## **ORIGINAL ARTICLE**

# Suicide in the elderly in Malaysia

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#### Abstract

Suicidal feelings and a sense of hopelessness have been regarded as part of the ageing process more so in the context of being elderly and having physical difficulties. As older adults are the fastest growing population in the world, suicides among this population is also expected to increase. The authors retrospectively reviewed all cases recorded by the National Suicide Registry Malaysia (NSRM) for the year 2009. Suicide in victims 65 years and older totaled 23 in number and accounted for 7.1% of all suicides. All the cases were autopsied. The case records were retrospectively analyzed with respect to age, gender, ethnicity and method of death. Comparisons were also made between males and females, levels of education, presence of stressor and life events antecedent to suicide. The ages of these suicide victims ranged from 65 to 94 years. Men comprised almost 70% of the cases. The average age of the victim was 73 years. Hanging was the most common method of suicide, accounting for 56.5% of the cases. Other methods included jumping from height (13.1%), exposure to unspecified chemicals (13.1%), jumping/lying before moving object (4.3%), exposure to pesticides (4.3%) and injuring oneself using sharp object (4.3%). Death of a loved one, legal problems, financial problems and physical illness were the stressors identified contributing to the suicide act.

Keywords: Elderly suicide, suicide, manner of death.

### INTRODUCTION

Suicidal feelings and a sense of hopelessness have been regarded as part of the ageing process more so in the context of being elderly and having physical difficulties. In ancient times, the Greeks tolerated these attitudes to the extreme by assisting the elderly to commit suicide if they could plead convincingly that they had no useful role in society. Back then, the assumption was that once a person reached old age, meaningful purpose in life fades and he would be better off dead. Sigmund Freud was also not spared from the death feeling when he was suffering from cancer of the palate. He was quoted to say "It may be that gods are merciful when they make our lives more unpleasant as we grow old. In the end, death seems less intolerable than the many burdens we have to bear." According to United Nations, the older population refers to age 60+ years.<sup>2</sup> An accepted definition of 'elderly' or older person by most developed countries is the chronological age of 65 years.

Currently, in Malaysia, with the re-emergence of infectious diseases such as tuberculosis and leprosy, as well as our constant battle with dengue fever, suicide may not be regarded as an important public health issue. However, it is worth noting that, as health care system is getting better, quality of life improves, resulting in a longer life expectancy. Consequently, the world is seeing the trend of older adults being the fastest growing population. In turn, this population is at greater risk for suicide compared to any other age group. The United Nations recently estimated that the population older than 60 years will reach 1 billion, with 70% residing in developing countries, by 2020.<sup>3</sup>

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A number of risk factors have been identified in this elderly issue. Depression has been noted as the most common psychiatric disorder in elderly suicides, particularly in the presence of other debilitating illnesses.<sup>3</sup> Other factors include poor performance of cognitive functions, alcohol abuse, social isolation and loneliness.<sup>3,4,5</sup> The aim of this project was to study the demography of suicide in persons aged 65 years and older in Malaysia.

#### **METHODS**

The National Suicide Registry Malaysia (NSRM) data from 1<sup>st</sup> January until 31<sup>st</sup> December 2009 was examined for cases of suicide in persons aged 65 years and above.<sup>6</sup> The data was collected from throughout Malaysia and compiled by NSRM. Cases will only be designated as suicide after completing police investigation and post mortem examinations have been performed. The case records were retrospectively analyzed with respect to age, gender, ethnicity and method of death. Comparisons were also made between males and females, level of education, and presence of stressor and life events antecedent to suicide.

### RESULTS

A total of 323 suicides were recorded by NSRM for the year 2009. Of all the cases, 23 victims were 65 years and older, accounting for 7.1% of all suicides (Fig. 1). The demographic profile of these 23 victims are summarized in Table 1. The ages of these ranged from 65 to 94 years. The average age of victims was 73 years. 7 victims were 75 years and older. 16 cases were male, which constituted almost 70% of suicides in the

elderly. Women contributed 30.4% of cases.

Based on ethnicity, the Chinese contributed almost 80% of t cases (n=18). Others were Malays (n=2), Indian, Kadazan, Dusun and Sikh contributed one case respectively.

The majority (52%) of the victims were married at the time of death. The widowed category accounted for 34.8% whereas 13% were singles.

As for educational level, none of the victims had completed tertiary education. Almost 40% had received informal training for skills while 26.1% actually never stepped into a school. 13.0% (n=3) completed primary school and 21.8% had secondary school education.

### Method of suicide

Hanging was the leading method of suicide, accounting for 56.5% (n=13) (Fig 2). The other halve of the cases comprised jumping from a height (n=3), exposure to unspecified chemicals (n=3), jumping/lying before moving object (n=2), exposure to pesticide (n=1) and injuring oneself using sharp object (n=1). Among male victims, hanging contributed 62.5% of the cases. A much lower figure (42.9%) was encountered in females. In both genders, this painless method of suicide appeared the preferred means of ending their lives.

#### Circumstances of suicide

Sixty-five percent (n=15) of the suicides occurred at home. Review of the victim's medical history revealed that 21.7% (n=5) had physical health problems, which included malignancy (n=1), stroke (n=1) and one interesting case of unbearable pain in the eye after surgery. One victim also had an Autoimmune Deficiency Virus

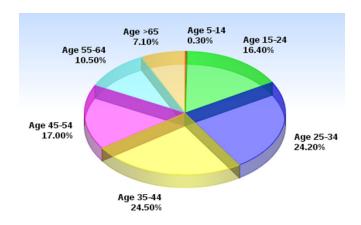


FIG. 1: Suicide cases recorded by NSRM for year 2009 based on age-group

TABLE 1: Demography of Malaysian elderly suicides in 2009 based on NSRM data

	Number (Percentage)
Gender	
Male	16 (69.57)
Female	7 (30.43)
Ethnic	
Chinese	18 (78.26)
Indian	1 (4.35)
Kadazan Dusun	1 (4.35)
Malay	2 (8.70)
Sikh	1 (4.35)
Religion	
Buddhism	17 (73.91)
Christianity	1 (4.35)
Hinduism	1 (4.35)
Islam	2 (8.70)
Others	2 (8.70)
Marital status at time of death	
Married	12 (52.17)
Single	3 (13.04)
Widowed	8 (34.78)
Highest completed education	
None	6 (26.09)
Others	9 (39.13)
Primary	3 (13.04)
Secondary	5 (21.74)
Employment status at time of death	
Disabled, permanently sick	2 (8.70)
Employed, but on sick leave	1 (4.35)
Full-time employed	4 (17.39)
Housewife/ homemaker	4 (17.39)
Others	1 (4.35)
Part-time employed (including self-employed)	1 (4.35)
Retired	4 (17.39)
Temporary work	1 (4.35)
Unemployed	5 (21.74)

Syndrome (AIDS). The diseases they suffered had altered their lifestyles significantly. Review of psychiatric histories revealed that 21.7% of the victims (n=5) had a documented psychiatric illness with 3 victims diagnosed with depression. One victim had a history of admission in a psychiatric institution.

Suicide intention was expressed by 10 victims (47.8%), however a suicide note was left by only one victim (4.4%). 30% of the victims showed a verbal expression of farewell. Two victims had made preparations for death.

Variables designated as life stressors were determined in 4 cases (17.4%). Death of a loved one, legal problems, financial problems and physical health problems were the stressors identified contributing to the suicide act.

### DISCUSSION

Suicide in the elderly is a complex phenomenon involving psychological, physical and social factors coming to play at a critical period in the life of a vulnerable individual. Typical features Malaysian J Pathol December 2015

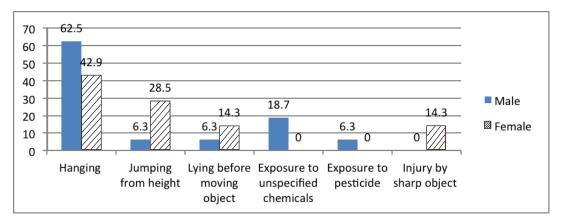


FIG. 2: Percentage distribution of elderly suicide cases based on gender and method of suicide

of a high-risk individual may be described as an elderly male, living alone following recent demise of a loved one and suffering from a chronic illness.<sup>5</sup>

This study showed that males contributed an almost 70% of cases of suicides in the elderly. This finding is in keeping with studies done in other parts of the world where the figure may be as high as 85%. Rates of female suicides tend to increase with age, peak during mid-adulthood and then decline with advancing age.<sup>7</sup>

The elderly individual tends to carry a higher degree of intent for suicide. They usually attempt suicide less often than younger people but are usually successful in their mission. In this study, previous suicide attempts were present in only 8.7% (2 cases), while the majority of approximately 65% (15 cases) had never attempted suicide before. In 6 cases, the data was not recorded as it could not be determined. It is worthwhile to mention that in elderly people, a previous suicide attempt was associated with an almost 20-fold increase in odds for suicide.

In this study, hanging is the most common suicide method in both elderly men and women. More than half of the cases (56.5%) of suicides were via hanging. Men showed a stronger preference than women, as demonstrated by percentages of 62.5% and 42.9% respectively. A study of 5 years of suicide cases conducted at the Forensic Pathology Unit, University Malaya Medical Centre in 2008, also revealed that hanging was the most common method employed, accounting for 43% of cases.<sup>9</sup> Other methods engaged were jumping from height (13.1%), exposure to unspecified chemicals (13.1%), jumping/lying before moving object (4.3%), exposure to pesticide (4.3%) and injuring oneself using sharp object (4.3%).

The suicide methods used in Malaysia are remarkably different than that encountered in western countries. As mentioned earlier, elderly suicides are associated with higher lethality. There, 80-90% of suicides died of gunshot wounds, with almost 85% directed to the head. 4.7 The low incidence of suicide by firearm injury in Malaysia could be due to the fact that firearms are not easily available to the public and a person needs to meet a strict requirements before he can apply for a license to possess one. 10

Social factors such as isolation, living in solitude, being divorced, widowed or single were commonly associated with increased suicidal feelings in elderly people. However, in this study, married people contributed slightly more than 50% of the cases. Four main life events or stressors were identified, i.e. death of a loved one, legal problems, financial problems associated with mounting debt, and physical health problems. Physical illness is a common antecedent to suicide in elderly people, though the prevalence figures vary widely from 34-94%. It is known to be a stronger predictor in men.11 A serious physical illness such as visual impairment, neurological disorders and malignancy were recognized as independent risk factors for suicide.1 This study shows that almost 50% of the victims had physical illness, yet, only one case was attributed to this stressor. The suicide victim complained of eye pain after surgery - the pain later became so unbearable that he decided to take his own life. The authors concluded that serious physical illness may be a stronger risk factor for suicide in men than in women, implying that elderly males may be more vulnerable to the effects of physical health problems. These findings have important implications for the detection and management of suicide in elderly people, highlighting the importance of psychiatric evaluation in people with physical disorders.<sup>1</sup>

Suicidal intention was expressed by 10 victims (47.8%) in this study, however only one suicide note was recovered (4.3%). 30% of the victims expressed a verbal farewell prior to the suicide act. Other studies suggested that about 20-30% of the suicide population leave suicide notes. Over all, suicide notes tended to be left more often by young females, victims with religious beliefs and those without a history of previous suicide attempts. It has been reported that suicide notes written by young people are longer, rich in emotions, and often begging for forgiveness. On the other hand, suicide notes written by the elderly were shorter, contained specific instructions, and were less emotional.<sup>7</sup>

In Malaysia, suicide in this age group receives very little attention. It is time that we start to address the issue and draw up strategies to screen the population, detect the high risk group and manage them holistically. Screening for suicidal ideation should be opportunistic, with high risk subgroups defined and targeted, based on knowledge of psychological, physical and social factors. High risk subgroups include those with depressive illnesses, previous suicide attempts, or physical illnesses, and those who are socially isolated. Elderly people with multiple such factors warrant special attention. Strategies for suicide prevention may include recognition and treatment of psychiatric disorders, especially depression, in both primary and secondary care settings. The community may help to develop a communitybased psychiatry services maintaining close links with primary care facilities. 6,12

#### Conclusion

Older adults are the fastest growing population globally with the trend expected to accelerating in the future. As this population grows, the number of suicides in this population will possibly increase too.<sup>7</sup> This study shows that the most common elderly suicide victim is male with an average age of 73 years old. The most common method is hanging. Almost fifty percent of the victims had physical health problems and recorded psychiatric illness was present in 21.7%. The home is the most common location of suicide. Suicide note is not always found, yet expression of intent was reported in almost one third of the cases. Since suicide is an avoidable act, it is fundamental to educate

health professionals and society in general to help recognize, prevent and treat those who are suffering in silence.

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