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Reasons for Attempted Suicide in Later Life

Kimberly A. Van Orden, PhD,
Department of Psychiatry, University of Rochester School of Medicine & Dentistry

Stefan Wiktorsson, PhD,
Department of Psychiatry and Neurochemistry, University of Gothenburg

Paul Duberstein, PhD,
Departments of Psychiatry and Family Medicine, University of Rochester School of Medicine & Dentistry

Anne Ingeborg Berg, PhD,
Department of Psychology, University of Gothenburg

Madeleine Mellqvist Fässberg, M.Sc., and
Department of Psychiatry and Neurochemistry, University of Gothenburg

Margda Waern, MD, PhD
Department of Psychiatry and Neurochemistry, University of Gothenburg

Abstract

Objectives—Using the Interpersonal Theory of Suicide as a guiding framework, we investigated older adults' causal attributions for suicidal behavior. We hypothesized that older adults who attributed their suicidal behavior to thwarted belongingness or perceived burdensomeness would be more likely to use more immediately lethal means and to re-attempt suicide during the 12-month follow-up.

Design—Prospective cohort study in western Sweden.

Participants—A total of 101 older adults who presented to medical emergency rooms for suicide attempts.

Measurements—Participants were asked why they attempted suicide.

Results—Attributions included: a desire to escape (n=29), reduced functioning and autonomy (n=24), psychological problems, including depression (n=24), somatic problems and physical pain (n=16), perceived burdensomeness (n=13), social problems that reflected either thwarted belongingness or family conflict (n=13) and lack of meaning in life (n=8); 41 participants

Address correspondence to: Kim Van Orden, kimberly_vanorden@urmc.rochester.edu.

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provided more than one reason. No specific reason was given by 28 participants, 15 of whom reported not understanding or remembering why they attempted suicide and 13 reported simply wanting to die (or go to sleep and not wake up). As hypothesized, patients who attributed the attempt to thwarted belongingness were more likely to use more immediately lethal means for their index attempt and were more likely to re-attempt during follow-up. This was not the case for those reporting burdensomeness.

Conclusions—People who attribute suicide attempts to thwarted belongingness use more lethal methods and have a poorer prognosis. Replications across diverse cultural settings are needed to determine whether attributing suicide attempts to thwarted belongingness may warrant increased monitoring.

Keywords

geriatrics; attempted suicide; social support; perceived burden; thwarted belongingness

Suicide rates increase with age in most Western countries (1). Further, older adults are more likely to die on their first attempt, in part because of the choice of more lethal methods (2). However, it is also the case that a previous suicide attempt remains a strong risk factor for subsequent death by suicide among older adults (3). Older adults who attempt suicide are relatively well characterized (4-7) but the perceived causes of the suicide attempts from the perspectives of the older adults themselves have not been described: what causal attributions do older adults make for suicidal behavior?

The Interpersonal Theory of Suicide (8, 9) proposes two psychological states that, when present simultaneously and believed by an individual to be immutable, lead to thoughts of suicide. A lack of social connectedness or “a thwarted sense of belonging” is one of these; the other is perceived burdensomeness, which may arise when a person believes that others would be better off if he or she were dead. The theory proposes that the subjective experiences of thwarted belongingness and perceived burdensomeness are the primary reasons why individuals consider suicide, and that all other risk factors for suicidal ideation operate via their influence on thwarted belongingness and perceived burdensomeness.

Prior studies have supported the association between thwarted belongingness, perceived burdensomeness and suicide ideation (8). Previous research also suggests that thwarted belongingness and perceived burdensomeness may be associated with the lethality of suicidal behavior. A key study (10) compared the content of suicide notes from adults who attempted suicide to those who died by suicide on the dimension of perceived burdensomeness and found that notes from individuals who died were more likely to be characterized by perceived burdensomeness. In a separate sample of adults who died by suicide, the authors found that perceived burdensomeness was more common among those who used more immediately lethal means. The latter finding is pertinent to our current investigation of non-lethal suicide attempts. Given existing data and the hypotheses of the Interpersonal Theory of Suicide, a corollary of the theory can be derived—that the presence of thwarted belongingness and perceived burdensomeness should result in the use of more immediately lethal means.

Using the Interpersonal Theory of Suicide as a guiding framework, we examined self-reported reasons for attempting suicide among older adults (n=101) who were hospitalized following suicide attempts. We hypothesized that: 1) thwarted belongingness and perceived burdensomeness would be the most commonly reported causes for suicide attempts; 2) the presence of thwarted belongingness and perceived burdensomeness would be associated with the use of more immediately lethal means; 3) thwarted belongingness and perceived burdensomeness would be prospectively associated with repeat suicidal behavior during the one-year follow-up.

Methods

Participants

Patients (N=103) aged 70 years and older (range 70-91) who were admitted to medical emergency departments at one of five hospitals in Western Sweden for a suicide attempt from 2003-2006 were interviewed. Of these, two did not complete the entire interview, leaving 101 participants. Participants were part of a larger study investigating suicide attempts; recruitment details can be found elsewhere (6). This paper presents qualitative data not previously published.

Measures

Cognitive functioning was measured with the Swedish version of the Mini Mental Status Examination (MMSE)(11). Physical illness burden was measured with the Cumulative Illness Rating Scale for Geriatrics (CIRS-G)(12). Psychiatric symptoms for the month preceding the attempt were rated using the Comprehensive Psychopathological Rating Scale (CPRS)(14), which includes the Montgomery-Åsberg Depression Rating Scale (MADRS) (13). Major depression and minor depression were diagnosed using DSM-IV criteria derived from the CPRS interview; SW, a clinical psychologist, conducted all interviews. Bipolar Disorder was established using interview data and medical records. Alcohol Use Disorder was determined using interview data, medical records and the regional hospital discharge register.

Regarding self-reported reasons for suicide attempts, subjects were asked, “Why did you attempt suicide?” The second author (SW) read the question out loud and recorded the responses by hand. There were no prompts or follow-up questions. Responses were transcribed and content-analyzed by two independent raters (SW and the fourth author AIB) for identification of themes based on the free-text responses. After this procedure the raters compared their themes. Following discussion, the themes were defined by consensus. Discrepant results were discussed with two senior researchers (a psychiatrist and psychologist) until consensus was reached. Methods for suicide attempts were coded from interview data and medical records as follows: overdose/poisoning, hanging, cutting, drowning and suffocation/strangulation.

Procedures

The median time between the index attempt and the interview was 11 days. Most interviews were performed in the hospital (n=87; 86%), with the remainder conducted in participants' homes (n=12), a nursing home (n=1), or an outpatient department (n=1).

The study was approved by the ethics committee for medical research at the University of Gothenburg.

Subjects were followed for one year via record linkage (with death certificates) and review of medical records from primary care, psychiatric clinics, hospital emergency departments and geriatric departments. As reported (15), there were 2 suicides and 6 non-lethal attempts during the follow-up.

Data Analytic Plan

Counts (and proportions) and means (and standard deviations) were calculated to characterize the sample and to determine the frequency of self-report reasons for suicide attempts (Hypothesis 1). A multinomial logistic regression was used to examine Hypothesis 2 regarding use of more lethal means. Specifically, reasons for suicide attempt (i.e., both “social problems” and “being a burden on others”) were entered as the predictors with the outcome of method choice, with pills as the reference group, and hanging, cutting, and other (i.e., drowning and strangulation/suffocation) as the comparison groups. Next, to determine whether thwarted belongingness and perceived burdensomeness were prospectively associated with suicide attempts/death during the one-year follow-up period, social problems and perceived burden were entered as predictors in a logistic regression with attempt/suicide as the binary outcome. For both models, MADRS score was entered as a covariate.

Since it is it is conceivable that individuals who attributed their suicidal behavior to problems with functioning and autonomy were also perceiving themselves to be a burden, but either were unaware of this, or chose not to share it with the interviewer, we conducted a sensitivity analysis by merging the two categories functional impairment/autonomy and burden to others. Further, it is possible that those who attributed their attempts to social problems might have personality characteristics and/or coping styles (e.g., an “externalizing” style) that might make them less likely to seek mental health treatment and thereby have less access to psychotropic medications. Thus, we also determined if those who endorsed social problems were less likely to use a prescribed medication for an overdose, or to use a particular class of psychotropic medications for an overdose.

Gender and age, both of which have been associated with method choice and lethality of suicidal behavior (16), predicted neither method choice nor repeat suicidal behavior, and were not included as covariates.

Results

Characteristics of the participants are shown in Table 1.

Overdosing with pills was the most common method, accounting for 72.3% of all attempts. The next most common methods were cutting (12.9%) and hanging (7.9%). Other methods included drowning (3.0%) and strangulation/suffocation (4.0%).

The most commonly reported reasons for the suicide attempt are presented in Table 2. More than one reason for the attempt was reported by 41 subjects. Our hypothesis that perceived burdensomeness and thwarted belongingness would be the most commonly reported reasons was not supported.

Regarding the social problems category, the responses described either 1) feelings of not belonging, or 2) family conflict. Sample responses are provided in Table 3. The table shows further samples of participants' perceptions of burdensomeness, including feelings of making life more difficult for others. The responses suggest that these individuals were engaging in the mental calculation that their death might be worth more to others than their lives (8).

Next, we examined our hypothesis that reporting feeling like a burden or social problems (i.e., thwarted belongingness and family conflict) would be associated with the use of more immediately lethal means (see Table 4). In line with hypotheses derived from the Interpersonal Theory of Suicide, those who attributed their suicide attempt to social problems were significantly more likely to use hanging or cutting as methods compared to using pills (the reference group). To aid in interpretation, we conducted a follow-up logistic regression with social problems predicting use of pills (OR = .27, Wald z = −2.15, $p = 0.03$) and calculated predicted probabilities. The predicted probability of using pills (as the method of the attempt) was 46% for those endorsing social problems and 76% for those not endorsing social problems. We also conducted sensitivity analyses among those who used pills as their method of attempt (n=73) and found that those who endorsed social problems were no less likely to use their own prescription for an overdose (OR = .40, z = −0.76, $p = 0.45$, $n = 73$), and were no less likely to use any particular class of psychotropic medication for an overdose, including benzodiazepines (OR = .79, z = −0.26, $p = 0.80$, $n = 73$) and antidepressants (OR = 1.48, z = 0.34, $p = 0.74$, $n = 73$). We also examined whether those who endorsed social problems and those who did not differed in alcohol use diagnosis, MADRS score, prescription medication misuse, physical illness burden, marital status and living arrangements. Only MADRS score distinguished the groups. Those endorsing social problems reported greater symptom severity (mean 12.69, std 3.72 vs. mean 9.29, std 4.70; $F(1,95) = 6.19$, $p<.05$). We re-ran the multinomial logistic regression including MADRS score as a covariate. MADRS score was not a significant predictor of method choice (OR for cutting = −.01, z=−0.15, $p=0.88$; OR for hanging = −.10, z=−1.04, $p= 0.30$), while social problems remained a significant predictor of cutting (OR=1.59, z=2.05, $p=0.04$) and hanging (OR=2.21, z=2.35, p=0.02). Finally, we examined (descriptively) whether thwarted belongingness (n=10) or family conflict (n=3) appeared to influence method choice. For those who endorsed thwarted belongingness, n=4 used pills as their method of attempt, n=3 used hanging, and n=3 used cutting. For those who reported family conflict, n=2 used pills and n=1 used cutting. A multinomial logistic regression predicting method choice with thwarted belongingness as the predictor yielded similar results to the model described above, with those endorsing thwarted belongingness significantly more likely to use hanging

(OR=2.34, z=2.62, *p*=0.01) or cutting (OR=1.64, z=1.97, *p*=0.049) as methods compared to using pills (the reference group).

In contrast to hypotheses, those who attributed their suicide attempt to "being a burden on others" were not more likely to utilize one method over another (see Table 4). Further, a composite variable of "functioning/autonomy" and "being a burden" was not a significant predictor of method choice (data not shown).

Given the significant number of participants who did not provide a specific reason for the attempt, we also examined whether voicing a lack of memory or understanding of the attempt was associated with method choice, and it was not (data not shown). We also examined whether wanting to die/sleep and not wake up (without providing a specific reason) was associated with method choice, and it was not (data not shown).

Finally, we examined our hypothesis that reporting social problems and feeling like a burden would predict repeat suicidal behavior during the follow-up (i.e., attempt or death). In line with hypotheses, those who attributed their suicide attempt to social problems were significantly more likely to engage in suicidal behavior during the follow-up compared to those who did not make that attribution (Wald z = 2.07, b = 1.69, OR (95% CI) = 5.43 (1.09 – 27.01), *p*=0.04). The predicted probability of a future suicide attempt/death was 25% for those endorsing social problems and 6% for those not endorsing social problems. This significant association remained (OR=5.81, z=2.00, *p*=0.045) when MADRS score (OR=1.04, z=0.50, p=0.62) was included in the model. None of the individuals endorsing family conflict engaged in repeat suicidal behavior, while n=3 of those endorsing thwarted belongingness engaged in repeat suicidal behavior. Reporting feeling like a burden was not significantly associated with increased risk for suicidal behavior during the follow-up (Wald z = 0.94, b = 0.86, OR (95% CI) = 2.36 (0.39 – 14.12), *p* = 0.35). Further, a composite variable of "functioning/autonomy" and "being a burden" was not a significant predictor of repeat suicidal behavior (z = 1.05, OR = 2.17 (0.51-9.30, *p* =0.30).

Although not the focus of our hypotheses, none of the other reported causes of suicide attempts were associated with increased risk for future suicidal behavior: escape (z = −0.20, OR (95% CI) =0.85 (0.16-4.47), *p*=0.84), functioning and autonomy (z = 0.92, OR (95% CI) =2.03 (0.45-9.20), *p*=0.36), psychological problems (z = 0.07, OR (95% CI) =1.06 (0.20-5.64), *p*=0.95), somatic problems (z = 0.71, OR (95% CI) =1.86 (0.34-10.15), *p*=0.48), no memory/understanding (z = −0.21, OR (95% CI) =0.80 (0.09-6.98), *p*=0.84), wanting to die/sleep without a specific reason (none of these individuals repeated suicidal behavior), and lack of meaning (none of these individuals repeated suicidal behavior).

Discussion

We examined self-reported causes of attempted suicide among older adults who were admitted to medical emergency departments for suicide attempts. Attributions could be captured by seven themes– escape; somatic problems and pain; functioning and autonomy; burden to others; social problems (thwarted belongingness or family conflict); psychological problems; and lack of meaning in life. Contrary to our hypothesis, thwarted belongingness

and burden to others were not the most commonly reported causes; rather, suicide attempts were more commonly attributed to escape, functioning/autonomy and psychological problems, such as depression or anxiety. Our second hypothesis was partially supported. Thwarted belongingness was associated with a greater likelihood of using cutting and hanging, methods that are more immediately lethal than overdose. Contrary to our hypothesis, perceiving oneself to be a burden on others was not associated with a greater likelihood of using more immediately lethal means. Finally, thwarted belongingness, but not perceived burden, was a predictor of suicide attempts/deaths during the follow-up period.

Past studies have consistently found support for the association between perceived burdensomeness and suicide ideation, attempts, and deaths, including an association between perceived burdensomeness and suicide ideation in older adults (17). No such association was observed in the present study. This discrepancy may be related to the fact that previous studies have prompted respondents to consider burdensomeness or analyzed the content of suicide notes. In contrast, we elicited unprompted responses. Some individuals who perceive themselves to be a burden might not consciously make this attribution unless prompted by a researcher. This possibility could be explored in research using multiple methods of assessing burdensomeness (free recall attributions for suicide attempts, prompted attributions, self-report, observer ratings). Regarding the null association for burdensomeness and future suicidal behavior, it is possible that the explanatory power of the Interpersonal Theory wanes in particular clinical or sociocultural contexts. For example, perhaps perceiving oneself to be a burden on others is a less pernicious indicator in the later years because it is more age-normative (18).

Older adults at risk for suicide are characterized by problems with social emotion recognition (4) and alexithymia (19). Further, medically serious suicide attempts among middle-aged samples are associated with difficulty communicating emotions to others (20, 21). Thus, problems recognizing, labeling, understanding, and communicating emotions may undermine timely help-seeking for mental health concerns (22) and underlie risk for suicidal behavior and lead to difficulties answering the question, “why did you attempt suicide?” Many of the older adults in our sample may not have fully understood their reasons for attempting suicide and/or have difficulties conveying that information to others. This is consistent with the characterization of older adults who died by suicide as “predominantly emotionally closed” (23) and findings linking the personality trait of low openness to experience to late-life suicide risk (24). We found that neither voicing a lack of understanding or memory for the attempt nor stating “I wanted to die” without providing a specific reason were associated with use of more immediately lethal means or repeat suicidal behavior. Thus, lack of insight into reasons for attempting suicide (or unwillingness to disclose reasons), or poor memory for precipitating events, which could be associated with more impulsive behavior, does not appear to be a marker of increased potential lethality.

We used the framework of the Interpersonal Theory to generate testable corollaries of the theory, the result of which could be new discoveries, rather than the falsification of the theory. Lack of support for our hypotheses regarding non-lethal attempts suggests avenues for potential refinement and creation of greater specificity of the theory with regards to non-lethal attempts. Although provisional, our results suggest that attributions for non-lethal

attempts among older adults are not restricted to thwarted belongingness and perceived burdensomeness. The most common attributions concerned the themes of escape, functioning/autonomy, and psychological problems. Baumeister (25) proposed a theory of suicidal behavior in which escaping from painful self-awareness is the primary reason individuals attempt suicide. The Integrated Motivational-Volitional Model of Suicidal Behavior (26) proposes that “entrapment”—feeling trapped with no other solutions to manage stressors—is a motivation for suicidal behavior as a means of escape from a trap. Research on these models of suicidal behavior in the context of later life could yield insights into psychological processes involved in suicidal behavior of older adults.

Although 94% of the sample met criteria for a mood disorder, only 23.8% endorsed psychological problems (including depression) as a reason for their suicide attempt. Our subjects did not appear to weigh the role of depression as strongly as other factors in reporting what caused them to engage in suicidal behavior. Given the increasing emphasis on patient centered care, our finding suggests that one form of “patient centeredness” in working with older adults following suicide attempts is simply to ask them why they attempted suicide and not presume that depression was the major precipitant. Patient centered care requires addressing patient's needs and wants (27), in addition to assessing and targeting standard risk factors (e.g., depression), if present. Older adults who attribute their suicidal behavior to thwarted belongingness may benefit from Interpersonal Psychotherapy (IPT), as an adaptation of IPT for suicidal older adults was found to decrease suicide ideation and increase social support (28).

Important limitations of our paper are the lack of validity data to corroborate our coding scheme and lack of a lethality scale for differentiating high and low medical lethality attempts. Regarding our coding scheme, it is possible that our coding was most reliable for thwarted belongingness, and less reliable for other reasons, thereby leading to Type II errors. However, it seems unlikely that our coding was less reliable for perceived burden given that most of the responses coded as reflecting burdensomeness specifically included mention of the word burden. However, future qualitative studies should be conducted with rigorous validity checks for the coding scheme. Given the sample size, we grouped the follow-up outcomes of non-lethal and lethal attempts together. Further, our null finding regarding the effect of perceived burden on future suicidal behavior could be due to limited statistical power to detect significant effects for smaller ORs (2.36) resulting from the low incidence of repeat suicidal behavior in the relatively brief follow-up interval. We were unable to examine mediators or moderators of the association between thwarted belongingness and repeat suicidal behavior. For example, interpersonal relationships are often disrupted in individuals with personality pathology and in individuals who misuse substances. Individuals who ascribe their suicide attempts to social problems might be more likely to meet criteria for a personality disorder or active substance use disorder. This hypothesis could be tested in future research. For ethical reasons, subjects who provided non-specific responses to the question, “why did you attempt suicide?” were not given additional prompts or follow-up questions. Thus, we cannot discern whether these individuals were unsure of their reason for attempting suicide, could not find the words to express their reason, or did not want to share their reason. Qualitative studies designed to examine attributions for suicide attempts could deepen understanding of the psychological experiences of suicide

attempters in later life. These studies would need to be conducted in settings that lend themselves to longer, more in-depth discussions about sensitive topics (i.e., outside emergency clinical settings). Our findings concern attributions older adults made after non-lethal suicide attempts; whether the same reasons would have been given before the attempt is unknown. Finally, while we have previously shown that late life attempters and completers in the catchment area share common risk factors (6); attributions given retrospectively by attempters and those offered by people who die by suicide are not presumed to be identical.

Strengths of our study include the use of a high-risk sample, a prospective follow-up period, inclusion of both qualitative and quantitative data, and examination of a previously under-investigated topic. Our results indicate that older adults who ascribe suicide attempts to thwarted belongingness are likely to use more immediately lethal means and are at elevated risk for re-attempting suicide. Replications across diverse cultural settings are needed to determine whether attributing suicide attempts to thwarted belongingness in later life might yield prognostic information and thereby warrant increased monitoring.

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References

1. World Health Organization. Distribution of suicides rates (per 100,000), by gender and age, 2000. 2002
2. Conwell Y, Duberstein PR, Cox C, et al. Age differences in behaviors leading to completed suicide. The American Journal of Geriatric Psychiatry. 1998; 6:122–126. [PubMed: 9581207]
3. Murphy E, Kapur N, Webb R, et al. Risk factors for repetition and suicide following self-harm in older adults: multicentre cohort study. The British journal of psychiatry: the journal of mental science. 2012; 200:399–404. [PubMed: 22157801]
4. Szanto K, Dombrovski AYMD, Sahakian BJ, et al. Social Emotion Recognition, Social Functioning, and Attempted Suicide in Late-Life Depression. American Journal of Geriatric Psychiatry. 2012; 20:257–265. [PubMed: 22354116]
5. Bergman Levy T, Barak Y, Sigler M, et al. Suicide attempts and burden of physical illness among depressed elderly inpatients. Arch Gerontol Geriatr. 2011; 52:115–117. [PubMed: 20403642]
6. Wiktorsson SM, Runeson B, Skoog I, et al. Attempted Suicide in the Elderly: Characteristics of Suicide Attempters 70 Years and Older and a General Population Comparison Group. American Journal of Geriatric Psychiatry. 2010; 18:57–67. [PubMed: 20094019]
7. Conwell Y, Thompson C. Suicidal behavior in elders. Psychiatric Clinics of North America. 2008; 31:333–356. [PubMed: 18439452]
8. Van Orden KA, Witte TK, Cukrowicz KC, et al. The Interpersonal Theory of Suicide. Psychological Review. 2010; 117:575–600. [PubMed: 20438238]
9. Joiner, T. Why people die by suicide. Cambridge, MA, US: Harvard University Press; 2005.
10. Joiner T, Pettit JW, Walker RL, et al. Perceived burdensomeness and suicidality: Two studies on the suicide notes of those attempting and those completing suicide. Journal of Social & Clinical Psychology. 2002; 21:531–545.

11. Folstein MF, Robins LN, Helzer JE. The Mini-Mental State Examination. Arch Gen Psychiatry. 1983; 40:812. [PubMed: 6860082]
12. Miller MD, Paradis CF, Houck PR, et al. Rating chronic medical illness burden in geropsychiatric practice and research: application of the Cumulative Illness Rating Scale. Psychiatry Res. 1992; 41:237–248. [PubMed: 1594710]
13. Montgomery SA, Åsberg M. A new depression scale designed to be sensitive to change. British Journal of Psychiatry. 1979; 134:382–389. [PubMed: 444788]
14. Åsberg M, Montgomery SA, Perris C, et al. A comprehensive psychopathological rating scale. Acta Psychiatr Scand Suppl. 1978:5–27. [PubMed: 277059]
15. Wiktorsson S, Marlow T, Runeson B, et al. Prospective cohort study of suicide attempters aged 70 and above: one-year outcomes. Journal of Affective Disorders. 2011; 134:333–340. [PubMed: 21737142]
16. Nock MK, Borges G, Bromet EJ, et al. Suicide and suicidal behavior. Epidemiologic Reviews. 2008; 30:133–154. [PubMed: 18653727]
17. Cukrowicz KC, Cheavens JS, Van Orden KA, et al. Perceived burdensomeness and suicide ideation in older adults. Psychology and aging. 2011
18. Van Orden K, Lynam M, Hollar D, et al. Perceived burdensomeness as an indicator of suicidal symptoms. Cognitive Therapy and Research. 2006; 30:457–467.
19. Bamonti PM, Heisel MJ, Topciu RA, et al. Association of Alexithymia and Depression Symptom Severity in Adults Aged 50 Years and Older. American Journal of Geriatric Psychiatry. 2010; 18:51–56. [PubMed: 20094018]
20. Levi Y, Horesh N, Fischel T, et al. Mental pain and its communication in medically serious suicide attempts: an “impossible situation”. J Affect Disord. 2008; 111:244–250. [PubMed: 18436309]
21. Horesh N, Levi Y, Apter A. Medically serious versus non-serious suicide attempts: relationships of lethality and intent to clinical and interpersonal characteristics. J Affect Disord. 2012; 136:286–293. [PubMed: 22197510]
22. Epstein RM, Duberstein PR, Feldman MD, et al. “I didn't know what was wrong:” how people with undiagnosed depression recognize, name and explain their distress. J Gen Intern Med. 2010; 25:954–961. [PubMed: 20473643]
23. Kjolseth I, Ekeberg O, Steihaug S. “Why do they become vulnerable when faced with the challenges of old age?” Elderly people who committed suicide, described by those who knew them. Int Psychogeriatr. 2009; 21:903–912. [PubMed: 19519985]
24. Duberstein PR. Are closed-minded people more open to the idea of killing themselves? Suicide and Life-Threatening Behavior. 2001; 31:9–14. [PubMed: 11326772]
25. Baumeister RF. Suicide as escape from self. Psychological Review. 1990; 97:90–113. [PubMed: 2408091]
26. O'Connor RC. The integrated motivational-volitional model of suicidal behavior. Crisis. 2011; 32:295–298. [PubMed: 21945841]
27. Duberstein PR, Jerant AF. Suicide prevention in primary care: optimistic humanism imagined and engineered. J Gen Intern Med. 2014; 29:827–829. [PubMed: 24664443]
28. Heisel MJ, Talbot NL, King DA, et al. Adapting Interpersonal Psychotherapy for Older Adults at Risk for Suicide. Am J Geriatr Psychiatry. 2014
29. Beck, A.; Davis, JR.; Frederick, CJ., et al. Classification and nomenclature Suicide prevention in the seventies. Resnick, HLP.; Hatorne, BC., editors. Washington DC: US Government Printing Office; 1972.

Table 1

Participant Characteristics

	N(%) or Mean (std)
Age	79.7 (5.3)
Male	47 (45.6)
Lives alone	70 (68.0)
Has/had children	88 (85.4)
Education, only mandatory[c]	58 (56.3)
Married	29 (28.2)
MMSE total	25.90 (3.1)[a]
History of psychiatric treatment	61 (59.2)
Previous suicide attempt	36 (35.6)
Mood disorders	95 (94.1)[b]
Alcohol Use Disorder (current)	13 (12.6)
Alcohol Use Disorder (lifetime)	27 (26.2)
Prescription misuse (current)	9 (8.7)
Prescription drug misuse (lifetime)	10 (9.7)
CIRS-G total score	13.41 (4.1)

Notes:

[a] Missing data: n=89

[b] Six patients were diagnosed with Bipolar Disorder, 27 with Minor Depression, and the remainder with Major Depression.

[c] Amount of mandatory education in Sweden was 6 years for those born before 1930 and 7 years for all others. MMSE = Mini Mental Status Examination; CIRS-G = Cumulative Illness Rating Scale for Geriatrics.

Table 2

Self-reported reasons for the attempt[a]

	N (%)
Escape[b]	29 (28.7%)
"I wanted to get away from life. I still do."	
"I wanted to die. Get away from everything."	
Functioning & autonomy	24 (23.8%)
"Can no longer do the things I used to do"	
"My wife is very ill since her stroke. She cannot take care of herself. (But I myself) am amputated and wheelchair bound."	
Psychological problems	24 (23.8%)
"I had a panic attack, and didn't want to have that again"	
"I was tired and depressed. My thoughts were chaotic."	
Somatic problems & pain	16 (15.8%)
"I had a stroke one year ago"	
"I wanted to get away from the pain, I decided, I've had enough"	
No memory or understanding	15 (14.9%)
"I can't understand or remember. It must have been an impulse."	
"I can't explain this."	
Perceived burden	13 (12.9%)
"I do not want to be a burden on anyone. I do not want to be a vegetable. The others are better off without me,"	
"I wanted to release my granddaughter from the burden I cause."	
Social problems: Thwarted belongingness & family conflict	13 (12.9%)
"I don't belong anywhere."	
"I don't want to live on my own anymore, I feel so lonely"	
Wanted to die (or sleep and not wake up) without a specific reason	13 (12.9%)
"I didn't want to wake up anymore."	
"I wanted to die right then. I regretted it at once."	
Lack of meaning	8 (7.9%)
"I wanted to get away from the meaninglessness"	
"I thought life was meaningless"	

Note:

[a] Sample attributions are shown in italics. Subjects could report more than one reason. A suicide attempt was defined according to Beck (1972) as "a situation in which a person has performed an actual or seemingly life-threatening behavior with the intent of jeopardizing his life, or to give the appearance of such an intent, but which has not resulted in death" (29).

[b] For the escape category, 6 individuals mentioned the concept of "wanting to get away" (or escape) without providing a specific reason, while 23 individuals also provided a specific reason coded as one of the other themes in this table.

Table 3

Examples of thwarted belongingness and other social problems and perceived burdensomeness

Social problems
Thwarted belongingness:
“I don't belong anywhere,”
“I have a feeling of not belonging,”
“I don't want to live on my own anymore, I feel so lonely,”
“I have lived my life, I am lonely,”
“I can't go out and it is hard to be with other people because of my tinnitus”
“I have no one to talk to.”
Family Conflict:
“I had a conflict with my grandchild. He said I was a liar so I thought it was better to be dead,”
“Wanted to help out at home. But I wasn't allowed to. Now I want to die if I am so difficult. I feel useless and unneeded,”
“I wanted to die. My partner is sick and we have a lot of conflicts.”
Perceived burdensomeness
“I wanted to die. I experienced that I was getting in the way of my children. They became unhappy because of me. They thought I was demanding.”
“I wanted to die. I wanted to sleep. I wanted to get away from the meaninglessness. I feel more and more worthless. I do not want to burden others. Everything looks black,”
“I do not want to be a burden on anyone. I do not want to be a vegetable. The others are better off without me,”
“I wanted to get away. I wanted to escape the misery. I don't want to be a burden for my children. I can't manage that well at home,”
“I wanted to release my granddaughter from the burden I cause. She shouldn't have to be concerned,”
“I thought that I was too much of a burden. I wanted to get away.”

Table 4

Multinomial Logistic Regression Equations for Social Problems (Thwarted Belongingness and Family Conflict) and Perceived Burden Predicting Methods of Index Attempt in Older Persons Hospitalized in Connection with a Suicide Attempt (N=101)

Predictors Entered in Set	*z*	*p*	RRR (95% CI)	Std. Error
Reference group: Pills				
Method: Hanging				
Reason: Social problems	2.27	0.023	7.00 (1.30 – 37.27)	5.96
Reason: Perceived burden	−0.31	0.753	0.69 (0.07 – 7.05)	0.82
Method: Cutting				
Reason: Social problems	2.27	0.023	5.72 (1.27 – 25.71)	4.39
Reason: Perceived burden	0.00	0.996	0.00	0.00
Method: Other				
Reason: Social problems	0.00	0.996	0.00	0.00
Reason: Perceived burden	1.10	0.269	2.73 (0.46 – 16.34)	2.50

Note: *Likelihood Ratio chi-square* (6) = *14.86, p<.05;* RRR = Relative risk ratio. None of the subjects who reported feeling like a burden on others used cutting as a method, and none of the subjects who reported social problems used a method categorized as “Other.” The Other category includes drowning and suffocation/strangulation.