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# REPERCUSSION OF THE COVID-19 PANDEMIC ON THE MENTAL HEALTH OF THE ELDERLY POPULATION

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**Abstract:** Coronavirus disease 2019 (COVID-19), which originated in Wuhan, China, took less than two months to evolve into a public health threat. During the COVID-19 pandemic, many seniors may experience a new or higher level of loneliness due to disruptions in personal social activities, often due to pre-existing chronic illnesses, visual or hearing impairments, or caused by dysfunction. In the context of the pandemic and social isolation, the mental health of the elderly suffers multiple consequences, therefore, this study aims to analyze the impact of social isolation in the elderly on the effects of the COVID-19 pandemic on the mental health of the population. As for the search strategy, a search was performed in the PubMed database, using the following syntax: elderly with covid 19 AND mental health AND social isolation AND incidence. After the search, a total of 79 articles were found, of which 48 were unanimously excluded by the authors. Then, 31 articles were read in detail, excluding theoretical articles (N = 9), and articles that did not provide epidemiological data (N = 17) on the incidence of the variables of this study. After the above procedure, 3 articles were selected for systematic review. The study's key findings showed that during the peak of the COVID-19 pandemic, older patients with restrictive lockdown measures scored significantly higher on scales of total anxiety, depression, and stress. Overall, these findings confirm that older adults experience more loneliness during the COVID-19 pandemic and provide important information for possible future research directions when investigating the impact of COVID-19 on older adults.

**Keywords**: COVID-19, Coronavirus, Pandemic, Mental health, Seniors.

### **INTRODUCTION**

Coronavirus disease 2019 (COVID-19), which originated in Wuhan, China, took less than two months to evolve into a public health threat, and each country faces unique challenges. However, the mortality rate is much lower than its predecessors (Severe Acute Respiratory Syndrome, SARS and MERS). What makes this infection so contagious and therefore so unpredictable is the high degree of human-to-human transmission and long-term survivability on a variety of inanimate surfaces. This has increased panic and uncertainty related to the virus. Research in China shows that the pandemic has had a major impact on mental health, with increases in health anxiety, acute stress responses, adjustment disorders, depression, panic attacks and insomnia. Cases of severe mental disorders, obsessive-compulsive disorder and anxiety disorders are recurrent and increase hospitalization rates (YAO et al., 2020).

During the COVID-19 pandemic, many seniors may experience a new or higher level of loneliness due to disruptions in personal social activities, often due to pre-existing chronic illnesses, visual or hearing impairments, or caused by dysfunction. Social isolation and loneliness can exist separately, and it is not uncommon for them to coexist (CUDJOE; KOTWAL, 2020).

The media highlighted that the elderly are the most affected by the epidemic, not only because they are the group most at risk of death from the disease, but also because they are forcibly or voluntarily incarcerated, which affects the elderly and directly affects mental health (TYRRELL).; WILLIAMS, 2020).

To Vervaecke; Meisner, (2021) during confinement, the elderly are unable to actively participate in all aspects of everyday life, such as work and other ways of contributing to society, reinforcing the view of the elderly

as an inactive and needy part of society. In conclusion, many studies have shown that there is age discrimination posing risks to the well-being and health of the elderly.

In the context of the pandemic and social isolation, the mental health of the elderly suffers multiple consequences, therefore, this study aims to analyze the impact of social isolation in the elderly on the effects of the COVID-19 pandemic on the mental health of the population.

### MATERIALS AND METHODS

The proposed objectives demonstrate qualitative research hypotheses. Qualitative research focuses on the process of researching a topic. Understanding this process produces a map as a product of the researcher's reflection on the field of study (VAN MAANEN, 1979).

Researchers are interested in determining the dynamics of events that lead to the results. Therefore, interest is not limited to results, but mainly in how to achieve them. This makes it possible to explain how, rather than just what (FONTELLES, 2009).

For the construction of a comprehensive review, the specific objectives were first identified, the questions to be answered were formulated, and then a search was carried out within the previously established inclusion and exclusion criteria to identify and collect relevant primary studies (VAN MAANEN, 1979).

As for the search strategy, a search was performed in the PubMed database, using the following syntax: elderly with covid 19 AND mental health AND social isolation AND incidence. According to the inclusion criteria proposed in the study, articles are freely available in designated databases, with a strict focus on study subjects, published in English between 2021 and 2022, with full text available.

After the search, a total of 79 articles were found, of which 48 were unanimously excluded by the authors. Then, 31 articles were read in detail, excluding theoretical articles (N=9), and articles that did not provide epidemiological data (N=17) on the incidence of the variables of this study. After the above procedure, 3 articles were selected for systematic review.

### **RESULTS**

The results of a systematic review of three articles selected from 79 articles, in order to better present the data and the answers to the central question. The articles will be presented in chronological order (Table 1).

1. F Müller, S Röhr, U Reininghaus and SG Riedel-Heller conducted research on social isolation and loneliness during COVID-19 lockdown in the elderly German population. The objective was to investigate associations between social isolation and loneliness with depressive symptoms in the elderly German population during the first COVID-19 lockdown. representative sample A randomly selected individuals at least 65 years of age (n=1005) participated in a standardized computer-assisted telephone interview in April 2020. Associations were inspected using multivariate regression models. Being alone but not isolated ( $\beta = 0.276$ ; p < 0.001) and being isolated and lonely ( $\beta = 0.136$ ; p < 0.001) were associated with greater depressive symptoms. Being isolated, but not lonely, was not associated with depressive symptoms. Study carried out in Germany.

2. Regarding the LLC Louis study, WC Chan and CPW Cheng produced a study on: Suicide risk in elderly patients with depression during the COVID-19 pandemic. The objective was to compare older adults with late-life depression (LLD) and healthy controls in terms of suicidal ideation during the COVID-19 pandemic and to determine

predictors of suicidal ideation. In total, 21 men and 43 women aged between 61 and 89 years were interviewed by telephone by trained research assistants. Of these, 33 were elderly with LLD (cases) and 31 were healthy elderly (controls). Elderly people with LLD had a higher level of suicidal ideation than healthy controls, after controlling for the level of depression and medical comorbidity (F (1, 59) = 5.72, p = 0.020). Mediation analyzes reveal an indirect effect between group and suicidal ideation through coping efficacy (Z = 2.43, p = 0.015). Study carried out in Hong Kong.

3. Researchers X Yang, BHK Yip, ADP Mak, D Zhang, EKP Lee, SYS Wong have done work on the differential effects of social media on depressive symptoms and suicidal ideation among the younger and older adult population in Hong Kong during the COVID-19 pandemic. The objective was to test the effects of mediation of symptoms of

social loneliness and post-traumatic stress disorder (PTSD) on the relationship between social media use and depressive symptoms and suicidal ideation, as well as the effect of age moderation on mediation models. A total of 1,070 adults (658 social media users and 412 non-users) completed the survey. The weighted prevalence of probable depression was 11.6%; 1.6% had suicidal ideation in the last 2 weeks. Both models of moderate mediation of depressive symptoms ( $\chi$  2 62 =335.3; P<0.05; comparative fit index [CFI]=0.94; non-normed fit index [NNFI]=0.92; error mean square approximation [RMSEA]=0.06) and suicidal ideation ( $\chi$  2 34=50.8; P<0.05; NNFI=0.99; RMSEA=0.02). CFI=0.99; The indirect effect via social loneliness was significant among the elderly ( $\beta$ =-0.01; P=0.04), but not among the younger ones  $(\beta=0.01; P=0.31)$ . Study carried out in Hong Kong.

Nº	Year/Relase	Authors	Quantity of people	Idade média	Country	Percentage in mental health
1	2021	F Müller, S Röhr, U Reininghaus e SG Riedel-Heller	1005 participants	65 years	Germany	To be alone but not isolated $(\beta = 0.276; p < 0.001)$ and being isolated and lonely $(\beta = 0.136; p < 0.001)$
2	2021	LLC Louis, WC Chan e CPW Cheng	21 men and 43 womne	between 61 and 89 years old	Hong Kong	Level of depression and medical comorbidity (F (1, 59) = 5.72, p = 0.020). Coping effectiveness ( $Z = 2.43$ , $p = 0.015$ )
3	2021	X Yang, BHK Yip, ADP Mak, D Zhang, EKP Lee, SYS Wong	1.070 adults (658 social media users and 412 non- users)	Younger and elderly people	Hong Kong	The indirect effect via social loneliness was significant among the elderly ( $\beta$ =-0.01; P=0.04), but not among the younger ones ( $\beta$ =0.01; P=0.31).

Table 1. Results of the analyzed studies.

Source: Own elaboration.

### **DISCUSSION**

Health World According the to Organization, (2020) during the serious social crisis, people's attention to mental health intensified. The COVID-19 pandemic can be described as one of these crises, having been described as one of the biggest international public health problems in recent decades, affecting the entire planet. Such events can cause psychological and social disorders, affecting the coping capacity of the whole society. The intensity and extent of transmission varies from person to person (BRASIL, 2020).

These measures were introduced reduce the risk of contracting and spreading COVID-19. However, implementing these measures, such as the social distancing, can negatively impact seniors who are already prone to loneliness and social isolation and may have difficulty accessing essential services and supplies. Furthermore, groups identified as "at risk" and often portrayed by the media as vulnerable can be condescending, affecting self-esteem and increasing anxiety. COVID-19 has been proposed as the "perfect storm" for the mental health of older adults. with quarantine measures that can impact physical and mental functioning (BROWN, et al, 2021).

Given the rapid spread of SARS-CoV-2 and its high mortality rate among the elderly, these factors exacerbate the risk of mental health problems in these individuals and negatively affect their functioning. Several studies have shown that the main symptoms of mental illness affecting seniors during the COVID-19 pandemic are: depression, anxiety, stress, fear of death, sadness, loneliness, insomnia, panic attacks, and more (YANG, et al, 2020).

In addition to mood-related complications such as sadness, agitation, pain, irritability, increased anxiety, lack of

joy and lack of motivation, depression can also lead to cognitive symptoms such as mental retardation; insecurities; feelings of abandonment; rejection; inferiority; pessimism; guilt and even suicidal thoughts (YANG, et al, 2020).

The pandemic can lead to low activity levels and exacerbate the link between loneliness and mental health in some people (for example, through social distancing and restrictions on movement). The rapid spread and rising death rates due to the pandemic have created public health concerns around the world, and the stress that people are facing in dealing with this situation has also had a serious negative impact on the elderly. al, 2021).

The study by Goodman-Casanova et al (2020) observed that elderly people who live alone have greater negative psychological effects, such as anxiety, sadness and stress, which can lead to decreased sleep quality and difficulty falling asleep.

In the study by Becerra-García, et al, (2020) it was also found that participants who lived alone had more severe psychological symptoms, regardless of age. This may be because people who live alone, especially the elderly, may be more vulnerable. In addition, the literature suggests that loneliness is an important risk factor for mental health in the elderly.

For Wang, et al, (2020), despite the stage of the pandemic, it has been shown that patients diagnosed with COVID-19, their families and groups with specific vulnerabilities, such as the elderly and those with chronic conditions, tend to have greater care needs. in mental health. Therefore, it is imperative to establish a psychological crisis intervention focus that allows mental health professionals to think objectively and informed about the different phases of the pandemic.

The study's key findings showed that during the peak of the COVID-19 pandemic, older patients with restrictive lockdown measures scored significantly higher on scales of total anxiety, depression, and stress. Older patients were more likely to report concerns about their physical health, anger, impulsivity, and suicidal thoughts (HAO, et al, 2020).

We sought to describe the existing literature on the relationship between social isolation and mental health. It is important to note that more and more studies have emphasized the different effects of social isolation on the mental health of the elderly. The most researched outcome is depression and anxiety. All studies in our review found that social isolation has an adverse effect on the mental health of older adults (COURTIN.; KNAPP, 2017).

For Sivertsen H, et al, (2015) as expected, the main finding was that depression was associated with poor quality of life (QoL) and this association remained stable over time. Additionally, the study reported that during the pandemic, depressed patients had a worse quality of life than non-depressed patients.

During a pandemic, older adults are more likely to experience higher levels of depression, anxiety, stress and insomnia. During the COVID-19 pandemic, mental health services for seniors may be reduced due to several factors. First, when the number of COVID-19 cases in the city dramatically increases, the immediate mental health needs of elderly patients are no longer a priority. Second, there is an incentive for elderly patients not to go to the hospital, as health services are used especially to treat advanced-stage patients and suspected or confirmed COVID-19 cases (HAO, et al, 2020).

The results confirmed that mental distress (anxiety, depression and stress) increased

significantly in older adults during the pandemic compared to normal times. These results are consistent with other international studies on the psychological impact of COVID-19. Taken together, this study highlights the need to understand the psychological impact of the epidemic through its outcomes, in order to ensure timely follow-up responses in the context of mental health (WANG, et al, 2020).

# **CONCLUSION**

With this new COVID-19 pandemic situation, given the fear of contamination and the measures that have been taken to reduce contagion, it is necessary to be attentive to the mental health of populations, especially risk groups, including the elderly. Social distancing and isolation can negatively impact an individual's psyche, which can lead to mental disorders. The results of this study suggest that older people are more likely to develop mental illness during the COVID-19 pandemic.

Overall, these findings confirm that older adults experience more loneliness during the COVID-19 pandemic and provide important information for possible future research directions when investigating the impact of COVID-19 on older adults. In addition, important resources for older people to better cope with moments of anxiety can guide the use of effective strategies to ensure that the health of older adults is not compromised by adverse conditions such as COVID-19.

In summary, the impact of the COVID-19 pandemic on social isolation and loneliness in the elderly shows a significant increase in morbidity associated with depression, anxiety and stress. As the pandemic develops, especially given the recent rise in infections, it is forcing a reassessment of public health policy.

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