Impacts of social distancing triggered by COVID-19 in the elderly residents from Long-Term Care Institutions of Brazil

Impactos do isolamento social desencadeados pela COVID-19 em idosos residentes em Instituições de Longa Permanência no Brasil

Impactos del aislamiento social provocado por COVID-19 en residentes de edad avanzada de instituciones de cuidados a largo plazo en Brasil

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Abstract

Introduction: The Coronavirus disease (COVID-19) has a high lethality rate among the elderly people, who are more vulnerable to novel diseases, especially those kept in Long

Term Care Institutions for the Elderly (LTCIs). Objective: To describe and discuss how the current social isolation imposed by the pandemic has impacted the senior citizens residing in Brazilian LTCIs. Methodology: Primary research was carried out employing the PubMed and SciELO databases, using the keywords "Coronavirus infection" and "Institutionalized elderly health" and with the keywords "COVID-19" and "Institutionalized elderly" and their respective correlatives in English to search for articles published until September 2020. Results and Discussion: Five Scientific Articles, one Research Note, one Epidemiological Bulletin, and one Technical Note were organized in a table to display their findings. Additionally, other applicable data was collated directly from the hands-on experience of one of the authors, who undertook preceptorship for Physiotherapy interns at a Brazilian LTCI. These institutions can possibly potentiate the propagation and dissemination of this viral disease, therefore, the presently enforced prophylactic strategies, (e.g. social distancing), are essential to help maintain the well-being of the population, even if this may be a detriment to their quality of life. Conclusion: The limitations imposed on social interactions by the pandemic have a negative impact on the cognitive and physical aspects of the elderly people at the LTCIs, who already experience conditions of exclusion and isolation.

Keywords: Communicable diseases, emerging; Geriatric nursing; Nursing care; Geriatrics; Public health.

Resumo

Introdução: A doença do coronavírus (COVID-19) apresenta elevada taxa de letalidade entre a população idosa, que integram o grupo de risco, principalmente aqueles mantidos em Instituições de Longa Permanência para Idosos (ILPIs). Objetivo: Descrever e discutir o impacto do isolamento social imposto pela pandemia de COVID-19 em idosos residentes em ILPIs no Brasil. Metodologia: Trata-se de um relato de experiência e um estudo de revisão de literatura, realizado nas bases de dados PubMed e SciELO, por meio dos descritores "Infecção por Coronavirus" e "Saúde de idosos Institucionalizados" e com as palavras-chave "COVID-19" e "idosos institucionalizados" e seus respectivos correlatos em inglês para busca de artigos publicados até setembro de 2020. Resultados e Discussão: Cinco Artigos Científicos, uma Nota de Pesquisa, um Boletim Epidemiológico e uma Nota Técnica foram organizados em uma tabela para apresentar seus achados e, para discussão, além de publicações pertinentes, considerou-se a experiência, de um dos autores, de preceptoria em estágios de Fisioterapia na ILPI no Brasil. Nessas instituições a doença tem potencial de se disseminar em ritmo alarmante, portanto, as estratégias profiláticas já implantadas, como o

distanciamento social, são essenciais para ajudar a manter o bem-estar desses indivíduos, ainda que causem prejuízos a sua qualidade de vida. Conclusão: As limitações impostas às interações sociais pela pandemia impactam negativamente nos aspectos cognitivo e físico da população idosa da ILPIs, que já experimentam condição de exclusão e isolamento.

Palavras-chave: Doenças transmissíveis emergentes; Enfermagem geriátrica; Cuidados de enfermagem; Geriatria; Saúde pública.

Resumen

Introducción: La enfermedad por coronavirus (COVID-19) tiene una alta tasa de letalidad entre los ancianos, quienes forman parte del grupo de riesgo, especialmente los que se encuentran en Instituciones de Atención de Larga Duración para Ancianos (IALDAs). Objetivo: Describir y discutir el impacto del aislamiento social impuesto por la pandemia COVID-19 en las personas mayores que viven en IALDAs en Brasil. Metodología: Se trata de un estudio de revisión de la literatura, realizado en las bases de datos PubMed y SciELO, utilizando las palabras clave "Infección por coronavirus" y "Salud institucionalizada del anciano" y con las palabras clave "COVID-19" y "Ancianos institucionalizados" y sus respectivos correlativos en inglés para búsqueda de artículos publicados hasta septiembre de 2020. Resultados y Discusión: Los nueve artículos encontrados fueron organizados en una tabla para presentar sus hallazgos y, para la discusión, además de las publicaciones pertinentes, se consideró el experiencia, de uno de los autores, de preceptoría en pasantías de Fisioterapia en el IALDA en Brasil. En estas instituciones, la enfermedad tiene el potencial de propagarse a un ritmo alarmante, por lo que las estrategias profilácticas ya implementadas, como el desapego social, son fundamentales para ayudar a mantener el bienestar de estos individuos, incluso si dañan su calidad de vida. Conclusión: Las limitaciones impuestas a las interacciones sociales por la pandemia tienen un impacto negativo en los aspectos cognitivos y físicos de los adultos mayores en el IALDA, quienes ya experimentan condiciones de exclusión y aislamiento.

Palabras clave: Enfermedades transmisibles emergentes; Enfermería geriátrica; Cuidado de enfermera; Geriatría; Salud pública.

1. Introduction

The World Health Organization (WHO) declared, the disease caused by the novel coronavirus (Coronavirus disease 2019; COVID-19), as a pandemic (WHO, 2020). The

COVID-19 is a highly contagious respiratory tract infection that can provoke severe acute respiratory syndrome, SARS-CoV-2 (Misra, Agarwal, Gasparyan & Zimba, 2020). It also exhibits an elevated lethality rate amongst senior citizens. As stated by Fallon, Dukelow, Kennelly and O'Neill (2020), old age and the presence of comorbidities are consociated pernicious vulnerabilities of the disease. In this regard, the present scenario in Brazil is disquieting, considering the substantial proportion of elderly citizens that constitute the population.

The main implemented prophylactic strategies against the COVID-19 is social distancing. This is an essential control strategy against SARS-CoV-2, however this action limits social interrelationships, and may provoke several behavioral alterations in the residents of Long-Term Care Institutions (LTCIs), considering that their whole existence is seemingly excluded and isolated from the society (Fallon et al., 2020; WHO, 2020). Accordingly, this article delineates upon the influence of COVID-19 on the LTCI population of Brazil.

2. Methodology

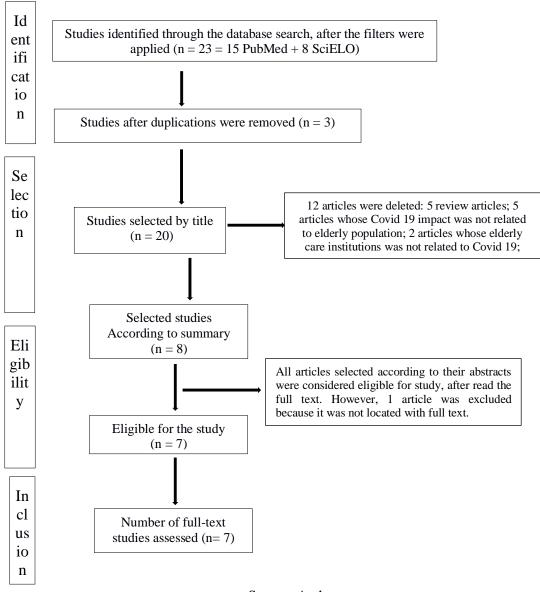
This study is a literature review, conducted in the PubMed and SciELO databases, to obtain relevant articles published up to September 2020. The search filters were developed in concordance with the thesaurus platform - MeSH terms (Medical Subject Headings) by following descriptors and Boolean operators "Coronavirus Infections" AND "Health of Institutionalized Elderly". Additionally, the keywords "COVID-19" AND "elderly residents", were utilized, as well. Neither language nor chronologic restrictions were applied when searching for the articles. The initial screening was realized considering the Title and Abstract of all the articles found. Contrasting the authors, title, year and journal of publication eliminated duplicated studies. After this first selection, all potentially germane studies were compiled in their entirety to have their eligibility assessed. Qualitative data was gained from all of the included articles.

Furthermore, other data was procured from health-related database: The Brazilian Institute of Geography and Statistics (Instituto Brasileiro de Geografia e Estatística; IBGE); World Health Organization (WHO); The Brazilian National Health Surveillance Agency (Agência Nacional de Vigilância Sanitária; ANVISA); and The Brazilian Ministry of Health. The other particulars were attained from an experience report of one of the authors (EPS), who is a preceptor of interns in the field of Physiotherapy in a LTCI in the state of Minas Gerais, Brazil.

3. Results and Discussion

There were 23 articles of significance, of which 7 were selected and amalgamated into present review. After verification, independently by the researchers, a consensus was reached on the selected articles. Figure 1 shows the flow diagram of the survey results:

Figure 1. Flow diagram of the research results based on items from preferential reports for Systematic Reviews and Meta-Analysis: The PRISMA Statement.



Source: Authors.

Moreover, information from five scientific articles, one research note, one Epidemiological bulletin, and one technical note were characterized in Table 1.

Table 1. Principal information from five scientific articles, one research note, one Epidemiological Bulletin, and one Technical Note, included in the present review.

Author/Title	Type of Publication	Principal Considerations
ANVISA / Orientations for the Prevention and Control of Infections from the SARS-CoV-2 in Long-Term Care Facilities for the Elderly (LTCFs)	Technical Note	A description of the primary Signs & Symptoms of the COVID-19 and the prophylactic strategies to be implemented to impede the dissemination of the virus throughout LTCFs.
Ministry of Health/ Coronavirus Disease 2019	Epidemiological Bulletin	A synopsis of the Unified Health System of Brazil (Sistema Único da Saúde; SUS), the non-pharmacological measures, and the epidemical phases of the COVID-19; also an abridgment of the response from the Ministry of Health, risk analysis of the SUS, and the epidemiological situation throughout the world and Brazil. Additionally, emphasis was placed on positioning the elderly amongst those more susceptible to the COVID-19.
Camarano and Kanso / Long-term care facilities for the elderly in Brazil.	Research Note	LTCFs are residential governmental and non-governmental institutions intended for individuals 60 years or older, with/without family support. The ever-increasing elderly population and the escalated survival rate of persons with reduced physical, cognitive and mental capacities require more from these institutions than just social care but mental health services as well.
Fallon, Dukelow, Kennelly and O'Neil /COVID-19 in Nursing Homes	Scientific Article	Notably, the elderly patients residing in nursing homes are at greater risk of contracting the disease with consequent adverse outcomes during this crisis. It is essential that early & collaborative care planning, more formalized leadership & governance and provisional support and disease-crisis awareness be implemented in these institutions for the residents and staff alike. Moreover, a progressive reassessment is imperative for the development and integration of modernized and superior healthcare services in these institutions.
McMichael <i>et al</i> . Epidemiology of COVID-19 in a Long-Term Care Facility in King County, Washington.	Scientific Article	In the pandemic, LTCFs are viewed as precarious ecosystems, due to the advanced age and underlying chronic health conditions of their residents, and the constant back-and-forth of healthcare professionals throughout these institutions. Proactive measures should be executed, to identify and impede potentially infected staff and family members from interacting with the residents, and to actively surveil patients and utilize the appropriate prophylactic procedures

		against the COVID-19 where necessary.
Misra et al./	Scientific	The ongoing COVID-19 pandemic caused by the
Rheumatologists'	Article	severe acute respiratory syndrome coronavirus 2
perspective on coronavirus		(SARS-CoV-2) is globally pertinent.
disease 19 (COVID-19) and		Environmental factors (e.g. air pollutants), smoking
potential therapeutic targets		and/or comorbid conditions (e.g. hypertension,
		diabetes mellitus and chronic cardio-respiratory
		illnesses) can increase the severity of the COVID-
		19. Development of a vaccine may be the only
		affective long-term solution against this disease.
Vaz and Gaspar / The	Scientific	Despite the innumerous benefits that LTCFs
clinical depression	Article	provide they also present several challenges that
presented by the		can contribute to the development of depression
institutionalized elderly in		amongst residents. Furthermore, there is also a
the Bragança District		significant repercussion that is attached to late
		onset depression, especially if not diagnosed and/or
		treated adequately, which is the augmentation of
		the mortality rate among these patients.
Wang et al./ Dementia Care	Scientific	The elderly are more vulnerable at the onset of
During COVID-19	Article	natural disasters and crises, and this has been
		substantiated during the COVID-19 pandemic.
		Individuals with dementia may have cognitive
		difficulties in accessing accurate information and
		the required safeguard procedures against the
		disease.

Source: Authors.

The IBGE (2019), affirmed that Brazil had over 210 million inhabitants, with 16.2% of those corresponding to senior citizens – individuals over the age of 60. Consequently, emphasis is placed on elderly care-seekers and the patients that reside in LTCIs (nursing homes). In 2011, there were $\approx 83,000$ patients in these public and private non-profit establishments. The current total is estimated to be over 100, 000. A paradigm, which corroborates the current cause for concern, is based on the outbreaks in Spain, where the increased mortality rate amongst older adults in retirement homes was associated with SARS-CoV-2 (Fallon et al., 2020).

The ANVISA (2020), substantiated "it is acknowledged that the elderly population in LTCIs are, in general, more susceptible to the disease, with varying dependencies". Furthermore, these patients represent a high-risk group because of their fragilities, such as living with chronic non-communicable diseases (NCDs), in usually closed & poorly ventilated ecosystems and being in constant contact with others and similarly vulnerable patients.

The COVID-19 is still a novel virus and consequently, there is still no vaccine and/or

specific pharmaceutical therapy contra the disease. Similar to other viral diseases, such as Influenza, the use of vaccines and antiviral drugs can be effective in reducing the spread of such diseases in the long term; however, such interventions are not yet available for COVID-19 (Mcmichael et al., 2020).

Respiratory etiquette, hand sanitization and most importantly social distancing, are essential countermeasures to confront the disease. According to the 7th Epidemiological Bulletin by the Brazilian Ministry of Health, social distancing does not directly impede the viral transmission, though it can reduce its propagation speed. As a result, transmission is realized in a controlled state of diminutive household groups (clusters), avoiding the subsequent encumbrance on the Health System, from the increase demand of hospital beds, intensive care units (ICUs), pharmaceuticals and trained professionals (Brasil, 2020).

McMichael et al. (2020), affirmed that the SARS-CoV-2 has the potential to aggressively disseminate throughout LTCIs; therefore, the aforementioned prophylactic measures must be maintained for the health and preservation of these patients. While there is no scientifically proven therapy for the disease, there are necessary control and preventative strategies being employed (Misra et al., 2020). Once a senior citizen ingenuously comes into contact (< 1m) with an asymptomatic COVID-19 patient there are at risk of exposing themselves to contamination and severe infection (ANVISA, 2020).

The imposed limitations on social interactions derived from the pandemic can have an even greater impact on elderly people living in LTCIs, when compared to the general population. One determinant of this, could be because their restrained quotidian routine, which is isolated and seemingly without many social relationships. Dezan (2015), reinforces the issue of social abandonment & exclusion and loss of family bonds throughout elderly asylums. Institutionalized social isolation leads to the loss of identity, freedom, and self-esteem for these elderly individuals, resulting in loneliness (Vaz and Gaspar, 2011). There is no doubt that this reality has been aggravated by the pandemic in question.

Shortly after the attestation of the pandemic, LTCIs suspended all visitations. The priority was not only to protect the admitted residents but also the health care professionals within these institutions (McMichael et al., 2020). It is a known fact that visitations from family and close friends are fundamental for the clinical evolution and well-being of the residents, and without it, they could become depressive hindering the interventions and other activities conducted at these institutions.

The current challenge is to educate this population group on the importance and benefits of the implemented prophylactic measures, such as, social distancing to avoid the

probable misinterpretation of it being another form of abandonment. Additionally, there should be an increase in the mental health services available to residents and the personnel in these institutions, as a counterweight against the vulnerabilities originating from prolonged social isolation. These imposed measures can inhibit, while at the same time, regulate the social interrelationships of this population, and if left unawares they can negatively influence the residents (Wang et al., 2020).

As a preventive measure of COVID-19, it was necessary to limit the displacement of the elderly person to the internal area of the institution. The reduction in mobility prevented some of the senior citizens, who before the pandemic had more independence and preserved autonomy; now there were only allowed to leave under strict circumstances, such as the case of medical consultation and exams. It was disconcerting how the patients reacted under these countermeasures, since many already demonstrated behavioral discrepancies (e.g. feeling depressed). Vaz and Gaspar (2011) solitude, the absence of leisure activities and the isolated quotidian routine of the residents, can contribute to a higher incidence of depression, which should not be taken lightly by the healthcare professionals employed at these institutions.

ANVISA (2020), obligated personnel and residents at the LTCIs to avoid agglomerations and reduce the duration of time and number of residents in the common areas. Meals were preferably served in patients' rooms and mealtimes appropriately arranged to regulate personnel in the cafeterias. Mealtime is one of the most pertinent periods for seniors, being a moment of nutriment, fraternization and relaxation, their daily version of a family reunion. This drastic change in their routine was not assimilated by most, since it is still ambiguous the concept of the novel virus and the prophylactic measures being enforced.

In Brazilian LTCIs – special mention to the establishment where one the current authors is physiotherapist and intern preceptor – social distancing has interrupted the physiotherapeutic treatments performed by the interns. Physiotherapy not only met the demands for rehabilitation, it also provisioned physical activity and workshops for cognitive and motor stimulation. Additionally, the quotidian contact with these interns facilitated the mitigation of prolonged social and emotional isolation. Against this invisible threat, some of the residents feel abandoned by their therapist whom have seemingly showed no aid, affection nor support. These thoughts and/or suspicions lead to interruption of the affective bonds they once had, which without adequate reconstruction could be a detriment to their overall well-being.

4. Final Considerations

Social distancing measures are essential to avoid contamination from the novel Coronavirus 2019, however, such measures can affect the physical and mental health, and the quality of life and well-being of elderly people, emphasis on those residing in LTCIs, whom even before the pandemic, were already apparently isolated and excluded from society. Thus, it is evident that the COVID-19 outbreak further compromised the interrelationships that permeate the lives of institutionalized elderly people. The absence of adequate therapy for the prevention and control of the disease ratifies social distance. Nevertheless, the development of other efficient prophylactic strategies is fundamental to guarantee the physical and cognitive health of the elderly population.

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