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Late-Life Suicide Prevention Strategies: Current Status and Future Directions

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Abstract

Late life suicide prevention differs from suicide prevention for other age groups: first, the number of older adults worldwide is on the rise; second, late-life suicide receives much less attention in all societal spheres, from the media, to federal funding agencies, to healthcare initiatives. Recent findings indicate an association between internalized ageist stereotypes and reduced will to live. Recent research also addresses the role of cognitive control as a contributor to risk and as an intervention target (e.g., through psychotherapies such as problem solving therapy) as well as firearm safety as a promising, though a politicized and challenging strategy to implement. Another strategy that may prove feasible is an approach on upstream prevention strategies in healthcare. One strategy we believe holds great promise is the promotion of high quality geriatric medicine. Geriatricians are trained to work with patients to prioritize the promotion of physical and cognitive functioning (rather than solely absence of disease) and to focus on well-being as a goal. Thus, geriatricians routinely target numerous late-life suicide risk factors—physical illness, functioning, pain, and (dis)satisfaction with life. However, efficacious strategies will not prevent suicide deaths if they are not implemented – addressing ageism as a universal prevention strategy is essential.

Suicide at any age is a negative outcome – a tragic and often traumatic loss for those left behind, a clinical problem for health care providers, and a public health problem for society. However, not all would agree that suicide *at all ages* is negative or tragic. We have often heard the following comment from audience members at our scientific and community presentations: “Of course they want to die, they’re old. I will want to die when I’m that age too.” The primary opinions we want to convey in this brief article—which we believe are supported by empirical studies—constitute our response to the sentiment from our audience members: our response is that suicide is not a normative response to the challenges of aging and suicide prevention efforts can reduce suffering and prevent deaths among older adults.

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Introduction

Suicide is a problem at all ages globally. The difference with regards to older adults is two-fold: first, people around the world are living longer and the number of older adults worldwide is on the rise—a phenomenon termed “population aging.” The United Nations estimates there are now 700 million people aged 60 years and over. By 2050 that figure will rise to over 2 billion [1]. Suicide in later life is going to become an increasing problem, in part, because our society will be made up of more and more older people. A second difference is that suicide in later life receives much less attention in all societal spheres, from the media, to federal funding agencies, to healthcare initiatives. Why is that the case? There are a multitude of causes, as would be expected for such a complicated problem – and understanding the lack of public attention to preventing suicide in later life is also one of the most important targets for prevention.

In the sections that follow, we will address what we see as key research findings over the past several years as well as what these findings suggest about directions needed to prevent suicide in later life.

Ageism

The term ageism was introduced in 1969 by Robert Butler [2], a psychiatrist and gerontologist who was the founding director of the National Institute on Aging. Ageism involves discrimination and prejudice based on age. Although ageism can apply to all ages, it is most commonly used to refer to discrimination and prejudice based on older age. Recent analyses of the World Health Organization’s (WHO) world values survey indicate that ageism is widespread globally [3], with sixty percent of respondents agreeing that older adults are not treated with respect. Negative attitudes towards older adults are even prevalent in Eastern cultures and societies that traditionally value filial piety and thus might be expected to hold more positive views of older adults; in fact, a recent meta-analysis comparing Eastern and Western societies (per UN conventions) on degree of negative attitudes towards older adults found surprising results – attitudes towards older adults were actually more negative in Eastern cultures and more positive in societies valuing individualism [4]. They also found that stronger negative attitudes were associated with the degree to which population aging was taking place. This raises the possibility that increasing ageism in cultures that have traditionally held elders in high esteem could be especially distressing to older adults. The problem of ageism is thus widespread and increasing as our demographic profile changes.

While no studies have directly addressed a potential link between ageism and late-life suicide, there may be both direct and indirect links. A recent review indicated that numerous studies across cultures have demonstrated that when older adults internalize negative stereotypes of aging, health and well-being suffers in the form of worse cognitive and physical functioning, worse physical and mental health, and death [5]. Decades of research on late-life suicide have identified a constellation of factors that characterize older adults who died by suicide: psychiatric illness (especially depression), physical illness (especially numerous comorbidities), physical pain, social isolation, and functional impairment [6].

Research is also accumulating for perceptions of being a burden and access to lethal means [7]. Note that the negative outcomes associated with internalizing ageism—functional impairment, physical illness, and psychiatric illness—are all associated with suicide in later life. Further, studies have also documented an association between internalized ageism and decreased will to live [5]. When older adults internalize messages around them that they are burdens to their families and society and that aging goes hand-in-hand with depression and loneliness, their will to live diminishes.

There may also be an indirect link from ageism to late-life suicide, through such mechanisms as discriminatory behavior and fewer resources allocated to promoting health and well-being for older adults. Discriminatory behaviors towards older adults are wide-ranging and often not recognized as discriminatory. Elderspeak (also called baby speak because it is similar to how adults speak to babies) is a term that describes a patronizing form of speech used with older adults characterized by factors such as increased pitch, greater intonation, slowed speech, and use of terms of endearment, such as “honey” [8, 9]. Elderspeak does not improve comprehension (including with those with cognitive impairment) and in fact results in reduced comprehension [10]. Elderspeak is empirically linked to poor outcomes, such as resisting care in long-term care settings (i.e., nursing homes) [9]. Recent research indicates that elderspeak can be reduced among long-term care staff by providing education and communication training [9] and that this type of program shows promise for web-based dissemination [11].

Ageist stereotypes are also associated with providers’ preferences for treating younger patients as well as their treatment recommendations [5], through such mechanisms as equating aging with illness and viewing the complexities of treating older people with multimorbidity as burdens on the system. It is not uncommon for physicians to view depression and wishes for death as normative for older adults. Several studies, including one of our own recent papers [12] suggest that suicidal thinking is not a normative reaction to aging-related stressors. As an example of ageism potentially impacting provider behavior around suicide prevention, data from emergency departments with universal screening protocols asking nurses to conduct self-harm/suicide screening with *every* patient show that screening decreases with age; from 81% among younger people to 68% among older people 85+ years [13]. Such screening protocols, combined with community-wide education on depression, was shown to prevent suicide deaths among older adults in Japan: depression screening (inclusive of additional care services for those diagnosed with depression)/ education lowered the rate of suicide death by 48% from baseline to post-implementation among older adults – and importantly, the rate of suicide did not significantly change for those in nearby comparison regions who did not receive the screening (and care services)/ education [14].

Ageism is entrenched in societies worldwide. In a call for a global campaign to combat ageism, the World Health Organization underscored the severity of the problem: “Unlike other forms of discrimination, including sexism and racism, ageism is socially acceptable, strongly institutionalized, largely undetected and unchallenged,” [3]. It seems unlikely that significant progress will be made in reducing suicide rates among older adults without the introduction of universal intervention strategies to reduce ageism and promote positive

attitudes about older adults and aging. Indeed, such a campaign would be evidence-based: a large body of literature has documented that emotional well-being improves with age [e.g., 15]. In contrast to widely held beliefs, suicide is not an expected response to the challenges of aging.

Cognition and cognitive decline

It is clear that cognition plays a role in late-life suicide, but the mechanisms whereby it exerts an effect are far from clear. However, this is an area receiving significant attention from researchers focused on late life suicide. In terms of cognitive processes that may play a role in the development of suicidal behavior, cognitive control deficits (e.g., cognitive flexibility, interference control) are the most consistently identified type of deficit for middle-aged and older adults [16]. In terms of cognitive decline and clinical diagnoses of dementia, the picture is less clear. Psychological autopsy studies generally do not find increased rates of dementia among those who died by suicide. Cognitive decline in earlier stages, however, may increase risk, through numerous mechanisms: recognizing and coping with a dementia diagnosis is a serious stressor and cognitive decline may involve problems with cognitive control that impact coping capability, the ability to receive social support, and physical functional capacity. Consider a 78 year-old man, recently retired (not by choice) due to cognitive impairment characterized by deficits in cognitive control. He was recently diagnosed with early stage dementia and can no longer drive. He now sees himself as a burden on his wife because he can no longer contribute financially and she is tasked with driving him to appointments. His cognitive control deficits make it difficult for him to think flexibly and he rigidly pushes away all of her attempts to persuade him he is not a burden. His impulse control and problem solving capabilities are diminished – and when paired with the presence of a firearm in the home – these prove fatal for this older man.

However straightforward as that example may seem, the role of cognitive decline in suicide is far from straightforward. Recent research, for example, suggests that there could be a bi-directional relationship between cognitive processes and suicidal behavior, as a recent study showed that older adults who attempted suicide were at increased risk for developing dementia after an attempt, even when controlling for pre-existing medical conditions and depression [17].

Recent research has also included tests of suicide prevention treatments that can accommodate, or are designed for, older adults with cognitive impairment. Problem Solving Therapy (PST) focuses on identifying and solving one problem at a time, with step-by-step guidance (e.g., generating solutions, weighing pros/cons of possible solutions, implementing/assessing a solution). PST is an evidence-based therapy for late-life depression. The effectiveness of PST for those with deficits in cognitive control has been examined in a RCT with older adults selected for executive dysfunction and depression; compared to a supportive therapy group, the PST group showed significantly greater decreases in suicide ideation both during treatment and for 24 weeks post treatment [18]. Problem Adaptation Therapy (PATH) uses strategies from PST but shifts the focus to enhancing emotion regulation and includes environmental considerations and possible caregiver involvement. PATH's effectiveness has been studied among homebound depressed

cognitively impaired older adults – and, compared to control group receiving Supportive Therapy for Cognitively Impaired (ST-CI), PATH has been associated with significantly greater decreases in depression, disability, and negative emotion [19]. Importantly, in the Kiosses et al. paper [19] despite seeing greater decreases in negative emotion within the PATH group (compared to the ST-CI group), there was no difference in suicide ideation between groups (potentially attributable to low baseline levels of suicide ideation given active ideation with plan or intent was an exclusion criterion). However, reductions in negative emotion across both PATH and ST-CI groups “preceded and contributed” to decreased suicide ideation between lagged and follow-up assessments.

Together, recent research suggests that cognitive processes and deficits may represent contributors to both the development of suicidal thinking and behavior, as well as potential intervention targets.

Firearms

As suggested in the example provided above, cognitive control deficits combined with access to lethal means may be a pernicious combination in later life. Access to firearms is associated with increased risk for suicide at all ages [20]. Data collected from 2001–2003 by the Centers for Disease Control and Prevention’s ICARIS-2, random-digit-dial, cross-sectional survey ($n=2939$ older adults aged 55+; accounting for 29% of total survey responders), show that 39% of older adults have at least one gun at home and, among this group, some report suicidal thoughts and behaviors (5.1% had suicide ideation in the past year; 3.6% had a lifetime history of suicide attempt) and/or lack of safety training/gun storage (55% have firearm safety training; 21% store their guns loaded and unlocked) [21]. Primary care physicians (PCPs) are uniquely positioned to screen for firearm safety as often older adults visit a PCP prior to suicide attempt [22]. However, firearm screening/safety counseling is “infrequent,” even when depression is present [p. 2214; 23]. Similarly to PCPs, geriatric case managers also are well positioned for firearm screening/safety counseling, particularly because older adults at risk may not acknowledge feelings of depression or thoughts of suicide with their PCPs, but might present for social services (and screening) in this setting. However, one study of geriatric case managers in Ohio ($N=161$) found that, despite the majority (70%) of case managers thinking that their older adult clients are at risk for suicide, less than a third (30%) routinely inquired about firearm access and fewer than half (48%) review firearm means restriction during suicide risk assessment [24]. Potential barriers include time constraints, lack of training, and concern over political/legal/personal sensitivity. Regarding firearm safety as a potentially sensitive issue, a recent study suggests that most (~60%) older adults are “comfortable” with physicians asking about firearms in the context of having a person at home with cognitive impairment/depression/suicide ideation, and only a minority (~18%) are “uncomfortable” in these contexts [23]. Assessing firearm access and providing safety counseling is generally acceptable to older adults and, if implemented on a large scale, might contribute to lowering rates of firearm suicide in later life in countries such as the U.S. where firearms predominate as a lethal method used by this age group. However, it is also the case that focusing on PCP screening for suicide risk may not be a feasible strategy given that PCPs are tasked with numerous screenings and there is very little data indicating the efficacy of screening in the

prevention of suicide deaths. For these reasons, the U.S. Preventive Services Task Force does not recommend screening for suicide risk unless depression is present [25]. While PCP screening is a logical approach, other strategies are needed. As mentioned above, firearm safety counseling could potentially be provided outside PCP offices, in such settings as aging services agencies that provide social services to older adults.

Promising intervention strategies

Interventions exist that target many of the factors in the ‘constellation’ of risk factors for late-life suicide but are often not available to older adults who could benefit. For example, collaborative care models for late-life depression that include psychotherapies such as PST are effective for treating depression and may reduce suicidal thinking; however, collaborative care models are not implemented widely. While no direct evidence is available, high quality geriatric medicine likely functions as suicide prevention: geriatricians are trained to work with patients to prioritize the promotion of physical and cognitive functioning (rather than solely absence of disease) and to focus on well-being as a goal. Thus, geriatricians routinely target numerous late-life suicide risk factors—physical illness, functioning, pain, and (dis)satisfaction with life. However, the number of geriatricians is much too low to reach all older adults at risk for suicide. Means restrictions interventions are promising [26], but effectiveness for older adults in particular is lacking.

Few interventions are available that reliably reduce the remaining risk factor—social isolation and loneliness. Our work attempts to address this gap in the literature. We are testing both receiving and providing peer companionship to reduce loneliness [27], behavior therapy to increase social engagement, and enhancing social communication to promote connectedness in settings such as senior centers and senior living communities. However, as with the interventions described above, none of these interventions will prove effective in reducing overall suicide rates if they are not widely implemented and available for all older adults.

Thus, addressing ageism is a necessary step in the process of connecting at risk older adults with all of the other available strategies for reducing suicide risk. Concrete strategies for tackling this public health issue are available. One recent model proposes that education on aging combined with intergenerational contact may be effective in reducing ageism. The model—PEACE (Positive Education about Aging and Contact Experiences)—proposes these strategies may reduce age-related discrimination, prejudice, stereotyping, and anxiety, and may promote health and well-being in later life, as well as making an impact at a societal level through changes in policies and programs affecting older adults, such as healthcare and housing [28]. The model also proposes a more indirect pathway for impacting ageism through intergenerational contact: youth and adults will benefit from their experiences with older adults in terms of their own health and well-being and also by reducing their internalization of negative age stereotypes – true upstream prevention.

Upstream prevention approaches are needed in the healthcare domain as well. Rather than focusing on strategies to increase PCP screening rates for suicide risk, advocacy and policy level efforts should focus on strategies such as educating the public about the purpose and

availability of geriatric medicine as well as encouraging and incentivizing young physicians to specialize in geriatrics.

Growing old is a journey more and more of us will have the privilege of experiencing. Universal prevention strategies are needed that target ageism and share the fact that aging is a journey that is not just about challenges, but about increased perspective on one's life and what is most valuable, increased relationship satisfaction, and more frequent experiences of positive emotions [29]. Late-life suicide prevention cannot stay only in the clinic – older adults typically die on their first attempt. Late-life suicide prevention must be broad reaching into our communities and must change our dialogue about aging to one that is not only more positive, but more realistic.

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Highlights

- Late-life suicide receives less attention than younger ages.
- Internalized ageist stereotypes are associated with reduced will to live.
- Cognitive control is a contributor to risk and an intervention target.
- One promising prevention strategy is high quality geriatric medicine.
- Addressing ageism as a universal prevention strategy is essential.

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