

Suicidality in the elderly

Elderly people have a higher risk of completed suicide than any other age group. While suicidality is multi-determined, mental health disorders, especially depression, have been consistently shown to have associations with suicidality in the elderly. Risk assessment is best accomplished through clinical interview of the patient; validated risk assessment scales have yet to be developed. While there are several measures that can be used to tackle this issue, identifying and treating depression are two key areas that could improve outlook.

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“Suicidality” spans from suicidal ideation to completed suicide and is a major public health problem.¹ Suicidal behaviour in the elderly is undertaken with greater intent and with greater lethality than in younger age groups. Healthcare staff play a vital role in recognition and prevention of suicide in this age group.² Psychological autopsies are mental state examinations of the deceased offering direct assessments of antecedents to suicide.³ I present, as a “psychological autopsy”, a reflective case study of a 96-year-old lady who initially presented as having had a stroke and was later found to have attempted suicide (Box 1).

Epidemiology

Elderly people have a higher risk of completed suicide than any other age group worldwide.⁴ The ratio of male to female elderly suicide deaths remains around 3:1.^{2,5} In the general population, the ratio of suicide attempts to completed suicides is approximately 15:1, while in

older people it is approximately 4:1, suggesting that older people are extremely successful at killing themselves.⁶ Cross-cultural differences may influence suicide rates.⁷ Whilst use of firearms predominates in the US, hanging remains the most common method employed by men in England and Wales and self-poisoning by the women.²

Risk factors

Most of the information on risk factors originates from case-controlled, “psychological autopsies”. The risk profiles of elderly people completing suicide resemble those who attempted suicide.² Furthermore, as the geriatric population increases, the “younger” elderly

Box 1: Case history

Mrs D, a 96-year-old female,* was brought to the emergency department with a Glasgow Coma Scale score of 3/15. Past medical history was of stable angina and asthma. Routine blood tests and a computed tomography brain scan were normal. She was suspected of having had a stroke, but over the next 24 hours she recovered fully. She confessed she had taken an overdose of temazepam of unknown quantities on the night before admission. Subsequent interview revealed that she had experienced suicidal ideation for more than 10 years. She had been widowed for 30 years and had two children who lived far away. During her admission, she confided in a nurse that she had stocked up food in the house to help with funeral plans. She had lied to the GP about insomnia to procure temazepam. She expressed hopelessness and said she didn't want to be a burden to society. There were no psychotic symptoms. A diagnosis of attempted suicide secondary to underlying chronic health problems and possible depression was made and treatment initiated.

(60–75 years) will share some of the risk factor characteristics of the younger and middle-aged population.⁸

1) Mental health factors

The presence of a mood disorder (most notably depression) has been consistently demonstrated in studies of suicidality in the elderly.^{9,10}

Somatic symptoms with persistently low mood and a feeling of hopelessness predominate.² In a US, case-controlled, psychological autopsy study, 71.4% of completed suicides were associated with mood disorders.¹¹

Most research has focused on direct voluntary methods of attempting suicide. Little research has been done on “indirect self-destructive behaviour”, which includes starvation and non-compliance with medication, which is commonly seen among the older, elderly patients in nursing homes and patients with chronic illness. There is no clear suicidal intent evident in these behaviours and they could cause more deaths than intended suicide.¹²

Whilst suicidal ideation could predict attempted or completed suicide, a previous history of attempted suicide has been shown to be a significant predictor of completed suicide.^{10,13} Nevertheless, it is important to keep in mind that people who have never previously engaged in suicidal behaviour account for 58–75% of completed suicides in older people.⁶

Whilst alcohol abuse

has been shown to have an association with suicidality,¹⁴ substance abuse using recreational drugs has shown a less consistent association in older patient samples.^{9,15}

There appear to be associations of increased suicidality with certain personality traits including hypersomnia (>9 hr/night), hopelessness, comorbid anxiety or panic disorder and higher neuroticism.^{16,17}

Mild dementia had a higher association with suicidal ideation than advanced dementia.¹⁸ Furthermore, cognitive disturbance may be associated with less-deliberate acts among older people with depression who attempt suicide, and such disturbance did not appear to influence the potential lethality of the behaviour.¹⁹

2) Physical health factors

Physical health factors and functional impairment have not been consistently linked with suicidality after controlling for mood disorders. A small study demonstrated an association of serious physical illness that was only present among men in their sample with certain visual problems, neurological conditions and malignancies.²⁰ Another study suggested co-existing depression and terminal illness increased risk of suicide.²¹

3) Social factors

Living alone and low social interaction have been shown to be associated with increased suicidality.^{6,2} Being unmarried, living alone and low education had associations with attempted suicide.²²

‘Precipitating life events’ appear to be different in the elderly population to those in younger and middle-aged groups. Whilst in young and middle-aged people, suicidality appears to be associated closely with interpersonal problems, and financial, legal and occupational difficulties, it appears to be less so among older adults.²

Bereavement appears to be a significant influence and elderly men seem especially vulnerable within the first year of widowhood. One study reports a relative risk of suicidality for widowed men over three times higher than that of married elderly males.²³

Neurobiological factors may also influence suicidality. A small study that sampled cerebrospinal fluid (CSF) from elderly, depressed patients who attempted suicide revealed low levels of 5-hydroxy indoleacetic acid and homovanillic acid, suggesting dysregulation of the serotonergic system in these patients.²⁴ More research is needed in this area.

It is clear from the case of Mrs D, that a high index of suspicion is needed to identify and treat suicidal behaviour in the elderly. It is also possible that, had Mrs D died within the initial few days after admission, the real reason for admission might never have been found.

A search through medical subject headings would suggest that Mrs D is the oldest person to have attempted suicide. However, it is more likely that the case highlights under-reporting of suicidality in older adults.

Risk assessment

There is a clear paucity of evidence concerning risk factors for suicidality in the older population, through a lack of randomised controlled trials. Recommendations for risk assessment are based on the fundamental premise that suicide is multiply determined.²⁵ Mrs D could be classified as a ‘difficult to reach patient’—described as a person who has little or no history with the mental health care system, attributes symptoms to medical issues or life events, has difficulty in verbalizing their feelings, and believes that suicide is a noble, private and ethical act.²⁵

Risk assessment is best accomplished through clinical interview of the patient in the context of a meaningful therapeutic relationship with a therapist. A chronological assessment of events has been reasoned to be the best way to assess immediate risk for future attempts.²⁶

As yet, no validated instruments have been developed as risk assessment scales in the elderly.²⁵ Certain key symptoms (hopelessness, worthlessness, emptiness and unhappiness) that mainly pertain to the “absence of positives” are part of the Geriatric Depression Scale, and have been shown to differentiate between high and low suicide ideation.²⁷ The Geriatric Suicide Ideation Scale (GSIS), a 31-item self-report assessment, was developed and validated specifically for older adults.²⁸ But despite the need for demographically and geographically sensitive risk

assessments, available data is of little guidance to the clinician. Apart from enquiring about suicidal ideation, the clinician should look out for verbal clues, including ‘end-centred conversations’ (“I wish I would die soon”).⁸ Other indirect behavioural clues include hoarding medications, changing a will, re-establishing contact with the clergy and self-neglect.¹²

Management

Introduced in 2002, The National Suicide Prevention Strategy for England was published to support the Saving Lives: Our Healthier Nation²⁹ target to reduce the death rate from suicide by at least 20% by 2010. A recent publication in 2009 suggests a reduction of 13.8%⁵ from baseline in 2002 with decreases in both male and female elderly suicides.³⁰ While the strategy actually did not appear to directly address death by suicide among older people, it did state as a goal to “reduce risk in key high risk groups”.⁸ Given that older people constitute the fastest growing population group, a lack of constructive action in this area is particularly concerning.

Interventions can be broadly classified as primary, secondary and tertiary.⁷ Primary preventative measures address whole populations and include measures to promote economic prosperity, for example, retirement planning and reviewing pension options. Other areas include personal health promotion activities like Alcoholics Anonymous

programmes. Reduction of access to means, for example, through limiting the number of paracetamol tablets available over the counter and legislation on firearm use, has also reduced suicidality, especially in the UK.^{31,32}

Secondary measures are aimed at detecting the suicidal behaviour and addressing the situation. Some measures include early detection of suicidal ideation. The identification, treatment and management of depression in older people is possibly the single most effective factor in the prevention of suicide. Most “psychological autopsies” highlight substantial levels of contact: 40–70% of elderly suicides see their general practitioner in the 30 days preceding death, and 20–50% attend in the preceding week. This raises the important issue of effective intervention at a time when the individual is particularly vulnerable.² Certain community support programmes, including ‘older person help-lines’ have been shown to be successful.³⁰

Tertiary intervention will focus on post-incident care, including the management and follow-up of older people who attempt suicide. As pressure increases for early discharge of patients from hospitals, this is an area to explore and is likely to have a significant impact on suicide prevention. Current systems include crisis intervention systems, individual and group therapies (especially Cognitive Behaviour Therapy), self-help groups and re-socialisation groups.

Conclusion

It is clear that suicidality in older people will be a growing problem. Depression is a major risk factor, and identification and treatment of depression are two areas that could provide long-term improvement. While assessing suicide risk is difficult, it is important to directly question suicidal ideation. The development of community-based, old age psychiatry services that maintain close links with primary care facilities and psychiatry liaison links with general hospital services are strategies to explore further. Educational programmes directed at GPs and providers

in the hospital setting may also go a long way in addressing the problem.

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*** Details of the case study have been changed to protect the patient's identity**

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