Risk Factors and Prevention Strategies for Suicide Among the Elderly

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Abstract

Suicide is a preventable public health concern affecting the nation as the 10th leading cause of death. The prevalence of suicide among the elderly is higher than any other group. Risk factors attributed to this phenomenon are depression, social isolation, substance abuse, poor physical health or function, financial stress, and access to lethal means, among others. Protective factors have been identified, as well. Prevention of suicide among the elderly is of utmost importance, and national and state-level task forces and prevention strategies are leading prevention efforts. Suicidality is considered to be “a state of total pain, which, coupled with neurological impairment, limits the perceived options to either enduring (suffering through) or ending utter agony.” This represents an important paradigm shift in the way researchers believe suicide occurs. This article provides an overview of factors that contribute to suicide among the elderly, prevention strategies, and examples of national, state and community-based prevention programs.

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An example of a suicide note written by an elderly man follows: “Death is as much a reality as birth, growth, maturity, and old age—it is one certainty. I do not fear death as much as I fear the indignity of deterioration, dependence, and hopeless pain...Dear family, I cannot stand it anymore” (Holmes & Holmes, 2005, p. 51-52). Suicide among the elderly has been described sequentially. As older adults continue to age, they may experience multiple losses, then stress, followed by depression, pain, and, finally, suicide (Alabama Department of Public Health [ADPH], n.d.; Osgood, 1985). The group at highest risk for suicide is that of elderly men; however, elderly women are also affected (Szanto, Prigerson, & Reynolds, 2001). Major losses occur while aging, such as in physical health, social interaction, mental status, loss of job through retirement, financial loss, loss of close relationship ties through changes in family structure, and cognitive loss (Osgood, 1985). The elderly are less resilient and more vulnerable to the stress of loss. Many coping mechanisms fail with age, and depression may result. Helplessness, hopelessness, anxiety, decreased self-concept, lowered self-esteem, loneliness, and loss of control may accompany a
sense of despair (Mann, 2005; Osgood, 1985), leading to a serious life crisis, the perception of crisis, and unbearable pain. The new paradigm emphasizes the suicidal individual sees death as the only option to relieve this pain. This is a shift from the old paradigm that considers suicide as a way to kill the self rather than the pain. It is now believed that suicidal individuals are “no longer capable of choice. Suicidality is a state of total pain which, coupled with neurological impairment, limits the perceived options to either enduring (suffering through) or ending utter agony” (ADPH, The suicide paradigm, n.d., para 3). This article provides an overview of factors that contribute to suicide among the elderly, prevention strategies, and examples of national, state and community-based prevention programs.

The National Strategy for Suicide Prevention: Goals and Objectives for Action articulates a set of 11 goals and 68 objectives, providing a framework for prevention efforts and the development of programs (Department of Health and Human Services [DHHS], 2001). These goals and objectives make it clear that primary and secondary prevention are fundamental to the reduction of suicides among all age groups. Awareness (Goal 1), support (Goal 2), research (Goal 10), and monitoring (Goal 11) of suicide prevention efforts and the reduction of the stigma associated with using mental health services (Goal 3) are important first steps in recognizing the complexity of developing suicide prevention programs (Goal 4). Restricting access to lethal means of self-harm (Goal 5) is supported by data reporting that elderly males are more likely to use firearms as a method of suicide (Conwell & Thompson, 2008). The importance of clinical training and good professional practices in recognizing and referring patients at risk for suicide and delivering effective treatment (Goal 6 and 7) are also prevention goals. Increasing access to and improving community linkages with substance abuse and mental health services and improving the media’s reporting and portrayal of suicidal behaviors are the final goals (Goals 8 and 9).

On the state level, the multidisciplinary Alabama Suicide Task Force was convened in 2002 to begin developing a plan for suicide prevention. Alabama’s Suicide Prevention Plan addresses goals stated in The Surgeon General’s Call to Action to Prevent Suicide (U.S. Public Health Service, 1999). The recognition of suicide as a preventable public health problem affecting Alabamians forms the basis for outlining a state-wide prevention strategy. Identifying federal, state and local resources to support the plan is critical to implementing the plan. The Website for the Alabama Department of Public Health (ADPH, Alabama Suicide Prevention Plan, n.d.) provides information about the state plan.

Suicide death rates for Alabama were compared to national suicide death rates. Figure 1 displays the comparison data for the overall population of the state with a breakdown by ethnicity (ADPH, Table 56, n.d.). Data for Alabama reports higher rates for Whites than the national average, while rates for Blacks and other ethnic groups (combined) are lower. It is important to note that suicide death rates may be higher than reported, especially for Blacks, due to the stigma attached to recording suicide as the cause of death (Rockett et al., 2010).
Figure 1. Alabama suicide death rate, 2009, by ethnicity.

The suicide death rate for Alabama in 2009 was 14.2 per 100,000 population (Male = 23.6; Female = 5.3; White = 18.0; Black and Other = 4.7). Figure 2 displays the breakdown of the 2009 suicide death rate data by age group, ethnicity and gender. (ADPH, Table 57, n.d.).

Figure 2. Alabama suicide death rate, 2009, by age group, ethnicity and gender.

Approximately 75% of elderly suicide completers visited a medical provider in the 30 days prior to their death, with approximately 50% of these visits occurring in the week leading up to the suicide (Conwell & Thompson, 2008). Of elderly suicide completers, 75% had no history of a
previous suicide attempt nor displayed warning signs. According to Conwell and Thompson (2008), 72% of attempters over the age of 65 used firearms to complete the suicide attempt. Researchers reported that suicidal firearm usage is on the increase among both Blacks and Whites, increasing the likelihood of successful suicide completion (Joe & Niedermeier, 2008).

Risk and Protective Factors

Risk factors for elderly suicide exist in mental, physical and social domains. These risk factors may be grouped into four categories: individual, relational, community, and societal. Individual factors include psychiatric illness/depression, substance abuse, financial stress, and physical health and function (Mann et al., 2005; Oquendo et al., 2010). An estimated 90% of completers aged 60 or older had at least one DSM Axis 1 diagnosis (Moscicki, 2001; Pearson, & Conwell, 1996). Podgorski, Langford, Pearson, and Conwell (2010) reported findings of a one-year retrospective study in Finland indicating depressive disorders in 75% of completed suicides, with recognizable symptoms of depression in only 33% of the cases. Other individual risk factors include prior suicide attempt, access to lethal means, impulsivity (Neufeld, & O'Rourke, 2009), and complicated grief (Latham, & Prigerson, 2004). When assessing individual suicidal risk factors, it is important to determine if the symptoms are acute or chronic, and if the risk is low, moderate or high; this assessment is critical in the determination of next steps to prevent potential suicide. For example, chronic problems may represent low, but not unimportant, risk whereas sudden loss or traumatic precipitating events may indicate a higher risk. Suicidal individuals with a concrete plan and access to lethal means would be at higher risk than those without a plan or access to means (J. Harrington, personal communication, May 28, 2008).

Relational factors for suicide include living alone, low social interaction, relationship problems, marital status, family history of suicide, family history of substance abuse or mental disorder, domestic violence, and being exposed to suicidal behavior of media figures, peers, or family members (Mann et al., 2005; NIMH, 2010). Community factors include limited availability and access to senior programs and health care services, transportation, proximity and access to faith communities, and demographics of the community. Societal factors include gun control policies, attitudes towards the care of the elderly, and the stigma of utilizing mental health services (Conwell, Van Orden, & Caine, 2011; Sirey et al., 2008).

Protective factors for suicide include access to and effective clinical care for mental, substance abuse and physical problems; connectedness; supportive therapeutic relationships with physicians and mental health professionals; problem solving and non-violent conflict resolution skills; and attitudes and beliefs discouraging suicide (NIMH, 2010). According to Conwell and Thompson (2008), “the weight of the evidence indicates that, like psychological and medical factors, social stressors place older adults at risk, whereas robust social supports seem to be a buffer against suicide” (p. 342).

Leach (2006) offers three explanations for lower suicide death rates for African Americans based on social supports. First, there is the African American church, where members—especially men—have increased roles. According to Gibbs (1997), lower rates of suicide occur in conjunction with church attendance or affiliation. Further, the African American church serves as a source of social support and stress reduction for the African American community. Other researchers found that religiousness and social support are strongly inversely related to suicidal behavior, including ideation, attempts and completed suicides (June, Segal, Coolidge, & Klebe, 2009; Sirey et al., 2008).
Suicide trend data for African American men, however, is on the increase. The strength of the African American church, while serving as a potentially protective factor for suicidal behavior, may also contribute to an internal angst that could lead to suicide. This is due to the stigma associated with seeking mental health services, the condemnation of suicide by the church, and the false assumption that African Americans are strong enough to avoid suicide (Day-Vines, 2009).

The second protective factor offered by Leach (2006) is that the majority of African Americans live in the South, which gives them a collective experience as a group. Leach claims that being in a homogeneous group may reduce the risk for suicide.

Finally, African American adults are often primary caretakers of grandchildren or co-reside with other family members (Leach, 2006). African Americans are disproportionately more likely to be primary caregivers for dependent grandchildren than Whites (Peek, Koropeckyj-Cox, Zsembik, & Coward, 2004). Researchers found that the percentages of grandparents that lived with at least one grandchild ranked at 11.7% for African Americans, and 3.6% for Whites (Compton, Thompson, & Kaslow, 2005; Leach). Additionally, African Americans are more likely to reside with family members in multi-generational households and less likely to live alone or in institutions (Peek et al.).

**Prevention Strategies**

A consensus among researchers is that regular screening for depression and suicidality at every entry point into medical and mental health systems, as well as effective treatment for depression, is a significant primary prevention strategy for suicide (Cheung, Liu, & Yip, 2007; Heisel, Dubelstijn, Lyness, & Feldman, 2010; Mann et al., 2005; Plasske, & Amrhein, 2010). According to Conwell and Thompson (2008), “if all late-life major depressive episodes could be prevented, suicide rates among older adults would drop by almost 75%” (p. 342). The National Institute of Mental Health (NIMH; 2007) reported that approximately 80% of depressed elderly adults in otherwise good health recovered with a combined treatment of psychotherapy and antidepressant medication, which was more effective in preventing the recurrence of depression than with the use of either psychotherapy or medication alone. A systematic review of suicide prevention strategies published in the *Journal of the American Medical Association* listed recommendations for screening those at high risk; raising awareness; and, educating primary care physicians, the general public and organizational and community gatekeepers about suicide (Mann et al., 2005). They also recommend the restriction of access to lethal means, follow-up care for suicide attempters, and the development of guidelines for media reporting of suicide.

A second strategy is decreasing social isolation of the elderly through family and community support; however, experts do not agree on what the social lives of the elderly should look like. Disengagement theory suggests that adults voluntarily retire, creating a mutual withdrawal expected by society. According to Podgorski et al. (2010), this is normal and benefits society as well as older individuals. Activity theory suggests that the elderly are more satisfied with life the more active they remain. Selectivity theory states that the elderly may benefit from maintaining some activity while disengaging from other activities. The elderly are proactive in managing their self-selected social activity. Continuity theory declares that the elderly will usually follow the same path as their past experience, maintaining the same type of activities, relationships, and behaviors from earlier years. Prevention strategies aimed at improving the social lives of the
elderly should be designed according to individual needs, weighing the need to maintain independence against the increased risk of death by suicide due to living in isolation. Community gatekeepers, who have access to at-risk seniors, may notice changes in those they serve and may be trained to identify and refer distressed elders for evaluation and care. This may include bank tellers, pharmacists, mail carriers, clergy, and employees and volunteers at senior centers, nutrition programs, outreach programs, and transportation services (Conwell, & Thompson, 2002).

A ten-year study conducted by De Leo, Dello Buono and Dwyer (2002) examined the long-term effects of telephone support on suicide in an elderly population in Italy. Physicians and social workers from local health services initiated referrals to the TeleHelp-TeleCheck service. Referrals were contacted and given an opportunity to participate in the study. Participants ($n = 18,641$; Female, $n = 15,658$; Male, $n = 2,983$) were called twice weekly to provide telephone support, needs assessment, and 24-hour emergency services. The study hypothesis was that there would be a significant difference in suicide rates between the TeleHelp-TeleCheck Line users and the general population. The results showed that, of those elderly individuals who used the TeleHelp-TeleCheck Line, the observed suicide rate was 5.99 times lower than expected. Chi square statistic was used to compare standardized and observed mortality rates after calculating the standardized mortality ratio (SMR), indicating a statistically significant difference ($x^2 = 8.36, p < 0.01$) between the rates (De Leo, Buono, & Dwyer, 2002). In the United States, talk lines exist; however, for these talk lines, individuals are required to call into the talk line rather than being called by volunteers. For example, the National Suicide Prevention Lifeline, 800-273-TALK, is a confidential hotline available to anyone in distress or crisis. Contact information for other national and state crisis center help lines are available online (ADPH, Crisis numbers, n.d.).

In Alabama, the Senior Talk Line located in Birmingham operates under the Crisis Center network in a similar fashion as the TeleHelp-TeleCheck Line. Although the Senior Talk Line is not a suicide hotline per se, it meets social needs of seniors and offers protective factors by providing someone to talk who is compassionate and can offer reassurance. The Senior Talk Line was developed by Anna Sullivan of the Crisis Center in Birmingham, modeled after the successful TeleHelp-TeleCheck Line in Italy (A. Sullivan, personal communication, September 28, 2010). Prior to the introduction of the Senior Talk Line, the Crisis Center received all calls, some of which were not crises; thus, the implementation of the Senior Talk Line in 2001, with the goal to reduce social isolation among the elderly. The Senior Talk Line is the only one of its kind in the state, serving Jefferson, Blount, Shelby, Walker, and St. Clair counties (Crisis Center, n.d.). Seniors call 205-328-TALK to request to receive the service or they may be referred by those working with this population. More research is needed to determine the effectiveness of programs like the Senior Talk Line with suicide.

On the community level, mental health services are available through community mental health centers that often serve as safety nets in rural communities (Hartley, Bird, Lambert, & Coffin, 2002). Senior outreach programs may exist in communities to serve those in need of social support, such as day programs for the elderly. Religious communities serving seniors help to meet social needs, if elders are able to attend services or program activities. When elders are homebound or living in residential facilities, it is more difficult to reach them; however, many residential facilities have programs for residents that address social needs.
An innovative program in the Birmingham area is Ruth and Naomi Senior Outreach, a 501©3 non-profit founded by Chaplains Rev. Lynn Bledsoe and Rev. Dr. Mary Porter. The pair began their work serving elder orphans and isolated elder adults in 2004. Through their work with hospice, they encountered a likely but unidentified form of suicide—a condition called “failure to thrive,” in which persons having lost the will to live quit eating and gradually waste away. This passive approach to ending the pain and difficulty of life (often taken by persons with dementia) is typically overlooked by those addressing elderly suicide and raises important questions about this behavior yet to be answered. Ruth and Naomi Senior Outreach is a community of volunteers (trained by the two chaplains) visiting in long term care facilities, hospitals, hospices and private homes. Protective factors identified in the primary prevention of elderly suicide may be noted in the Ruth and Naomi mission: “To become spiritual companions to isolated older adults and to call, equip, and support others to do so as well” (Ruth & Naomi, Mission, 2009, para 1).

Bledsoe and Porter teach volunteers using the values of PRISM®, which they developed: presence, relationship, interdependence, silence, and mystery. In their role as ordained clergy, the chaplains also practice the therapeutic ministry of presence as they more directly address spiritual issues, administer the sacraments, pray, and sing familiar hymns/songs with seniors (L. Bledsoe, personal correspondence, July 20, 2011). They approach their work in a way that is contemplative and open-ended, addressing many protective factors through non-pharmacological interventions: animal companionship, art, music, and body memory activities. Body memory activities include bread making, dancing, and singing, among others. The focus on quality of life embodied in Ruth and Naomi chaplains and volunteers is summed up in the organization’s vision statement: “in living and in dying, every elder upheld in a community of care” (M. Porter, personal correspondence, July 21, 2011).

A third important strategy is increasing the awareness of suicide as a preventable public health issue. Health communication campaigns designed to educate the general public about suicide risk factors and resources for suicide prevention are essential. This should be a coordinated effort by a multi-disciplinary group of stakeholders, including primary care physicians (Chambers et al., 2005; Mann et al., 2005). In the same way that social marketing efforts communicate life-saving information for stroke and other emergencies, messages designed to educate the public about the warning signs and risk factors for suicide are warranted. For example, the acronym IS PATH WARM, was adopted by the American Association of Suicidology to help remember the evidence-based signs and symptoms of suicide: Ideation, Substance abuse, Purposelessness, Anxiety, Trapped, Hopelessness, Withdrawal, Anger, Recklessness, and Mood changes (American Association of Suicidology, n.d.). Due to high suicide death rates among men, strategies designed specifically for men are needed. Formative data gathered in focus groups, interviews, and surveys, are urgently needed to reach the most vulnerable and resistant target groups and secondary audiences. Considering the gap between the suicide death rates of Caucasian and African American men, it is likely that differing public health messages would be needed for these groups. All public health messages about suicide should aim to decrease the stigma of suicide and create a more open platform for public dialogue. Working with various media outlets would assist in this important strategy. The Alabama Suicide Prevention Plan promotes a “collaboration with the media to assure that entertainment and news coverage represent balanced and informed portrayals of suicide and its associated risk factors, including mental illness and substance abuse disorders and approaches to prevention and treatment” (ADPH, Alabama Suicide Prevention Plan, Point 11).
A forth strategy important to early and effective treatment of suicidal clients includes improvements in the training of counseling and mental health professionals to identify and treat underlying issues, such as substance abuse, depression, and other mental health issues related to suicide risk. This would include promoting continuing education opportunities related to suicidality, such as the American Association of Suicidology Conference, as well as other events. The Alabama Strategy for Suicide Prevention recommends initiating “training for all health, mental health, substance abuse and human service professionals concerning suicide risk assessment and recognition, treatment, management, and aftercare intervention” (ADPH, Alabama Suicide Prevention Plan, Point 7). This includes educating primary care physicians, who provide pharmacological support for their patients. As future research findings provide additional clues to solving this public health problem, education of service providers must remain current. For example, researchers have identified a modest level of support for using suicidal ideation as a surrogate endpoint for suicide among the elderly and call for additional research for this important marker (Links, Heisel, & Quastel, 2005). Other research efforts are needed to increase understanding of this 10th highest cause of death in the United States (NIMH, 2007).

Making a positive impact on the suicide crisis among the elderly will take a proactive and multifaceted approach. Strategies that influence this at-risk group must be implemented at the individual, relational, community and societal levels. Those in contact with the elderly can learn to ask the question, “Are you feeling suicidal today?,” and be prepared to administer emotional CPR if the answer is “yes.” It is hoped that the outcome of these prevention strategies would be that risk factors are identified and reduced, that individuals and families are educated, and that lives are saved.

References


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