

LATE-LIFE SUICIDE IN NORWAY AND LATVIA: UNDERSTANDING THE REGIONAL DIFFERENCES AND COMPLEXITIES OF LATE-LIFE SUICIDE

 
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Abstract

Late-life suicide is a significant public health concern that has been associated with a range of social and individual factors. Social factors, such as social isolation, lack of social support, and financial stress, regional differences can contribute to the risk of suicide in older adults. Individual factors, such as depression, anxiety, and other mental health disorders, as well as physical health problems and chronic pain, have also been associated with an increased risk of suicide in older adults. Understanding the social and individual factors that contribute to late-life suicide in both Latvia and Norway is essential for developing effective prevention and intervention strategies to address this issue. The novelty and aim of research on social and individual factors of suicide among older people lie in understanding the unique risk factors that contribute to late-life suicide both in urban and rural areas. While there is existing research on suicide in general, there are various factors that contribute to suicide risk in older adults. Regional differences are often different from those that affect younger populations. Therefore, research on social and individual factors of suicide among the older persons aims to identify these unique risk factors and develop tailored prevention and intervention strategies that address the needs of older adults. There is still a need for further research to understand the specific social and individual factors that contribute to this issue in rural and urban areas.

Key words: older people, late-life suicide, social isolation.

Introduction

It is estimated that globally there are over 800,000 deaths by suicide every year (about 1 per 40 seconds), a number that is likely to be an underestimate of the real situation. Suicide is a very complex problem, with a range of reasons both at the individual and contextual level (Hawton, 2017). Suicide has become a bigger part of the public conversation in recent years, particularly due to the COVID-19 pandemic, but there is still quite a silence about older people taking their own lives. Suicide among the older people in rural areas has received little public attention and relatively little notice from researchers. This neglect stems in part from the myth that 'little can be done to treat older people who are suicidal, an assumption that reflects a general neglect of the mental health of older people' (Simon, 1989).

The aim of study is to find out possible regional differences in social and individual factors of suicide among the older people in Latvia and Norway. The tasks are:

- 1) to identify social and individual risk factors of suicide among older persons;
- 2) to find out statistical data about late-life suicide in Latvia and Norway.
- 3) to focus attention on how it is possible to analyze regional differences in late-life suicide.

The research questions are: what is known about regional differences of late-life suicides in statistics and previous research? In what direction should further research be carried out about late-life suicide?

Materials and Methods

The article primarily uses a literature review approach to discuss the concept of suicide among older people and the associated risk factors, focusing attention on urban/rural differences. It cites research studies and statistical data from sources such as the Norwegian Institute of Public Health and the World Health Organization to support its arguments. The article also references the theories of Emile Durkheim to explain the social factors that contribute to suicidal behavior. Overall, used methods involve gathering information and synthesizing it to provide a comparative approach to the overview of the topic.

Results and Discussion

Emile Durkheim, a French sociologist, developed a theory of suicide in which he argued that suicide is a social phenomenon that is influenced by the level of integration and regulation within a society. According to Durkheim, there are four types of suicide: egoistic, altruistic, anomic, and fatalistic. Egoistic suicide occurs when individuals lack a sense of belonging and social integration. According to Durkheim, this type of suicide is common among older adults who may experience feelings of isolation and loneliness. The lack of social support and connections can make them more susceptible to suicide. Anomic suicide occurs when individuals experience a disruption in their sense of social regulation. This type of suicide is common among older adults who may experience financial or social upheaval, such as the loss of a spouse or a change in their living situation. Anomic

suicide occurs when individuals have an excessive sense of integration and regulation, for example, religious or military groups. Durkheim did not believe that altruistic and fatalistic suicide is relevant to older adults (Mueller *et al.*, 2021). Overall, Durkheim's theory of suicide highlights the importance of social integration and regulation in understanding the risk of suicide among older adults. It suggests that older adults who lack social support and connections, or who experience disruptions in their sense of social regulation, are at an increased risk for suicide. According to Durkheim's theory, there is background for rural/urban differences.

Late-life suicide, defined as suicide among individuals aged 60 and older, is a significant social concern in Norway. According to statistical data from the Norwegian Institute of Public Health (FHI, 2021), suicide is the second leading cause of death among individuals aged 70 and older in Norway, with a rate of approximately 25 deaths per 100,000 individuals. The suicide rate among older adults in Norway is also higher than that of the general population, with a rate of 16 deaths per 100,000 individuals for those aged 60 and older compared to a rate of 12 deaths per 100,000 individuals for the overall population. In 2020, the first year of the COVID-19 pandemic, we observed an increase in the age group 70 to 79 years (Figure 1), (FHI, 2021). In examining the suicide rate disparity between older adults and the general population in Norway, it is crucial to explore potential rural vs. urban differences. Factors such as accessibility to mental health services, social isolation, and economic conditions may vary between rural and urban areas, influencing suicide risk differently. Additionally, the observed increase in suicides among the 70 to 79 age group during the pandemic might have distinct implications in rural regions, where older adults might face unique challenges accessing healthcare and support services.

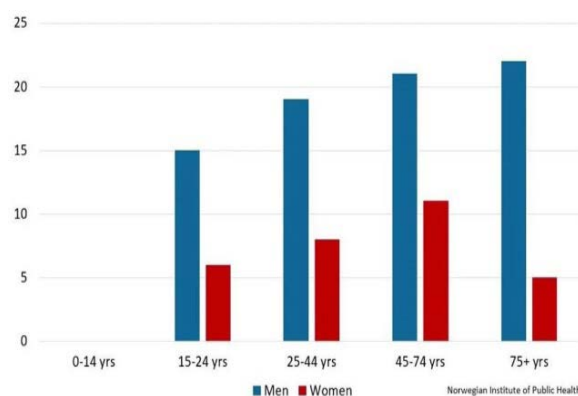


Figure 1. Number of suicides per 100 000 inhabitants for men and women in different age groups, based on suicide rates for 2014–2020.

Even though the increase in suicide in the older population was within the expected random variation, we cannot exclude that factors related to the pandemic have had an impact. This can be because the pandemic has led to increased levels of stress, anxiety, and depression, which can contribute to an increased risk of suicide, especially among older adults in both urban and rural areas. Furthermore, the pandemic has led to increased social isolation and loneliness, which can exacerbate existing mental health issues and contribute to an increased risk of suicide, especially in older adults (FHI, 2021).

Urban Aspects

In urban areas, the pandemic's impact on mental health might be magnified due to factors such as population density, limited green spaces, and higher levels of social and economic inequalities. Urban older adults may face increased stress and anxiety from disruptions to their daily routines, isolation from family and friends, and difficulties accessing healthcare services.

Rural Aspects

In rural areas, the pandemic's effects on mental health may be compounded by existing challenges such as limited access to healthcare, social isolation, and a shortage of mental health resources. The pandemic's disruption of rural support networks and communal activities may exacerbate feelings of loneliness and hopelessness among older adults in these areas.

Unique Challenges

Both urban and rural settings may experience unique challenges. For example, older adults in rural areas may have limited access to telehealth services, which are critical during the pandemic, while older adults in urban areas might face increased stress from overcrowded living conditions or social disconnection in highly populated neighborhoods. Research has shown that older adults, in both rural and urban areas, are at an increased risk for suicide due to several factors, including physical health problems, social isolation, and loss of autonomy (FHI, 2021). This bitter phenomenon is more common among older men, for the most part those over 80 years old, especially when they face chronic pain and dependence on others, as well as loneliness, feeling of abandonment and a loss of meaning for life. All these conditions are risk factors for suicide; 'some of these factors can be controlled and their influence is limited but some others may simply be too much of a burden for individuals and their families' (De Leo, 2022). Urban/rural differences could play a significant role in how these risk factors impact older men's suicide risk. If we choose Latvia as an example, both Latvia and Norway have different rates of suicide, with Latvia having a higher rate compared to Norway. According to data from the World Health Organization, the suicide rate in Latvia

was 29.5 per 100,000 people in 2018, while in Norway, the suicide rate was 14.8 per 100,000 people in the same year. In Latvia, previous research has shown that late-life suicide is often associated with a history of alcohol abuse and financial difficulties. Additionally, the impact of the Soviet occupation on mental health of Latvians may be a factor in the high suicide rates in the country. Availability of health care and social services in remote rural areas can be an important influencing factor in Latvia. Recent studies of Latvian researchers have paid attention only to representation of motives of suicide as urban/rural differences (SVA, 2009; Kozlovs & Skulte, 2022).

In Norway, previous research has shown that late-life suicide is often associated with a history of depression and previous suicide attempts. Additionally, social isolation and a lack of social support have been identified as risk factors for suicide in older adults in Norway. In rural areas the risks of social isolation and lack of social support are higher than in urban areas.

Norway and Latvia have some differences when it comes to geographical factors that may influence suicidal behavior. Norway is a relatively wealthy country with a high standard of living and a comprehensive welfare system. Access to healthcare and mental health services is generally good, and there are resources available for those at risk of suicide. However, rural areas of Norway may have more limited access to healthcare and mental health services, which could contribute to higher rates of suicidal behavior in these regions. Latvia, on the other hand, is a country that has been historically exposed to socioeconomic challenges and has had a hard time recovering from the economic crisis of 2008. It has a higher poverty rate compared to Norway and access to healthcare and mental health services may be more limited, particularly in rural areas. Regional disparities in availability of health care and social services are risk factors for older people in rural areas in Latvia (Holma, 2017). Additionally, cultural attitudes towards mental health and seeking help for suicidal thoughts may be different in Latvia, which could also contribute to higher rates of suicidal behavior.

The Survey of Health, Ageing and Retirement in Europe, (SHARE, 2022) and the ESS (European Social Survey) provide data on suicidal behavior in different European countries. According to the data, there are geographical differences in suicidal behavior in Europe. Northern and Western European countries tend to have lower rates of suicide compared to Eastern and Southern European countries. Literature provides consistent evidence that older adults from southern and eastern European countries demonstrate higher level of loneliness than their peers from the west and north (Lee, 2020). Factors that may contribute to these differences include cultural attitudes towards

mental health, access to mental health resources, and socioeconomic factors such as poverty and unemployment more common in rural areas. It is important to note that data from surveys may not be fully representative of the entire population and should be interpreted with caution.

Discussion and Challenges

One of the important research projects that has been done in Norway so far in opinion of authors is 'Elderly and suicide' by I. Kjølheth. The project describes the complex causal relationships behind suicidal acts, which signals should we look at, and moreover what we can do to prevent it from happening. Kjølheth discusses if it is easier to understand older people taking their own lives than younger ones and assumes that suicide rates among the elderly confirm that Norwegians have a reason to fear old age. One reason for this may be a societal attitude that it is 'normal' to have suicidal thoughts in old age. However, older adults who have survived suicide attempts speak of deep despair, feeling invisible or disconnected from others, and the struggle to maintain control over their own lives. Suicidal behavior in the elderly is different from what we see in younger and middle-aged individuals. Elderly people are less likely to talk about their suicidal thoughts, and even if they do, it is less likely that anyone will intervene. This was clear in a recent Norwegian study: in more than half of the cases studied, the older adult had attempted to alert someone about their suicidal thoughts, but nothing was done to prevent suicide (Waern, 2013). A fatalistic attitude toward the problem of suicide in late life conveys a materialistic and dismissive message to younger members of society, who instead need examples of courage and determination to live a meaningful life and nurture an authentic sense of belonging to the community (De Leo, 2019).

Regional differences. Geographic variations in suicide mortality differ not only between but also within countries, with differences between urban and rural areas standing out. Suicide rates in rural areas have been shown to be higher than those in urban areas, and this disparity is particularly pronounced in older adults, which is a significant public health concern. (Casant, 2022). In Baltic countries (including Latvia), studies have shown that rural areas have higher rates of late-life suicide compared to urban areas (Stumbrys, 2022). Factors contributing to this include a lack of access to mental health resources, a lack of social support, and poverty. Additionally, rural areas in Latvia may also be more likely to experience social and economic disruption, which can further increase the risk of suicide among older adults.

Since 1971, excess male suicide mortality has, without exception, been higher in the rural than the

urban population, even though excess male suicide mortality has increased for both (Pray, 2013). A study conducted in Latvia found that alcohol use is a significant risk factor for suicide, both in rural and urban areas, meaning that individuals who had a history of alcohol use were at a higher risk of suicide, regardless of whether they lived in a rural or urban area. The study also found that the pattern of alcohol use was different between rural and urban populations in Latvia, with higher rates of heavy drinking in remote areas. The findings suggest that addressing alcohol use and abuse could be an important strategy for reducing suicide rates in both rural and urban areas of Latvia.

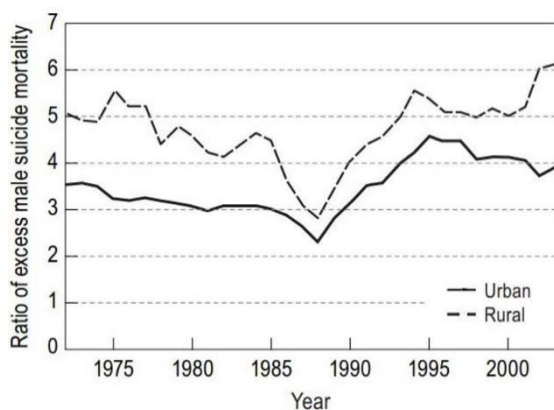


Figure 2. Male excess suicide mortality in rural vs urban populations across Latvia. Calculations based on a 3-year moving average. Source: Demographic Bulletins and Demographic Yearbooks. Riga.

In Norway, the issue of late-life suicide in rural areas is similarly concerning. Studies have shown that older adults in rural areas may be more isolated and have less access to mental health resources, which can contribute to an increased risk of suicide. Additionally, poverty and a lack of economic opportunities in rural areas of Norway have been identified as risk factors for suicide in older adults. One study conducted in Norway (Kleppstø, 2020) found that older adults living in remote areas were more likely to experience social isolation and had less access to mental health resources compared to those living in urban areas. This study also found that rural areas in Norway were characterized by lack of economic opportunities, which can contribute to an increased risk of suicide among older adults. Another study conducted in Norway (Dahl, 2019) found that older adults in rural areas were more likely to experience depression, social disconnection and anxiety compared to those living in urban areas. This study also found that older adults in rural areas were less likely to receive treatment for mental health issues, which can contribute to an increased risk of suicide.

Late-life suicide is a significant public health concern in rural areas not only in Latvia or Norway. The study by Ding and Kennedy (2020) did not compare suicide rates between rural and urban areas specifically. Instead, the study aimed to understand the factors that contribute to vulnerability to late-life suicide in the USA. The study found that several factors can increase the risk of suicide among the elderly, including social isolation, depression, and physical health problems. The authors also noted that cultural attitudes towards suicide and mental health, access to mental health resources, and the availability of lethal means can all play a role in the risk of suicide in later life. While the study did not compare suicide rates in rural and urban areas, it highlights the importance of addressing risk factors in both settings in order to reduce the incidence of suicide among the elderly. The study by Niu et al. found that the risk for late-life suicide was higher in rural areas of China, with gender being a factor in the increased risk. Research explains that elderly men in rural areas had a higher risk of suicide compared to elderly women in the same area. The risk of suicide in older adults is increased in rural areas due to factors such as poverty, lack of access to mental health resources, and social isolation. Further research is needed to better understand the specific needs of older adults in rural areas and to develop effective interventions to prevent suicide in this population.

It is complicated to know the exact number of suicides among the elderly. This is because the elderly often encounters preconceived attitudes even after their death. This means that the cause of death is not always investigated or confirmed. Additionally, serious illnesses may cause the cause of death to be attributed to the severity of the older person's illness (Farberow, 1999).

Why do we look at suicide among the elderly differently? Perhaps it is because the fear of old age with functional decline and dependence is frightening for most people, and it leads to a sort of acceptance of the action taken by the elderly. Research shows that the elderly had underlying anxiety before suicide. This anxiety was characterized by fear of losing self-care ability and autonomy (Kjølseth, Ekeberg, & Steihaug, 2010). They felt a loss of identity and that hope for a better life was gone. They were at 'the turning point' in a process where life had to end in death and its release (Crocker & Evans, 2006).

From a sociological perspective, suicide can be related to the society the older person lives in, the status of the elderly in society, and the degree of respect they are given (Kjølseth, 2014). Being a part of a society and experiencing a strong and secure identity is important for a person, whether they are young or old. When the elderly begin to feel that they are a

burden to their family and society, there is something wrong with our view of old age. The elderly can also have loss of close relatives and lose their social role, and they can get diseases that hinder the expression of life (Rasnaca *et al.*, 2022). Older adults who reported feeling lonely were nearly three times more likely to die by suicide than those who did not report feeling lonely (Shiovitz-Ezra, 2018).

From a psychological perspective, ageing changes can contribute to increased suicide risk. Research shows that with increasing age, there is a decline in cognitive functions. This is especially related to memory and forms of problem-solving. A paradox in this is that emotional regulation can also improve over time, and negative feelings decrease, and positive feelings increase. This contributes to the fact that memory related to positive memories becomes better and better. This is called the 'positivity effect'. However, the older suicide-prone individuals had difficulty regulating positive thoughts and utilizing them. They did not have many good memories from childhood and adolescence and could not think in a positive future-oriented way (Kjølseth, 2014). Somatic illness with resulting functional decline, depression, isolation, loneliness, and life stressors are other factors that constitute a suicide risk among people over 65 (Kjølseth, 2014).

There are several risk factors that have been identified as associated with late-life suicide in Norway. Some of the most reported risk factors include:

1. Mental health conditions: Depression, anxiety, and bipolar disorder are linked to increased suicide risk in older adults, both in rural and urban settings.
2. Physical health conditions: Chronic illnesses like cancer, heart disease, and chronic pain also elevate the risk of suicide in older adults, regardless of their location.
3. Social isolation: Social isolation, whether living alone or lacking social support, contributes to higher suicide risk in older adults, including those in rural areas.
4. Financial stress: Older adults facing financial strain, such as insecurity or debt, may experience an elevated risk of suicide, irrespective of rural or urban contexts.
5. Access to lethal means: Availability of lethal means like firearms or medications can raise suicide risk in older adults, regardless of where they reside.
6. Recent loss or significant life event: Older adults coping with recent losses (e.g., spouse or friend's death) or significant life events (e.g., retirement or relocation) may face an increased risk of suicide in both rural and urban environments.

According to Kjølseth, the key to understanding the suicides of the elderly is their experience of not being

worth anything which is related to functional loss and helplessness. But is that an individual experience or does it reflect society's attitude? Is it true that we don't really care about the oldest and most fragile?

To answer these questions, we need to research three independent factors which relate to each other in terms of suicidal behavior: **individual, network and society**. Individual factors refer to the characteristics and attributes of a single person, such as their personality, values, and beliefs. Network factors refer to the connections and interactions between people, such as their social networks and relationships. Society factors refer to the larger cultural and societal context in which individuals and networks exist, such as laws, norms, and institutions. In rural areas, understanding the interplay of these factors becomes crucial in comprehending the unique challenges and risk factors that may contribute to suicidal behavior among older adults. Factors like limited access to mental health services, tight-knit community networks, and cultural attitudes toward mental health play a significant role in shaping the suicide landscape in rural settings. Comprehensive research on these interconnected aspects is vital for developing effective suicide prevention strategies tailored to rural communities' specific needs. As already stated, these three factors are interconnected and can influence each other. For example, an individual's personality can influence the types of networks they form, and their networks can in turn influence their personality. Society factors can also shape the networks that form and the behavior of individuals within those networks. Additionally, the behavior and actions of individuals and networks can also shape the broader societal context.

All three factors can influence suicidal behavior in different ways. Individual factors that may increase the risk of suicidal behavior include mental health conditions, a lack of social support, exposure to trauma or abuse, feelings of hopelessness or helplessness, state of mind, finances, and occupation. Network factors that may increase the risk of suicidal behavior are social isolation or lack of social support, exposure to suicidal behavior in one's social network, a history of bullying or harassment, conflict or stress within one's relationships or family, local environment, or participation in social life. Often networks will have changed to such an extent that there are hardly any networks at all in old age. Public transport availability for older people is crucial in remote rural areas. Societal factors that may increase the risk of suicidal behavior include lack of access to mental health care, economic stress or inequality, exposure to media portrayals of suicide, societal changes that increase stress, such as war, violence, and disasters, societal norms that discourage seeking help or expressing emotions. It's worth noting that it is not always

possible to predict who will attempt suicide and that many people who die by suicide do not have a known mental disorder. Also, suicidal behavior is not caused by any single factor, and many factors can contribute to the risk of suicide.

Suicide prevention. There are several interventions that have been shown to be effective in reducing the risk of suicide among older adults. These include increasing access to mental health services, providing social support and companionship, and reducing access to means of suicide. In Norway, there are a few initiatives in place aimed at reducing the rate of late-life suicide. These include the ‘Senior Alert’ program, which aims to identify and provide support to older adults at risk of suicide, and the ‘Life-Saving Conversations’ campaign, which encourages individuals to have open and honest conversations about mental health and suicide with their loved ones. Additionally, the Norwegian government has set a goal to reduce the suicide rate among older adults by 20% by 2020, through the implementation of a few targeted intervention and prevention programs (regjeringen.no 2020).

It’s worth mentioning that despite the efforts, the suicide rate in Norway has not decreased in the last years.

Reducing the rate of suicide among older adults is a complex issue that requires a multifaceted approach. Some strategies that have been shown to be effective in reducing the risk of suicide among older adults include:

Enhancing mental health services: Improve access to counseling and medication management in both rural and urban areas to prevent older adult suicides.

Addressing social isolation: Combat loneliness in rural regions by offering support programs like volunteer visiting initiatives, equally vital in urban areas.

Limiting access to lethal means: Restrict access to firearms and prescription drugs for suicide prevention among older adults, applicable to both rural and urban settings.

Tackling economic disparities: Addressing economic and social inequalities is crucial, particularly in rural areas with higher poverty rates, to reduce suicide risk among older adults.

Promoting positive aging: Encourage social engagement and a sense of purpose for both rural and urban older adults to decrease suicide risk.

Public awareness campaigns: Raise awareness about suicide risk and encourage help-seeking behaviors, equally important in both rural and urban communities.

Training healthcare professionals: Ensure proper training for identifying and responding to older adults at risk of suicide, regardless of location.

Considering regional nuances enhances the effectiveness of suicide prevention efforts among older adults. It’s important to keep in mind that suicide prevention is a complex and multifaceted issue, and no single strategy will be effective in addressing it. It is important to implement a comprehensive, integrated, and multidisciplinary approach that addresses the different factors that contribute to suicide.

Conclusions

Europe is seeing unprecedented growth in the ageing population. The World Health Organization projects that from 2000 to 2050, the ageing population over 60 years will triple in size from 600 million to two billion (World Health Organization, 2015). As this trend progresses, governments are faced with the ethical and moral imperative to ensure that older persons maintain a high quality of life as they age (Shiovitz-Ezra, 2018).

Based on the stated tasks and purpose of the article, the following conclusions can be drawn:

1. Social and individual risk factors of suicide among older persons have been identified through the study. These factors may include individual (loneliness, depression, physical illness, substance abuse, and financial difficulties), network (social isolation, lack of links with peer groups, relatives), society (attention to older person problems).
2. Statistical data on late-life suicide in Latvia and Norway has been collected and analyzed. The findings may suggest differences in suicide rates among older persons in different regions, as well as differences between two countries.
3. The study has highlighted the need for further research on late-life suicide, particularly in terms of exploring the regional differences and specific risk factors that may be contributing to the issue. This may involve conducting more in-depth qualitative studies and developing targeted interventions to address the identified risk factors.
4. There is a need for more research to better understand the factors contributing to late-life suicide in both Latvia, Norway, and the whole Europe as well as to develop effective interventions to prevent suicide in older adults. One area of research that could be useful is to investigate the role of cultural and societal factors in late-life suicide in these countries. Another area of research that would be beneficial is to study the effectiveness of interventions aimed at reducing social isolation and increasing access to mental health resources for older adults.
5. In conclusion, late-life suicide is a significant public health concern in both Norway and Latvia. While the overall suicide rates differ, the rates of late-life suicide in both countries are rising. Previous

research has identified several risk factors for suicide in older adults, such as physical illness, depression, and social isolation. Social factors and

suicide among older persons are the area where more research is needed to find out trends in regional differences.

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