in the oldest old, the YPLL for suicide is greater in younger adulthood and mid-life because life expectancy at those ages is so much longer. In 1982 the USA Centers for Disease Control adopted YPLL as a useful metric in order to provide “a more accurate picture of premature mortality” by discounting the value of a life lost to suicide in old age relative to younger ages (Gardner and Sanborn, 1990).

When used for explicit purposes in which the values underlying its assumptions are specified and the results are interpreted in a narrow manner, YPLL can be a useful tool for public health practice and policy. Its interpretation, however, can be (mis)shaped by the subjective nature of those underlying values with the risk that biases, such as ageism, distort its intention. For example, when combined with other economic metrics, such as productivity, income generation, or dependency-related costs, it can be appropriately used to evaluate the financial contributions and costs to society of different age groups and causes of premature death. Is the conclusion justified that the social and economic value of a suicide prevented in early or mid-life is greater than that of an older person? The answer of course depends on the clarity of purpose for which the statistic is to be used and careful consideration of the damaging implications and adverse consequences that could result, intended or not.

In 1995 Robert Hahn proposed Years of Accumulated Ability Lost (YAAL) as an alternative to YPLL (Hahn, 1995). Calculated as the sum of the number of deaths from each cause and each age category weighted by the numerical mid-point of that age category, YAAL accounts for the social

and economic value of contributions made by adults well into later life, such as paid employment, caregiving, volunteering, and building stronger communities by sharing perspectives, skills, and experiences. Although Hahn did not examine the YAAL of suicide, he later demonstrated that its calculation resulted in rankings comparable to crude mortality for most causes of death (Hahn, 2023). His intent to value all that is learned in the course of a life, and continues to be applied well past retirement age, is an important reframing of the YPLL approach to estimating social and economic loss with suicide.

We live in an information age where sound bites dominate and complex constructs are too easily simplified and distorted. Suicide and the social forces that swirl around aging are easy targets (French, 2023). In a society that devalues older people, a metric like YPLL can be misunderstood or misapplied in ways that further undermine the importance of lives lost in old age. YAAL is a useful complement that pushes back against those forces. As for any such values-based metric, it has limitations too, of course. Acquired ability becomes more difficult to apply, and therefore value, with the physical illness and functional losses associated with aging. On the other hand, the related notions of experience and wisdom that accrue with age are not as easily lost. While ability is a positive attribute, experience is accumulated through both positive or negative events that make up meaning in life and which also cannot be so easily erased.

To address these limitations, the field should refine the concept with the development of a metric of Years of Experience in Life Lost (YELL). Leveraging the power of social media and the information age more fully, YELL could amplify even further the value society derives from experiences gained through a long life, and the imperative that it does not end prematurely by suicide. That is, make suicide in later life something to YELL about!

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Competing interests

None.

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