

THE INFLUENCE OF COVID-19 ON THE OLDER ADULTS IN EUROPE - A SYSTEMATIC LITERATURE REVIEW

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ABSTRACT

This review focuses on exploring how COVID-19 has affected older adults, representing a significant global concern for public health and societal dynamics. Through a systematic analysis of 54 studies, we identified four key themes: social challenges, public health implications, psychological aspects, and demographic shifts. These themes were derived from an in-depth examination of the literature, shedding light on the multifaceted impact of COVID-19 on older adults. The key findings from the literature review highlight that during lockdowns, older adults experienced heightened loneliness, struggled to care for themselves, and became isolated from their families and friends.

Keywords: COVID-19, older adults, public health, social issues

INTRODUCTION

“The first case of novel coronavirus 2019-nCov have been reported in Europe on 24th of January 2020“ (Internet 1). On March 11, 2020, The World Health Organization declared severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) as a pandemic (WHO, 2020). According to World Health Organisation data until the 2nd of May 2022 in Europe are 216,346,110 confirmed cases of coronavirus, which is more than 40% of all confirmed cases in the world. Since the pandemic started, 1,994,452 people died from COVID-19 in Europe (Internet 2).

Scientists from all spheres of science have been acting toward the effect of COVID-19 since the pandemic started. More than half of Europe’s population has been vaccinated (Internet 2). Vaccines are supreme medicine for the prevention of infectious diseases (Rappuoli et al., 2014). World Health Organisation (WHO) indicates that the population belonging to the risk group includes a cohort of 60+ years and/or with comorbidities (WHO, 2022). According to the United Nations (2019), all those aged 60 or 65 years and over are considered older adults. The number of older people is constantly increasing.

The pandemic has affected the sustainability of the health care system, which has led to an increase in the number of older adults in need of health services, and the lack of nurses is a serious problem (Grah et al., 2021). Most European countries have introduced closures to prevent the spread of the SARS-CoV-2 virus. Some restrictions applied exclusively to the elderly population. Most older adults live alone, do not use social networks significantly and during the lockdown, they had less contact with their family and relatives. Every fifth inhab-

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itant in Europe is 65 years old or over (EUROSTAT, 2020). The physical and mental health of the elderly is at risk due to physical and social distancing during the lockdown measures (Garner et al., 2022). It is foremost to deal with these issues because we need to manage the future. Considering that depopulation and the aging of the population in Europe are present today, we must work to improve the quality of life of the citizens (Sekulić, 2022). European countries are more or less successfully coping with the coronavirus pandemic, which has damaged the health of a wide range of people. The introduction of rigorous measures has triggered stress and has affected the institutional trust of citizens (Uzelac et al., 2021).

This literature review concentrates on scholarly articles released from 2020 to early 2022, delving into the repercussions of COVID-19 on older adults. Our objective is to synthesize the findings from prior research, pinpoint any existing gaps in understanding, and offer insights into the extent to which older adults have been considered in discussions about COVID-19. Our focus is specifically on evaluating the impact of COVID-19 on older adults within European nations.

METHODOLOGY

This section delineates the methodology used to identify and analyze literature concerning the impact of COVID-19 on older adults. The procedure encompassed the systematic identification, collection, review, and analysis of scientific articles.

To source relevant scientific articles, the academic research database WoS (Web of Science) served as the primary tool. Specifically, original articles, review articles, and early-access publications were considered. The search strategy, inspired by the recommendations of Pullin and Stewart (2006), aimed for precision and specificity, utilizing “Older adults” as the principal keyword phrase along with “COVID-19,” ensuring relevance to the primary focus of this review. These phrases were used conjointly to yield results pertinent to our goals, primarily targeting studies addressing social challenges and public health concerns during the pandemic. Each step of the process was meticulously recorded and visualized in the PRISMA flowchart (Figure 1), which illustrates the number of articles at each stage, including those excluded due to irrelevance. The study scope encompassed research conducted from the onset of 2020 until the 9th of February 2022.

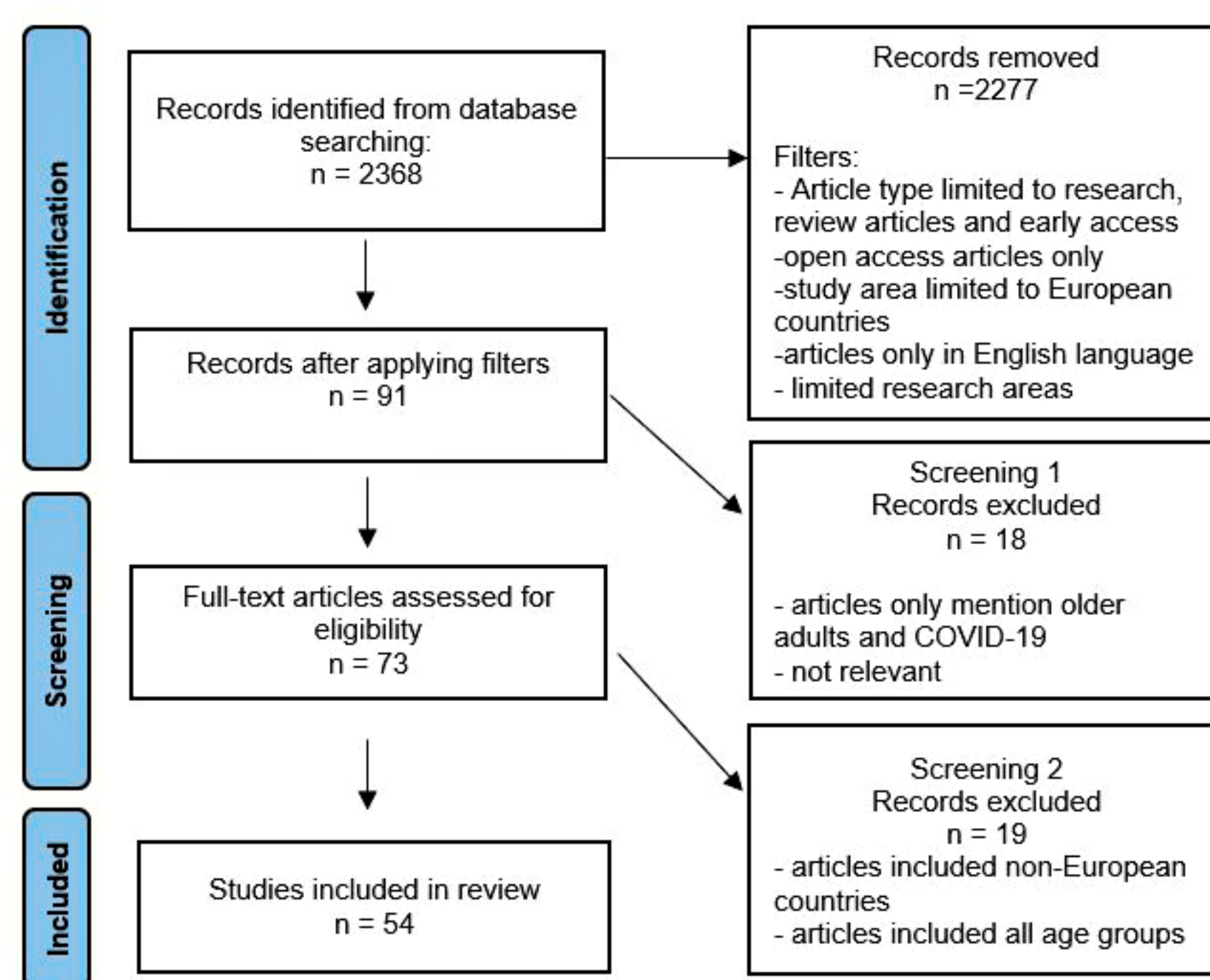


Figure 1. The PRISMA scheme of the article flow at each stage based on initial keywords and the WoS database

Source: Moher et al. 2009

The literature selection process followed four distinct steps:

1. Initially, 2368 articles were retrieved from the WoS database.
2. In the second step, the search was refined by filtering for specific document types—research articles and review articles (including early access) that were open-access and conducted in English. The focus area was narrowed down to European countries within research domains such as public and environmental health, occupational health, health care services, sociology, social sciences, family studies, social issues, social work, geography, and psychology. This stringent application resulted in 91 relevant records.
3. Subsequently, meticulous screening of titles and abstracts among the 91 articles was undertaken to discern those mentioning older adults and COVID-19 but not extensively addressing the topic. This process led to the exclusion of 18 articles, leaving 73 articles deemed relevant for further consideration.
4. In the final step, a thorough examination of the full texts of these 73 articles was conducted, resulting in the inclusion of 54 articles that sufficiently addressed the impact of COVID-19 on older adults within the predefined research scope.

RESULTS AND DISCUSSION

After a meticulous analysis involving identification, screening, and comprehensive review of full articles, four distinct domains about the influence of COVID-19 on older adults were discerned. These areas are social issues, public health, psychology, and demography. The number of studies addressing the impact of COVID-19 on the elderly population is increasing. Generally, the pandemic has affected all spheres of life on earth but most affected are elderly persons.

The research landscape regarding COVID-19's impact on older adults shows a rising trend in study volume (Figure 2). Initially, studies primarily centered on public health and have consistently maintained significance. Notably, social issues have gained prominence as a crucial concern during the pandemic, ranking second in research focus. Psychology has emerged as a growing area of interest in recent articles, while demography represents another noteworthy domain concerning the impact of COVID-19 on older adults (Figure 3).

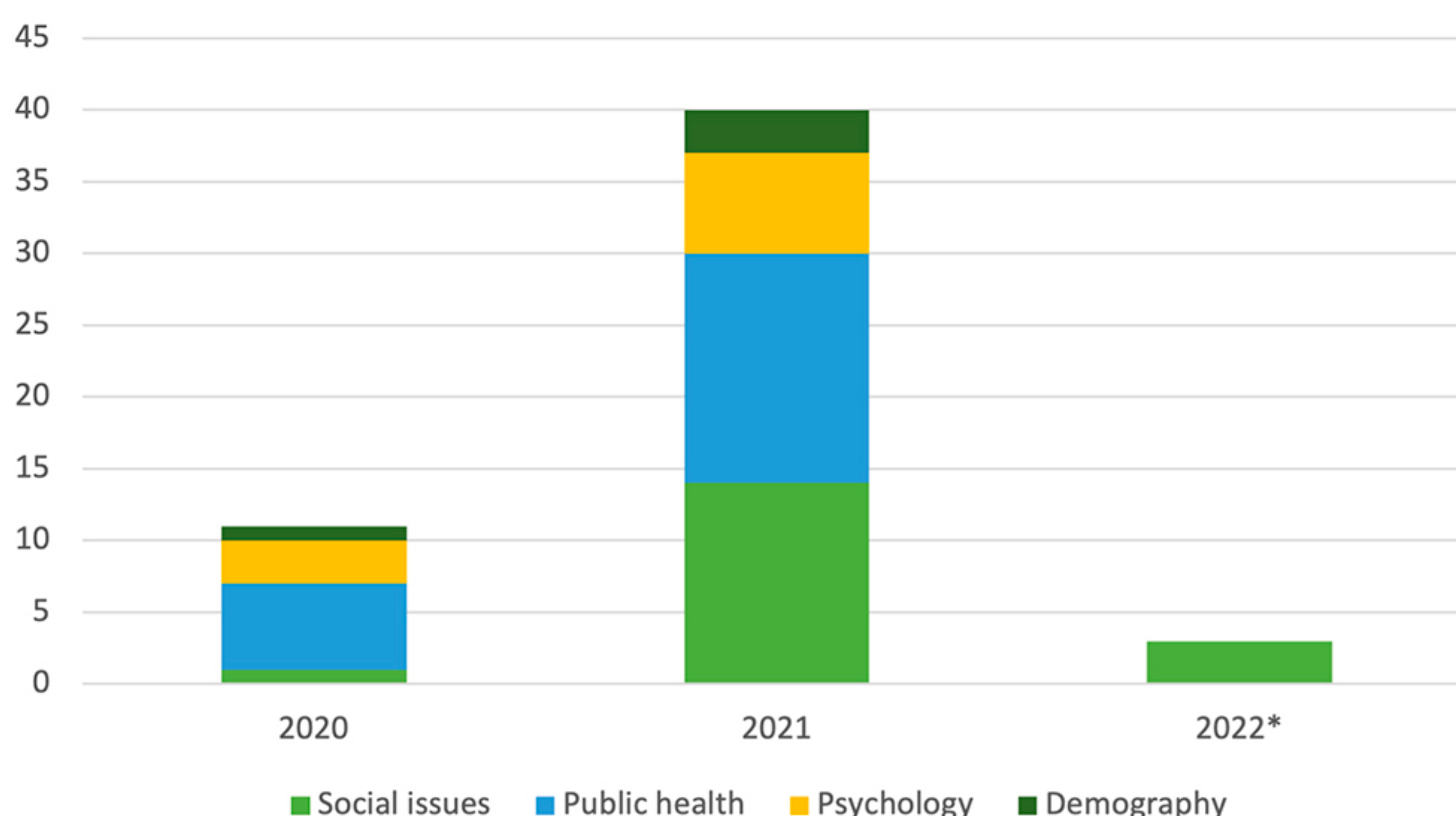


Figure 2. The classification of research articles encompasses the review

**Contain articles published prior to 09 February 2022*

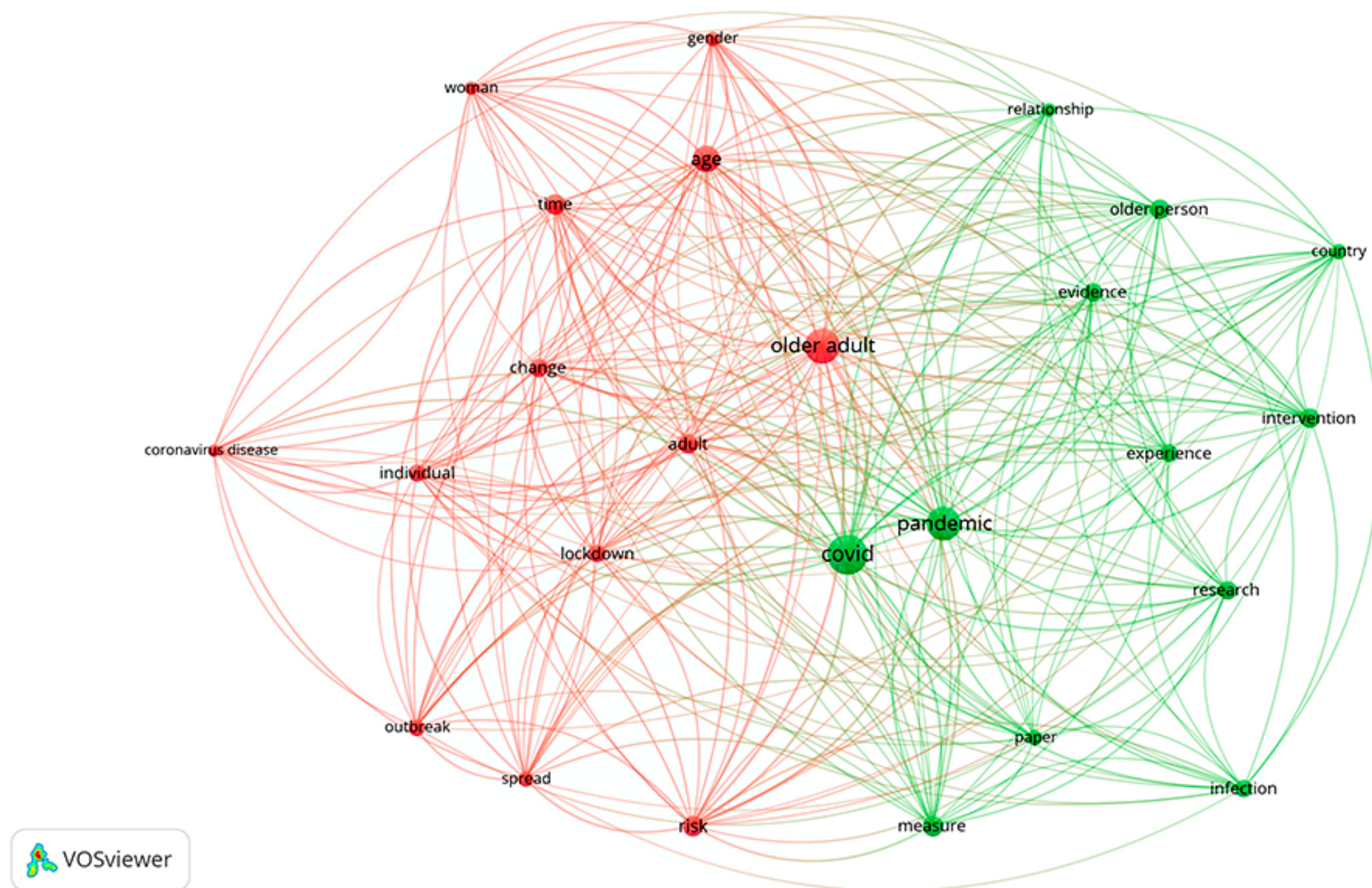


Figure 3. Percentage dissemination of the articles reviewed by the study area

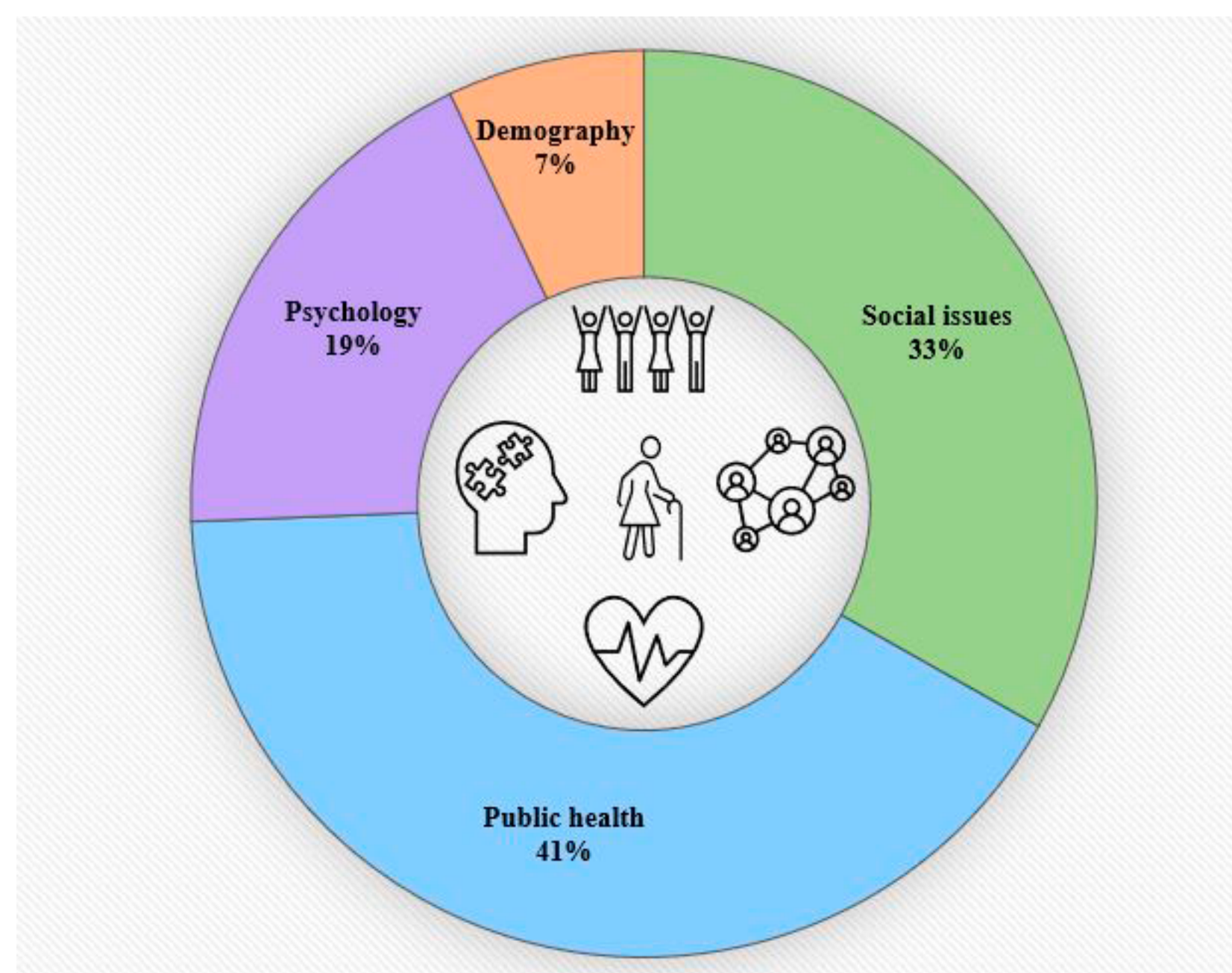


Figure 4. Analysis of selected keyword conjunction in determine studies from Web of Science (WoS)

We analyzed the keyword analysis for this literature review using VOSviewer software (1.6.17). VOSviewer is used to analyze and visualize bibliographic data. It provides a clear overview of the studies focused on COVID-19 (Hamidah et al., 2020).

By examining the keywords (Figure 4) we determine that the term “COVID-19”, is primarily incorporated with the expression “covid” and “pandemic”. The expression “older adults” is frequently combined with the terms “age”, “time”, and “risk”.

Social issues

The pandemic affected society and social relations. Older adults are detached in almost all European countries, classified in the group of people at higher risk of getting ill and a higher risk of death from COVID-19. In a way, they have declined movement, regular activities, seeing friends and family, and going to the doctor, which leads to age discrimination and deepens the gap between the younger and older generations. It is foremost to cultivate intergenerational solidarity in such times of crisis so that the distressed can defeat more easily. Society excluded older adults cause of the COVID-19 pandemic (Seifert, 2021).

The use of modern digital technologies can help overcome obstacles such as physical distance and isolation during a pandemic. However, this type of help is not available to everyone, and an additional barrier is that older adults do not know how to use digital technologies. Healthcare workers have a notable role, but all of us have to take care of the older adults and provide support even after the end of the COVID-19 pandemic. We still do not know the consequences of this crisis period will appear. Older people are generally less or do not know how to use social networks, modern digital and information and communication technologies, or do not have access from home. Locking during the onset and spread of the pandemic was recommended or even mandatory in most European countries. Measures of physical distancing have greatly affected the social life, well-being, and psyche of the elderly population. Garner and associates (2022) examined the impact of COVID-19 on the well-being and quality of life of the older adults in Spain and England at the time of the lockdown. The lockdown influence reduces physical activity and social interaction with the older adults, but to a different extent depending on the degree of restrictiveness of the measures. During the lockdown in the Netherlands, the older adults used digital technologies to maintain contact, but they still lacked relatives (Kremers et al., 2022). Healthcare professionals in nursing homes in western Norway encouraged users to use digital tools and technologies to communicate with their loved ones during COVID-19 (Badawy et al., 2022). Health workers carry a huge burden during the coronavirus pandemic, in the daily confrontation with fatalities. Their support and care for the elderly are eminently important. Rolandi and associates (2020) investigated the level of loneliness in older people in Milan (Italy). Older adults familiar with using social networks before the coronavirus pandemic reported a lower degree of loneliness and forgetfulness on the part of family and friends than those who did not know how to use social networks during the lockdown. Finland's oldest population (80+) has almost fully complied with the recommendations to prevent the spread of COVID-19. The consequences of distancing the oldest-old members of the community were different. They did not want to use modern technologies to compensate for the lack of physical presence of friends and family. Some of them still met with their relatives, but always outside. Some of them lost family members or friends, which had a significant impact on their lives (Kulmala et al., 2021).

Gallistl et al. (2021) indicate the need to help the older adults who were isolated at home more than others during the pandemic. Communication via telephone, Internet, and numerous social networks is the only link with relatives in these conditions of isolation. However, there are several problems with a lack of skills (cognitive or physical), access to the Internet, and knowledge of the use of social networks. Great support and help are needed for this group of older adults, both during the pandemic and following. More than 90% of older adults home users in Austria do not have internet access. Lack of physical contact with the family leads to loneliness. In March 2020, a curfew was established for all residents 65 and above in Serbia. Gazibara and associates (2021) explored the collective consciousness of the elderly months after the end of curfew and lockdown. Although most of the elderly reconciled with the fact that it was necessary to remain locked in their homes to prevent the spread of the pandemic (because they belong to the most at-risk group of the population), they still felt uneasy and very empty due to not being able to see their loved ones. During the first wave of the COVID-19 pandemic, ageism increased in Spain. Respondents in Spain reported less physical activity, less healthy eating, described their subjective opinion of health as good or very good (even a few who were positive for the virus), increased anxiety and fear of infection, poor sleep, relationships with family remained the same, some even improved their relationships, many were worried about the future, the economy, politics, and business (Fernandez-Ballesteros & Sanchez-Izquierdo, 2021).

Several people were outraged and considered such measures unreasonable. Tomaz and associates (2021) indicate that social distancing influenced reducing the quality of life of older adults and significantly increased feelings of loneliness during the coronavirus pandemic in Scotland. Wetzel and associates (2021) indicate that older adults in Germany in 2017 were half as lonely as in 2020 (the beginning of the coronavirus pandemic). The tool they used most to improve social welfare was the smartphone. A positive impact on improving the well-being of older adults can increase the intensive use of social networks.

The organization ALONE was founded 45 years ago due to the lack of care for the elderly who are alone. This organization is engaged in volunteer work, socializing, and caring for the elderly (Internet 3). During the coronavirus pandemic, volunteers switched to remote communication with their older friends at the suggestion of the Irish government. The befriending approach is significant for the elderly in Ireland, especially during the pandemic due to the possibility of contact by phone, food supply, and reduction of loneliness. Holton et al. (2021) indicate that support services need to be assimilated to all users in the coronavirus pandemic. The results of interviews conducted in northern Italy indicate that the use of modern technological devices by older adults who have been isolated has contributed to maintaining quality relationships with their loved ones and has significantly contributed to reducing loneliness (Matteucci, 2021). Unlike other authors who examined the impact of the coronavirus pandemic on the quality of life of the elderly Koivunen et al. (2021) concluded that the older adults in Finland managed to maintain a high level of quality of life during the pandemic, despite measures of restriction and social distancing. Osborne & Meijering, (2021) do not suggest that closure was a negative phenomenon in the lives of older people. If only they had experienced it as a time for rest.

Particular attention should be focused on the support of older adults during the coronavirus pandemic. Due to the restrictions on the movement of older adults during the pandemic and the impossibility of numerous health examinations, the elderly also had limited oral health, all of which affected the quality of life of the population (Weber et al., 2021). Neighborhood solidarity is the most valuable to the elderly at the beginning of the coronavirus pandemic in the UK. Due to the UK government's recommendation that the elderly do not leave their homes, they felt burdened because others had to bring them even food necessities (Brown & Reid, 2021).

Table 1. Articles of social issues established in this review

Authors	Country	Area of study
Badawy et al., 2022	Norway	digital technologies, communication
Seifert, 2021	Switzerland	social isolation
Gallistl et al., 2021	Austria	social networks, loneliness
Osborne & Meijering, 2021	Netherlands and England	stillness
Kremers et al., 2022	Netherlands	digital technologies
Holton et al., 2021	Ireland	befriending service
Garner et al., 2022	Spain and England	quality of life
Rolandi et al., 2020	Milan (Italy)	loneliness, social networks
Tomaz et al., 2021	Scotland	loneliness
Gazibara et al., 2021	Serbia	social isolation
Kulmala et al., 2021	Finland	social cohesion
Wetzel et al., 2021	Germany	well-being
Koivunen et al., 2021	Finland	quality of life
Matteucci, 2021	North Italy	social health, well-being
Brown & Reid, 2021	United Kingdom	solidarity
Fernandez-Ballesteros & Sanchez-Izquierdo, 2021	Spain	social health, ageism
Weber et al., 2021	Leipzig, Germany	oral health related quality of life, social support

Public health

Public health undertakes the interest of all societies at the time of the outbreak and spread of the COVID-19 pandemic. At the time of the pandemic in Italy, the elderly (also most often suffering from chronic diseases) were advised to stay at home and avoid physical contact with family and in general. Due to the lack of connection between family members and loved ones, older adults (especially those with poor health) were not able to use the therapy regularly, because they could not go to the doctor for a prescription for medication. If patients do not take therapy regularly, their health can worsen. Most doctors were in COVID clinics day and night, so access to health services was disabled for all who were COVID-19 negative (Degli Esposti et al., 2020). Perez et al. (2021) examine the older population about the level of loneliness moreover the level of physical activity during the lockdown in the first months of the pandemic in Spain. Regard that the elderly reported a lower level of physical activity and a higher level of loneliness to withstand the pre-pandemic period. Rogers et al. (2020) conducted a study in the United Kingdom on the impact of COVID-19 closure on the physical activity of older adults with serious health problems. A quarter of older adults reported lower levels of physical activity than before the measures to restrict movement. Older adults with morbidity are at higher risk for deteriorating health due to the spread of the SARS-CoV-2 virus and have often been isolated from the rest of society, affecting both physical and mental health. It is necessary to encourage older adults to be physically active, even during the periods they spend in their homes. It is needed to stimulate older adults to be physically active to preserve their health through television and social media (Wang et al., 2021). During the COVID-19 pandemic, older Finns reported a significantly lower level of physical activity they performed outside the home. During the pandemic, they just did exercises and went grocery shopping (Portegijs et al., 2021).

Internet use during the Coronavirus pandemic has affected the quality of life of older adults in England in two ways. Older people who used the Internet for communication purposes reported an increase in their quality of life, while those who used the Internet to find out about COVID-19 reported reduced quality of life and the appearance of depression. Older adults should be instructed about the importance of communication via the Internet (Wallinheimo & Evans, 2021). McGarrigle & Todd (2020) found that mHealth and eHealth interventions minimally contribute to improving the physical activity of the elderly in the short period of closure due to the COVID-19 pandemic. Comparing the attitudes of all categories of the population in Madrid, de la Vega et al. (2020) found that older adults is much more responsible when it comes to compliance with measures to prevent the spread of COVID-19. However, the negligence of the younger generations can negatively affect the health of the elderly. Despite greater responsibility and physical isolation, and respect for measures, the older adults is still the most endangered and are mostly infected. Marston et al. (2020) propose a “Concept of Age-friendly Smart Ecologies (CASE)”. Digital technology has an influential role during the COVID-19 pandemic. In the era of population aging, ecological cities adapted to all generations are the future. The Dutch used a mobile application to track individual contacts positive for the Sars-Cov-2 virus. The goal of using the application is to prevent contact with COVID-19 positive individuals. Older people use smartphones less and know less about modern technologies in comparison to younger generations, and on the other hand, they make up the category of the risk population when it comes to infection with COVID-19. About 45% of Dutch people over 75 used the COVID-19 Contact Tracing App (Jonker et al., 2020). In the United Kingdom, they used the COVID-19 Tracking Application. The white population half accepted the use of the app, while others were more skeptical and used the app to a lesser extent. Respondents who did not want to install the application or who deleted it raised doubts about its use of the application (Dowthwaite et al., 2021). The use of the digital health platform has enabled doctors and nurses to keep in touch with patients during the COVID-19 pandemic and to do their work remotely. Although this system is still in its infancy, medical staff and patients have equally well accepted the new health care system (Lapao et al., 2021).

Due to the high risk of death and the high rate of people suffering from COVID-19, the older adults need more protection than others. The only way that has been found so far against the Sars-CoV-2 virus is a vaccine. The vaccine prevents the development of more severe forms of the disease and prevents deaths (Andryukov & Besednova, 2021).

Lutomski and associates (2021) examined the quality of life of older adults during the COVID-19 pandemic in Poland. They found that in more than half of older adults during the pandemic, due to numerous restrictions in the form of lack of socializing with friends, and family, shopping, lack of physical activity, anxiety, and depression, quality of life declined significantly.

Older adults in Norway were concerned about the coronavirus pandemic (Schou-Bredal et al., 2021). Bell and associates (2021) discovered that the negative factors caused by the pandemic have a negative effect on the well-being and loneliness of the elderly population.

In a global pandemic, when the health system of all countries is overloaded, there are even wider problems with the regular health care of older adults who live far from big cities and hospitals. The solution would be possible in telemedicine or remote treatment (Zeghari et al., 2021). Access to information and communication technologies is essential for remote treatment (WHO, 2010). The problem arises when the older adults do not have adequate equipment and/or do not know how to use it. Zeghari et al. (2021) believe that the solution to this problem is a mobile unit equipped with telemedicine service, which could reach even the most remote areas. Through a multidisciplinary analysis of data obtained by in-depth interviews of the elderly population in Austria, the Netherlands, and Italy, Santini et al. (2021) explained the interaction between the use of ECAs (embodied conversational agents), retirement, and the aging process. This is one of the first studies to consider behavioral changes in the use of ECA during the coronavirus pandemic. “Embodied conversational agents (ECAs) are computer interfaces represented in human or animal bodies. Embodied conversational agents’ expertise in face-to-face conversation, including the ability to produce and respond to verbal and non-verbal communication” (Cassel et al., 2000, 29).

Gonzalez-Touya et al. (2021) point to the trouble of lack of health care, especially in elderly patients who are not emergencies during a pandemic. Delayed examinations can lead to a deterioration in many health conditions. The consequences will be present in all European countries, a significant impact will be exerted on the poorer population, which could unquestionably endanger the quality of life of the elderly throughout Europe.

Older adults in Switzerland adhered to all public health measures. The older adults who suffer from some diseases adhered the most (Bearth et al., 2021). Even when there are no serious threats in the form of a pandemic, older adults are isolated to some extent. Efforts towards social and familial integration are essential, as isolation should be avoided. Prioritizing the well-being of the elderly and maintaining connections, particularly during a pandemic, is of utmost importance. Embracing the opportunities presented by 21st-century technology is crucial, offering potential solutions to address these challenges, both during the pandemic and beyond.

Numerous studies have focused on the effects that COVID-19 leaves on sick or healthy adults. However, few studies deal with the resilience of the elderly. Weitzel et al. (2021) investigated the resilience of older adults during the coronavirus pandemic in Germany. 18.7% of the elderly estimated that they have high resilience, which indicates the ability of the older generation to adapt to the existing calamity. Guastafierro and associates (2021) concluded that the risk perception of the elderly in Italy was lower than expected.

Table 2. Articles of public health established in this review

Authors	Country	Area of study
Andryukov & Besednova, 2021	European countries	vaccination
Weitzel et al., 2021	Germany	resilience
Bearth et al., 2021	Switzerland	risk perception
Perez et al., 2021	Spain	physical activity
Bell et al., 2021	Warwickshire County (UK)	wellbeing
Santini et al., 2021	Austria, Netherlands and Italy	active ageing
Gonzalez-Touya et al., 2021	European countries	healthcare
Dowthwaite et al., 2021	United Kingdom	modern technologies
Degli Esposti et al., 2020	Italy	healthcare

Authors	Country	Area of study
Lapao et al., 2021	Lisbon, Portugal	modern technologies
Jonker et al., 2020	Netherlands	mobile application
Lutomski et al., 2021	Poland	quality of life
Marston et al., 2020	England	digital technologies
Rogers et al., 2020	United Kingdom	physical activity
Zeghari et al., 2021	Digne-Les-Bains, Netherlands	telemedicine
Wallinheimo & Evans, 2021	England	healthcare, quality of life
de la Vega et al., 2020	Madrid, Spain	morbidity
McGarrigle & Todd, 2020	not specified	healthcare, physical activity
Wang et al., 2021	United Kingdom	healthcare
Portegijs et al., 2021	Finland	physical activity
Schou-Bredal et al., 2021	Norway	concerns
Guastafierro et al., 2021	Lombardy Region, Italy	risk perception

Psychology

Measures to prevent the spread of the SARS-CoV-2 virus have affected the mental health of the elderly and led to feelings of loneliness and depression. Seifert & Hassler (2020) investigated the subjective feeling of loneliness in the elderly in Switzerland before and during the Coronavirus pandemic. Loneliness increased after the introduction of Government measures on physical distancing, and with the decline of measures, the elderly population felt less lonely. Low-income individuals living alone felt the highest degree of loneliness. A similar study was conducted in Austria (Stolz et al., 2021). The duration of segregation has contributed to the growing degree of loneliness among the elderly in Austria (Mayerl et al., 2021). The authors state that loneliness in the elderly population increased during the lockdown but believe that these effects are temporary. TV-Assist-Dem proved to be a good form of health and psycho-social support for the elderly with lenient cognitive damage during the coronavirus pandemic (Goodman-Casanova et al., 2020). “It exploits TV-based transmission of data and video interactivity between health professionals, patients, caregivers, and family members and provides services like reminders, health monitoring, and cognitive stimulation” (Internet 4). Studer-Luethi et al. (2021) researched the impact of the “brain coach” program on the cognitive health of the elderly in Switzerland during the pandemic. The program encourages the growth of cognitive health and promotes active living and well-being. This program provided the necessary support and assistance and reduced the feeling of lack of social and physical closeness during the pandemic. Another research shows that digital technology has a minor effect on improving older people the mental health (Skalacka & Pajestka, 2021). The lack of contact with their loved ones negatively affects the quality of life and increases the level of stress and bad mood in older adults who have a certain level of dementia (Goodman-Casanova et al., 2021).

Measures to combat the spread of the pandemic (which were milder than in the rest of Europe, as they were reduced to recommendations, and there was no mandatory strict closure in 2020) did not contribute to deteriorating mental health and quality of life of older adults in Sweden (Kerstis et al., 2021). Gustavsson & Beckman (2020) surveyed the elderly at the beginning of the pandemic outbreak in that country although the Swedish government did not introduce closure measures, the elderly still distanced themselves, closing in homes. During the closure, most of them felt depressed and had sleeping trouble. Measures to prevent the spread of the COVID-19 pandemic have hurt the emotional development and quality of life of older adults. Digital technologies have had a positive impact on alleviating loneliness and lack of contact with loved ones (Llorente-Barroso et al., 2021).

Contradictory research results related to the impact of digital technologies on the loneliness and mental health of the elderly can be explained by social differences in different European countries: differences in neighborly relations and closeness, family size, number of household members and their mutual relations, and quality of life before the start of the pandemic.

Table 3. Articles of psychology established in this review

Authors	Country	Area of study
Llorente-Barroso et al., 2021	Spain	modern technologies, loneliness
Skalacka & Pajestka, 2021	EU 27	mental health, modern technologies
Mayerl et al., 2021	Austria	mental health, loneliness
Seifert & Hassler, 2020	Switzerland	loneliness
Gustavsson & Beckman, 2020	Sweden	mental health
Goodman-Casanova et al., 2020	Spain	mental health, social support, healthcare
Studer-Luethi et al., 2021	Switzerland	cognitive health
Stolz et al., 2021	Austria	mental health
Goodman-Casanova et al., 2021	Malaga, Spain	mental health, quality of life
Kerstis et al., 2021	Sweden	mental health

Demography

Mortality is a fundamental factor in population growth. COVID-19-related mortality has been disputed in many European countries. Vila-Corcoles et al. (2021) indicated the existence of a substantial percentage of elderly deaths in Spain that are not related to COVID-19. A certain proportion of the elderly suffered from several diseases, and the PCR test appears to be negative. According to Neumann-Podczaska et al. (2020), 40% of elderly COVID-19 patients in Polish hospitals who succumbed to the virus had comorbidities.

Older people experienced high levels of discrimination during lockdown due to the Coronavirus pandemic (Kornadt et al., 2021). “Ageism is defined as stereotypes, prejudice, or discrimination against (but also in favour of) people because of their chronological age” (Ayalon, Tesch-Römer, 2017, 1). Ageism was increased during the pandemic. Ageism is presented in the form of negative stereotypes about older adults (Bengston, 2014). The negative impact is identified in the quality of life and health quality of older adults (WHO, 2021). Numerous messages about the vulnerability of the elderly and the representation of the elderly as a burden. That can be one of the side effects of a pandemic, and after the pandemic is over, we must take care to treat the elderly appropriately. The pandemic has exacerbated the quality of life of the citizens of Ireland and Austria. In interviews with older adults, Hopf et al. (2021) found that the elderly are keenly aware of the discrimination they face in society.

Table 4. Articles of demography established in this review

Authors	Country	Area of study
Vila-Corcoles et al., 2021	Southern Catalonia, Spain	mortality
Hopf et al., 2021	Austria and Ireland	ageism
Kornadt et al., 2021	Luxembourg	ageism
Neumann-Podczaska et al., 2020	Poznań, Poland	mortality

CONCLUSION

Older adults make up a large part of Europe's population, so it is relevant to investigate the impact of the COVID-19 pandemic on that population. Public health and social protection measures should be the center of attention in mitigating the effects of the pandemic.

Technology is useful when we are forced to be separated from other people for health reasons. However, the "digital abyss" may be due to socioeconomic status, age, geographical location, and cultural factors that must be considered (Carter et al., 2018). Solidarity between generations should exist and especially be of great importance even in times of crisis.

The impact of the COVID-19 pandemic on Europe's older adults population has been substantial. A considerable number of older adults contracted the virus, with some cases resulting in death. The key findings from the literature review highlight that during lockdowns, older adults experienced heightened loneliness, struggled to care for themselves, and became isolated from their families and friends. In Northern and Western European countries, specific mobile aid organizations and volunteer associations were available to assist the older adults during this challenging period.

The limitation of relying solely on the Web of Science database should be addressed in future research by considering a broader range of data sources. For future research, it would be valuable to explore the specific outcomes after the conclusion of the pandemic. Only then we will be able to speak with certainty about the influence and consequences.

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