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Social isolation and loneliness in older adults in the context of COVID-19

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ABSTRACT

The COVID-19 pandemic, accompanied by stringent social restrictions, wrought profound changes across various facets of human existence. Unprecedented measures, such as compulsory quarantines, curfews, and restrictions on mobility and social interactions, were implemented to mitigate infection rates. This paper delves into the repercussions of isolation, with a specific focus on its impact on the elderly population—an exceptionally vulnerable demographic. The primary objective of this study is to discern the ramifications of pandemic-induced isolation on the mental and physical well-being of senior citizens. This contribution underscores the comparative analysis of three prior studies that have illuminated the nexus between pandemic-induced isolation and heightened levels of anxiety, depression, and loneliness. A notable strength of this research lies in its comprehensive dataset, derived from comparisons with extant scientific literature and the utilization of diverse scientific methodologies. The preceding investigations centered on the Austrian populace, juxtaposing the effects of loneliness among senior citizens before and during the pandemic. However, these studies were constrained by their inability to explore the enduring consequences of isolation and loneliness post-repeal of anti-pandemic measures, and their incapacity to ascertain its correlation with senior citizens' mortality, particularly those residing in solitary circumstances. This article represents a partial outcome of the Project VEGA 1/0595/21-public administration interventions at the time of COVID-19 and their impact on the quality of life of citizens of selected communities.

1. Introduction

Social existence, interpersonal communication, and affiliation with communal entities constitute pivotal constituents of the human condition. Humanity inherently manifests itself as a social entity, finding membership within various societal strata, including familial, friendly, and residential communities (Petersen et al., 2019). The advent of the COVID-19 pandemic precipitated a transformative shift in the communal landscape, primarily catalyzed by state-enforced isolation measures. These anti-pandemic protocols were enacted with the overarching objective of mitigating the deleterious consequences of the infectious malady; nevertheless, their efficaciousness was frequently accompanied by contentious discourse.

Social exclusion or isolation is an existential state wherein an individual experiences a substantial absence of engagement with distinct social cohorts and society at large (Kotwal et al., 2021). Isolation engenders a profound influence on numerous facets of daily life, with a principal focus on interpersonal dynamics vis-à-vis emotional and psychological dimensions. From a sociological perspective, the quintessence of human existence is inexorably linked with real-time interpersonal communication, thereby underscoring the adverse repercussions engendered by restricted or impeded contact. Psychological ramifications associated with social isolation encompass a spectrum of maladies encompassing anxiety, panic disorders, depressive states, aggressive tendencies, and profound loneliness. The degree of isolation's impact on distinct demographic cohorts is contingent upon individualistic attributes such as financial resources and access to personal housing. The most marginalized segments of society, notably seniors and individuals with disabilities, are inherently predisposed to myriad existential threats. These cohorts endured the brunt of the pandemic and resultant isolation, primarily owing to their reliance

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upon external assistance and routine social interaction.

This article serves as a contemplative discourse on the phenomenon of isolation and its ensuing repercussions. Its principal objective resides in ascertaining the ramifications of pandemic-induced isolation upon society and the well-being of senior citizens, who constitute one of the most vulnerable segments within the broader demographic spectrum.

2. Isolation as a social issue during the COVID-19 pandemic

The process of socialization in an individual entails the assimilation of knowledge regarding societal norms and patterns of interaction, ultimately leading to their integration within the social framework. Throughout the entire human lifespan, an individual's personality undergoes development, influenced by a myriad of factors within the context of socialization and societal involvement. Socialization engenders personal evolution, giving rise to distinct cognitive paradigms and the formation of diverse social affiliations. Eminent psychologist and psychoanalyst Erikson (1950) associated individual socialization with stages of maturation, wherein adults, typically between 25 and 60 years of age, invest in self-development, forging their unique identities. These individuals yearn for interpersonal engagement, seeking to transmit their life experiences to both peers and the younger generation.

Upon reaching the age of 60, individuals often embark on retrospection, a time for reflection upon their life's journey. The awareness of life's fleeting nature frequently prompts a proclivity towards social detachment. Consequently, social isolation imperils the quality of life across all demographic segments, transcending the ramifications of anti-pandemic directives. The ensuing section will expound upon the implications of social exclusion on the elderly populace.

Notably, the quarantine and enforced social isolation measures, integral components of anti-pandemic strategies, jeopardize the societal integration process. Conversely, social exclusion delineates the isolation of individuals or collectives from the broader societal fabric. Contemporary trends underscore a proliferation of this phenomenon, largely attributed to internet accessibility. Younger segments of the population predominantly experience this as voluntary isolation. Concurrently, older generations exhibit an inclination toward reduced social interaction, influenced either by personal choice or physical limitations (Peace, 2001).

Forced isolation, in contrast, entails the involuntary confinement of individuals in environments with minimal external connectivity. During such periods of enforced isolation, the profound implications of socialization deficits come to the fore. Lifestyle dynamics shift, precipitating restrictions on social interactions, familial gatherings, and professional networking. The absence of a vibrant social life eludes facile substitutes. Additionally, economic hardships loom large, as job security and income sources face precarious jeopardy. This predicament engenders an inability to formulate substantive long-term plans for financial stability and well-being (Pancani et al., 2021).

The social isolation that countries around the world implemented is a form of forced isolation. Experience from China showed that isolation is the most effective way to manage a pandemic. The number of countries that urged residents to remain at home continued to grow, and teaching and working were transferred to a remote online format. Restaurants, as well as many shops and shopping centers, were closed, and people were not permitted to visit social service facilities and hospitals (Hartley and Perencevich, 2020). Yet, despite the fact that these measures were intended to prevent the free spread of the virus, their impact was ambiguous. Therefore, the paper focuses on forced isolation as the main factor influencing the physical and mental state of the population and the most vulnerable groups.

When in isolation, people become anxious, more prone to aggression and sudden mood swings, and are unable to handle their emotions. One of the most serious negative factors affecting people in isolation is stress. This is caused by the fact that people are stressed by such events as a change in their usual social circle, the restriction or suspension of freedom, and their usual daily activities. For those inclined towards mental illness, loneliness can have long-term consequences. It has been demonstrated that any forced isolation for a period longer than 10 days can lead to depression, and long-term isolation is not only harmful to mental health but also to physical health (Brooks et al., 2020).

2.1. The impact of isolation on a person's physical and mental health

The health of every person, his or her resilience, is an important part of the well-being of society, as it affects how we think, feel, and act, how we deal with stress, and how we make decisions in life. Mental health is a personal image of the human world and its individual characteristics. During a pandemic, mental health and human resilience can work as major resources for maintaining physical health (Marinucci and Riva, 2020). Long-term social isolation can lead to chronic diseases that affect every aspect of a person's life. Social isolation can lead to feelings of loneliness, fear of others, or even a negative self-image. A lack of regular human contact can also lead to conflicts with family members or friends. The magnitude of the risk associated with social isolation is comparable to the use of tobacco products and other significant biomedical and psychosocial risk factors (House, 2001).

In the broader context, the experience of isolation during a pandemic serves as an indicator of a

society's diminishing quality of life. The repercussions of isolation during the COVID-19 pandemic can be comprehensively characterized by considering various interconnected factors. These include the prolonged duration of quarantine, separation from loved ones, heightened fears of contracting a lethal virus, pervasive uncertainty, disillusionment, the onset of ennui, inadequacies in both general and medical care, insufficient access to pertinent information, and substantial financial losses. It is essential to recognize that these factors can exert enduring effects on an individual's mental well-being, potentially precipitating an array of psychological challenges and disorders.

Isolation amplifies the likelihood of psychological and emotional distress, with associated manifestations encompassing depression, heightened stress levels, abrupt mood fluctuations, heightened irritability, post-traumatic stress disorder, expressions of anger, and emotional exhaustion, as discussed by Rubin and Wessely (2020).

The prevalence of loneliness during the pandemic period has been a subject of investigation, jointly undertaken by socialself.com in collaboration with the OECD, Cigna, YouGov, and The Kaiser Family Foundation in the United States. The findings indicate that a notable proportion of respondents aged 24-39 (34%) reported enduring and pervasive feelings of loneliness attributed to the pandemic's effects (Fig. 1).

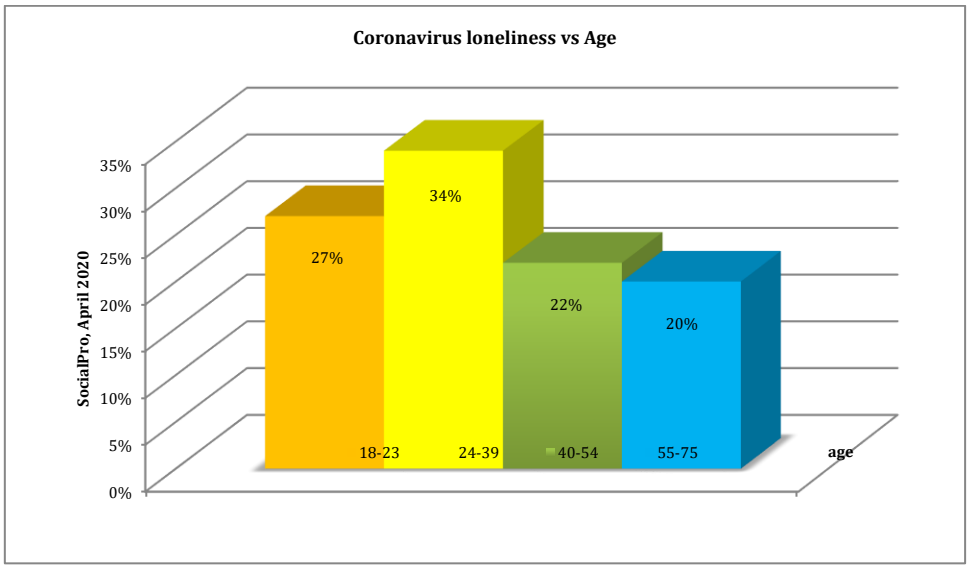


Fig. 1: Loneliness and the coronavirus/COVID-19 pandemic

The younger generation aged 18 to 23 felt less lonely during the pandemic (27%). Respondents in the post-productive age of 40-54 made up 22%, which points to a strong sense of loneliness at the time of the pandemic. The lowest share of age belongs to the older generation between the ages of 55 and 75 in the United States (Palgi et al., 2020). Research that during the pandemic period, older people felt less lonely compared to the younger generation. This can be explained by the fact that the elderly, especially seniors, generally lead a less social life and often live alone, so the isolation during the pandemic did not have a significant impact on their feelings of loneliness. On the other hand, the feeling of loneliness among the older population cannot be ruled out, which will be pointed out in more detail in the second chapter of the paper. Detailed information about the group of seniors and the environment in which they lived is absent in the given research. In this case, we appeal to the diversity of these groups of seniors and their perception of isolation, as the results may not be identical due to their different living conditions. Important factors that can point to differences in research are Seniors who live alone or with family members, seniors dependent on the help of others, or seniors who belong to long-term institutional care.

In accordance with the research conducted by the American psychologist and psychotherapist Kübler-Ross (2014), it is posited that individuals undergo analogous emotional and psychological responses when confronted with feelings of isolation and reactions to loss. Kübler-Ross (2014) asserted that individuals grappling with severe challenges tend to traverse a common spectrum of emotional experiences, marked by a sequence of stages characterized by their efforts to come to terms with the issue and to construct a semblance of security within their environment.

In her observations, Kübler-Ross (2014) contended that when comparing individuals who have endured the loss of a cherished close acquaintance with those experiencing the throes of social isolation, she discerned an unequivocal correspondence in their progression through the identical phases of psychological reaction to adversity. These stages are succinctly delineated as follows: shock, denial, panic-anger, bargaining, depression, and acceptance.

An analysis of the scientific literature carried out by American research psychologist Holt-Lunstad et

al. (2015) involving more than 70 studies and 3.4 million people indicates that social isolation declared for an indefinite period, increases the risk of premature mortality. This means, on average, an increased risk of 29%, and for those who lived alone 32%. The degree of influence of social isolation showed the greatest degree of influence on premature mortality compared to other risk factors, which are loneliness and living alone (Table 1) (Holt-Lunstad et al., 2015). It is necessary to take into consideration the fact that the pandemic itself impacted the number of deaths on a global scale. Social isolation was a necessary mechanism for stopping the spread of the disease, but its consequences may threaten the length and quality of life, especially for those living alone or depending on others for help.

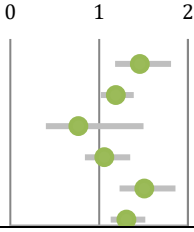
More recent research by Naito et al. (2021) also looked at differences in mortality risks associated with social isolation in different regions (Table 2). The death rate was higher among socially isolated people but with some differences between regions. The magnitude of the relationship between social isolation and mortality was greatest in South Asia, North America/Europe, followed by Africa and South America. The relationship was not significant in the Middle East and Southeast Asia.

Table 1: Weighted mean effect sizes (odds ratios) by type of measurement (Holt-Lunstad et al., 2015)

Measure	Number of studies	OR+	SE	95% CI
Social isolation	3	1.83	0.185	[1.27, 2.63]
Living alone	20	1.51	0.072	[1.32, 1.74]
Loneliness	8	1.49	0.105	[1.22, 1.84]
Overall	31	1.53	0.035	[1.38, 1.70]

Table 2: The mortality risk of social isolation (Naito et al., 2021)

		Social isolation		No social isolation	
	HR (95% CI) of social isolation	Number of events	Incidence rate (95% CI) (1000 person-years)	Number of events	Incidence rate (95% CI) (1000 person-years)
North America/Europe	1.46(1.18-1.81)	133	7.3 (6.1-8.6)	739	4.1 (3.8-4.4)
South America	1.19(1.02-1.39)	295	8.0 (7.1-9.0)	1338	7.0(6.6-7.4)
Middle East	0.77(0.40-1.50)	47	5.3 (3.9-7.0)	254	3.4(3.0-3.8)
Southeast Asia	1.06(0.84-1.35)	99	13.5 (11.1-16.4)	1375	11.6(11.0-12.3)
South Asia	1.51(1.23-1.86)	221	22.1 (19.4-25.3)	4001	12.2(11.8-12.5)
Africa	1.31(1.13-1.52)	329	24.6 (22.1-27.4)	651	18.9(17.5-20.4)



Other research points to the impact of long-term isolation on the human immune system. A state of harmony, peace, and balance is a key to strong immunity. When people lose this balance, they panic and become vulnerable. Professor Nicholas Carlton states that the inability to satisfy basic emotional needs is an important factor contributing to the development of schizoid disease, a personality disorder. He presents the finding that isolation disrupts a person's immunity at the cellular level. The specific reasons for this influence are not yet known, but the fact remains that people in isolation are just as exposed to the risk of disease as those who are socially active (Carleton et al., 2020). The above-mentioned studies draw attention to the risks of social exclusion of a person, which leads to emotional instability and disruption of the patterns of social behavior. As a consequence, problematic personality disorders may occur. Loneliness as a social phenomenon is not the only reason for all serious mental disorders, but it seriously worsens the disease symptoms. In people with pre-existing mental health conditions, the pandemic may even make things worse. The most vulnerable are socially anxious, depressed, lonely people who often have serious somatic problems after traumatic events. Symptoms that were previously suppressed can flare up, which requires additional care beyond what was sufficient prior to the pandemic. Therefore, during the COVID-19 pandemic, social isolation negatively affected people with mental disorders, who are particularly vulnerable to stress reactions. The pandemic, however, contributed to the manifestation of "destructive mental reactions" even in healthy people. We include among these individual manifestations, for example, phobias, a greater risk of susceptibility to bad habits, or a distorted perception of the real situation (Kindred and Bates, 2023).

Wilson et al. (2007) additionally documented that the perception of social isolation constitutes a risk factor with predictive value concerning cognitive decline and susceptibility to Alzheimer's disease. This phenomenon arises from the understanding that isolation exerts adverse effects on overall health, consequently resulting in the deterioration of executive functions, thereby hastening the aging process. Moreover, the interactions of individuals grappling with social isolation manifest a deleterious influence on their immediate social milieu, rendering them incapable of adequately fulfilling their fundamental requirements for communication and social engagement.

The ramifications of isolation, particularly concerning marginalized segments of the population, such as the elderly, underscore the imperative need for heightened scholarly attention and inquiry. This demographic warrants a more comprehensive examination concerning the effects of isolation on

their well-being and the potential strategies to mitigate its adverse consequences.

3. Isolation and seniors during the pandemic

Because of mandatory isolation during the pandemic, elderly people were seriously at risk. Many of them with increasing age lost various opportunities for an active social life and social communication. The circle of their loved ones, friends, and family members narrowed. According to the National Academy of Sciences in the USA, nearly a quarter of Americans over 65 have little social contact and rarely interact with other people. Further, 43% of the elderly population over 60 feel lonely (NASEM, 2020). Since the outbreak of the COVID-19 pandemic, elderly people faced additional vulnerability factors. The spread of the disease and the measures implemented led to consequences that directly threatened the lives of seniors. The elderly in particular were exposed to increased risk in conditions of quarantine and isolation without family members and without persons who provided social care. Seniors who lived in difficult conditions, such as refugee camps or settlements, were at particular risk because the spaces were overcrowded, thus increasing the risk of spreading infections. Furthermore, access to medical care, water, and sanitation services was limited and there were potential problems in accessing humanitarian support and aid. As was evident during the pandemic, not only did the virus itself endanger the lives and safety of the elderly; but the influence of a number of factors, such as the absence of social contact, access to social and health services, living conditions, and loneliness, rapidly affected the dignity and quality of life of seniors (WHO, 2020).

The elderly population is at greater risk for infectious diseases such as COVID-19. Ioannidis et al. (2020) compiled statistics of deaths from COVID-19 according to different age categories. According to the results shown in Fig. 2, the highest number of deaths falls to the group of seniors aged 80 and over, with the highest scores belonging to Belgium, the United Kingdom, France, and Canada. High mortality is also observed in the group of seniors aged 65 to 79 in all countries shown in Fig. 2. Statistics show that people under 40 and under 64 died less from COVID-19 than older age groups (except Mexico). Therefore, it is necessary to pay more attention to the introduced government measures, the impact of which was often ambiguous and could have affected the risk group of seniors even without it (Ioannidis et al., 2020).

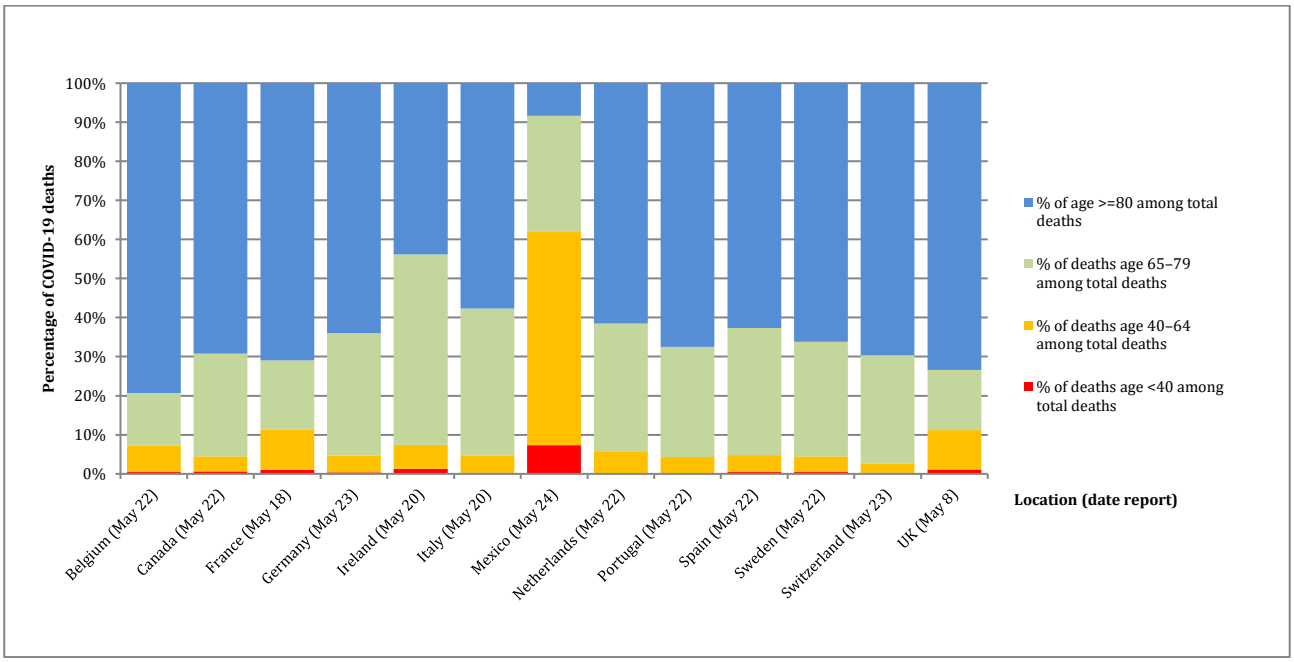


Fig. 2: Proportion of COVID-19 deaths in specific age groups

Limitations on freedom and movement, as well as physical distancing, can lead to the disruption of basic care for seniors and their support. The impact of physical social distancing, such as the obligation to stay at home in quarantine and the forced self-isolation regime during COVID-19, had an impact on the quality of life of older people. Even though similar measures were aimed at ensuring the safety of all people, it was further necessary to take the negative consequences into consideration, especially for vulnerable groups of the population. These risks would only be bolstered, if such measures are maintained over a longer period, especially for seniors dependent on help, support, and community services (UN, 2020).

The European Center for Social Care Policy and Research addressed the issue of loneliness and social isolation among older people in Europe. The data obtained from 2016 show that the issue of loneliness in the elderly population was relevant even before the start of the COVID-19 pandemic. On the basis of Fig. 3, we can identify a high variability in the

occurrence of loneliness among the elderly population within Europe. Older people in Eastern and Southern Europe report loneliness and fewer social contacts more often than in Northern and Western Europe. In 2016, more than 30% of older people in Romania, Bulgaria, and Greece reported that they often felt lonely. More than 20% reported the same sentiments in Hungary and Lithuania, as well as in Italy, Cyprus, Portugal, and France. In Slovakia, the proportion of respondents feeling lonely is 15%. The lowest proportion of older people reporting frequent loneliness was found in Denmark, Sweden, Finland, and Ireland.

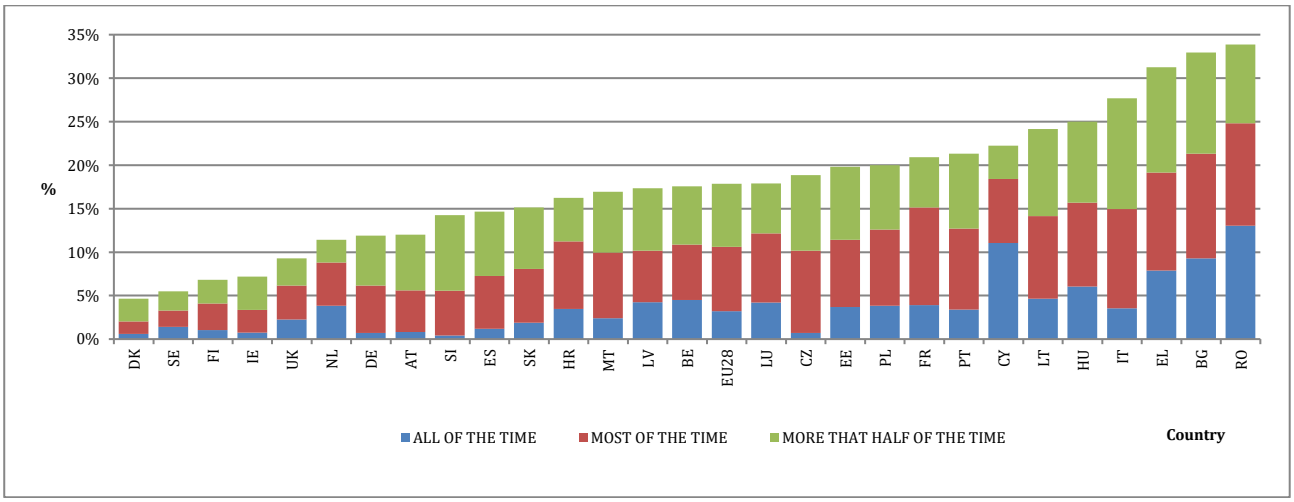


Fig. 3: Share of people aged 65 and older reporting feeling lonely (%)

Social isolation is defined as a "lack of quantity and quality of social contacts" and "includes few social contacts and few social roles, as well as the absence of mutually enriching relationships" (Pickering et al., 2023). Loneliness is "defined as a distressing feeling that accompanies the sense that a person's social needs are not being fulfilled by the quantity or especially the quality of social relationships" (Hawkley and Cacioppo, 2010). Although social isolation and loneliness can have both common and unique features, we are here using the term social isolation to refer to both concepts. On the example of a GOC (2021), which examined the impact of the COVID-19 pandemic on the lives of older people, we will describe the challenges faced by seniors, as well as examples of the problem of social isolation, which are organized into seven areas:

1. Respect and social inclusion: Experts expressed their fears of intergenerational tensions and social problems related to seniors during the pandemic. Isolation thus affected the social contacts essential for seniors and put up barriers between the older and younger generations (Ayalon, 2020; GOC, 2021).
2. Housing: Seniors living alone and in social facilities were identified as a risk group during the pandemic. Seniors living in non-state facilities showed similar vulnerability factors as those dependent on long-term care in state facilities, but they lived in an environment governed by social models of care with a higher level of autonomy (Zimmerman et al., 2020; GOC, 2021).
3. Community support and health services: A significant disruption to community support and health services occurred. While for some services remote support was already provided before the pandemic (for example, caregiver support programs), others switched to new models only later (GOC, 2021).
4. Transportation: Data indicate that the use of transit by seniors decreased during the pandemic. On the other hand, in many communities, there was an expansion of volunteer driver services and delivery programs to support elderly people in isolation. Some communities, however, reported a lack of volunteer drivers, resulting in gaps in service (GOC, 2021).
5. Communication and information: While data suggest that more than two-thirds of older Canadians use the Internet (Davidson and Schimmele, 2019; GOC, 2021), certain segments of the population, such as low-income older adults, people living in rural communities, seniors with health disabilities or cognitive impairments, may have encountered problems accessing and using the Internet. Therefore, telephone helplines, information lines, and telephone assistance programs for elderly people with a low level of knowledge of using technology were launched and improved.
6. Social participation: The pandemic disrupted the functioning of the community and recreational organizations. Seniors who could previously draw on the necessary services for socialization and participation in public affairs became isolated and could not realize themselves in these areas of life (GOC, 2021).
7. Outdoor spaces and buildings: Outdoor spaces can provide less risky places to safely socialize and engage in physical activity. It is necessary, however, to create strategies to maximize the availability of outdoor community spaces.

Strategies were also needed to permit seniors to return safely indoors (such as providing hand sanitizer) (GOC, 2021).

A broad range of interventions were developed to reduce social isolation and loneliness among seniors. Among them were social skills training, communities, support groups, and cognitive behavioral therapy. Creating more friendly communities for the elderly and improving access to care, information, and communication technologies helped reduce the effects of social isolation and loneliness. In addition, laws and policies aimed at combatting marginalization and discrimination can help strengthen social ties. In this context, the UN (2020), in collaboration with the WHO (2020), also focused on addressing social exclusion and loneliness as public health and policy issues through:

- Elaborating recommendations for introducing and expanding effective measures to reduce social exclusion and loneliness;
- Improving research and strengthening evidence about which interventions are the most effective and necessary;
- Building global coalitions to increase policy priority on social exclusion and loneliness among older people.

Similar programs are necessary and essential for the population that is to some extent dependent on assistance. Seniors and other marginalized groups of citizens cannot be excluded from social life and live on the margins of society, because complex care includes various areas of quality of life, not just physical health.

According to Santini and Koyanagi (2021), during the COVID-19 pandemic, loneliness among people over 50 years of age was significantly associated with worse anxiety symptoms, sleep problems, and worse depressed mood. The worsened feeling of loneliness was significantly associated with a particularly strong risk of worsening depressed mood (OR=10.11; 95% CI=8.06, 12.7) (Table 3).

Table 3: Associations of loneliness or worsened loneliness since the COVID-19 outbreak (independent variables) with any mental health problem or worsened mental health problem since the outbreak (dependent variables) among older adults (aged 50+ years old) in Europe (Santini and Koyanagi, 2021)

	OR	95% CI Any depressed mood	p-value	OR	95% CI Worsened depressed mood
		Loneliness			
Absent	1			1	
Present	4.37	3.91; 4,89	<0.001	0.99	0.83; 1.18
		Worsened loneliness			
Absent	1			1	
Present	2.23	1.90; 2,62	<0.001	10.11	8.06; 12.7

These data show that loneliness as such is not the only factor affecting the health of the elderly population. Isolation, which results in feelings of loneliness, increases the risk of developing mental health problems such as depression and anxiety.

A review of Sepúlveda-Loyola et al. (2020) "Impact of Social Isolation Due to COVID-19 on Health in Older People: Mental and Physical Effects" identified ten articles involving 20,069 participants from Asia, Europe, and America. Results based on pooled data from selected studies indicated an increased prevalence of anxiety ranging from 8.3% to 49.7%. Corresponding values from depression were noted from 14.6% to 47.2%. Also, the highest value related to sleep disorders was up to 36.4%. A total of 6 out of 10 selected surveys pointed to increased levels of psychological stress, defined as higher anxiety, depression, and loneliness, and poorer sleep quality during isolation during the COVID-19 pandemic. Modest effects of isolation on anxiety and depression were demonstrated in 3 surveys. Only one study showed that people had lower levels of anxiety during quarantine (Sepúlveda-Loyola et al., 2020). Sociodemographic characteristics were also compared in the cross-sectional study by Stolz et al. (2021) "The impact of COVID-19 restriction measures on loneliness among older adults in Austria." In a survey from early May 2020, respondents said they were negatively affected by aspects of the restrictions related to COVID-19. More specifically, 80.7% of respondents stated that they were negatively affected by the impossibility of visiting restaurants and bars, 72.4% by the impossibility of participating in social and cultural activities, 62.6% by limited freedom of movement, 57.8% by the impossibility of seeing children or grandchildren in person, 36 .0% by not being able to attend family celebrations. The average UCLA loneliness score was 4 and was evaluated based on a cross-sectional sample from May 2020. In comparison, the UCLA median score in SHARE Austria from 2013, 2015, and 2017 was 3 (on a scale of 3 to 9). It also shows (Fig. 4) the distribution of values on the UCLA scale at different time intervals. The research also pointed out that the lack of social contacts in conditions of isolation showed a significant reduction in the total score of loneliness compared to the period after the end of mandatory isolation (average value during isolation 56.6%, average value during the release of measures 45.8%). At the same time, the overall "feeling of loneliness" score also decreased after the measures related to isolation were canceled. An important variable in this research was the aspect of seniors living alone or living with relatives (Stolz et al., 2021).

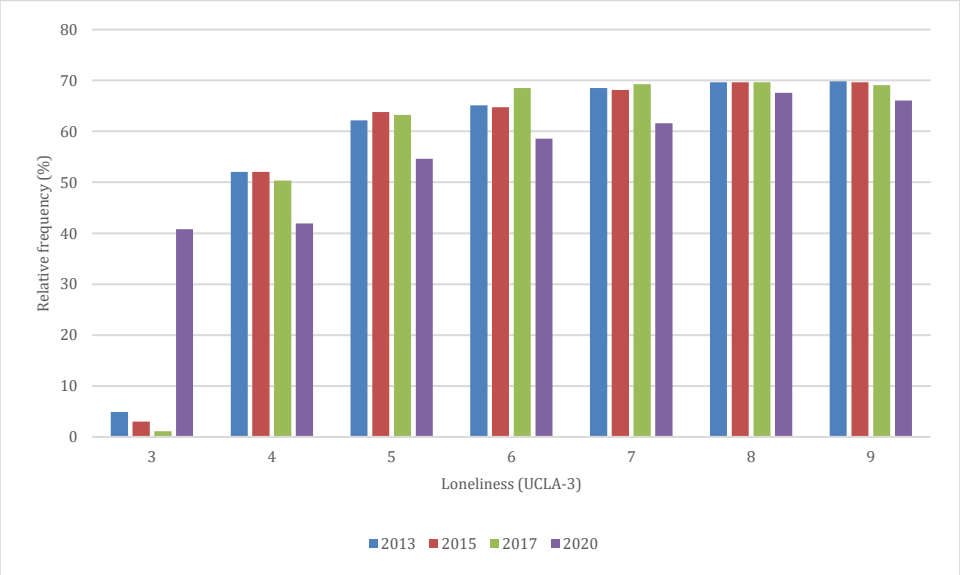


Fig. 4: The loneliness score on the UCLA scale

4. Results and discussion

Based on a comparison of three studies: Santini and Koyanagi (2021), Sepúlveda-Loyola et al. (2020), and Stolz et al. (2021) we concluded that the greatest impact of isolation during the COVID-19 pandemic on seniors was identified by aspects of loneliness, anxiety and depression. Two studies pointed to a tendency towards increased feelings of loneliness in conditions of isolation. Stolz et al. (2021) using the UCLA scale indicated a decrease in the total score of feeling lonely among seniors compared to 2013-2017 with a result of 4 to 3 in 2020. Sepúlveda-Loyola et al. (2020) based on several collected data, pointed to an overall increase in anxiety and depression among respondents during the mandatory isolation period. A total of 9 out of 10 surveys that were included in this cross-sectional study emphasized the increased aspect of anxiety and depression. According to Santini and Koyanagi (2021), based on a survey conducted, an increased score of depressive state leads to an increased feeling of loneliness during isolation. This research, along with that of Sepúlveda-Loyola et al. (2020), pointed to sleep disturbances in seniors leading to overall reductions in depression and anxiety scores.

Stolz et al. (2021) proved that the restrictive measures of COVID-19 in Austria led to an increase in the level of loneliness among seniors. However, unlike previous research, this one shows that the effects of isolation are short-term, and that's why strong negative consequences for the mental health of older adults are not expected in the future. However, the effects on loneliness and subsequent mental health problems could be more long-term and more severe if future restrictive measures are taken repeatedly or at longer intervals. Based on the above-mentioned studies, we emphasize the survey by Holt-Lunstad et al. (2015), which pointed out that the degree of influence of social isolation showed the greatest degree of influence on premature mortality, as a result of which the seriousness of the issue in need of solution and planning is emphasized strategies to protect and restore the quality of life of the elderly population in the future.

5. Conclusion

The article points to the fact that the consequences of the pandemic are risky not only for the worsening of people's physical health but also for its psychological effects. These often represent a greater threat to safety, life, and health than the disease itself. The primary psychological problems of the pandemic and the threat of infection with the COVID-19 coronavirus consist of at least two aspects:

- The development of panic and panic attacks, anxiety, fear, and depression during social isolation,
- Frustration (blocking) of primary human needs– the need for communication and social contacts.

According to Santini and Koyanagi (2021), Sepúlveda-Loyola et al. (2020), and Stolz et al. (2021), isolation had an impact on older adults in the form of worsening loneliness during the pandemic, which was associated with an extremely high risk of worsening depressed mood, anxiety symptoms, and sleep problems. Santini and Koyanagi (2021) and Sepúlveda-Loyola et al. (2020) referred to recommendations that further research is needed to address the consequences of increased loneliness during the pandemic on mental health and how it would be possible to alleviate loneliness and its consequences in the conditions of a pandemic or a similar crisis situation in the future. Findings in their survey show similar results as Sepúlveda-Loyola et al. (2020). According to Sepúlveda-Loyola et al. (2020), a multicomponent program involving psychological strategies and increased levels of physical activity was needed for this population. The survey was carried out using a comparison of 10

already conducted research that dealt with the impact of social distancing on mental or physical health. The main reported outcomes were the previously mentioned problems such as anxiety, depression and poor sleep quality. Stolz et al. (2021) concluded that the creation of support programs and strategies is necessary only in case of repetition of restrictive measures and over longer periods of time. The main findings of their survey highlighted increased loneliness in 2020 compared to previous years and that loneliness scores were higher during the lockdown phase compared to the subsequent easing phase, especially among seniors living alone. The data obtained indicate an escalation of loneliness across Europe since the outbreak of the pandemic, which is directly linked to a dramatic increase in the likelihood of worsening mental and physical health problems in seniors. That's why we emphasize further research that will be dedicated to solving this issue even after the pandemic period, with focusing on the longer-term effects of isolation on the quality of life of the elderly population.

The global community confronted an unprecedented and multifaceted crisis encompassing health, economic, and psychological dimensions. The pandemic permeated across diverse age cohorts, yet it markedly exposed the elderly to an asymmetrically heightened risk due to their preexisting compromised immune systems and heightened vulnerability to fatal outcomes from COVID-19. While individual-level interventions, such as social distancing and quarantine, proved effective in safeguarding the general populace and the most susceptible demographic groups, it is imperative to adopt a nuanced approach when implementing these measures for isolated elderly individuals. Careful consideration must be given to ensuring unfettered access to social support and caregiving services for this specific demographic. This underscores the exigency of acknowledging and addressing the unique challenges and requirements that the elderly confront during times of crisis, necessitating well-calibrated and targeted responses.

Beyond the physiological dimension, it is of paramount importance to scrutinize the manner in which society and governmental entities orchestrate the deployment of individual interventions concerning marginalized groups, including the elderly. Public discourse surrounding COVID-19, wherein the elderly are often singularly depicted as the most vulnerable segment, proves ineffectual and may inadvertently foment social stigma and perpetuate deleterious stereotypes about older individuals. Age-based discrimination can exert a direct impact on the elderly's access to essential services and commodities. Measures like social isolation, when not attuned to the unique needs and circumstances of numerous elderly citizens, can engender heightened social exclusion, protracted uncertainty, and compromised overall health.

Drawing on Canada's International Plan to Mitigate the Impact of Seniors' Isolation in 2020, it is imperative to accord special consideration to the elderly during emergency and critical situations. This imperative arises from the elderly population's heightened difficulty in securing requisite care from familial and social networks. Governments and international humanitarian organizations, such as the World Health Organization (WHO), are actively engaged in formulating programs designed to furnish support and care. This stems from the recognition of the pivotal societal role that older individuals fulfill.

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Compliance with ethical standards

Conflict of interest

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