

Pandemic of COVID 19 and old adults Brazilians: a reflection on social isolation, infoexclusion, infodemia and ageism

Pandemia de COVID 19 y adultos mayores brasileños: una reflexión sobre el aislamiento social, la infoexclusión, la infodemia y el edadismo

Pandemia de COVID 19 e idosos brasileiros: uma reflexão sobre isolamento social, infoexclusão, infodemia e idadeismo

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ABSTRACT: The coronavirus disease 2019 (COVID-19) pandemic presents challenges to older people, especially those from low and middle income countries. Social distancing is one of the restrictive measures adopted to avoid contagion, which can trigger damages to physical and mental health to older adults. In addition to that, digital exclusion, infodemia and ageism are also present in this context. Digital access can assist older people in various aspects of life, including minimizing the negative consequences caused by social distancing. With the help of technology, educational measures have great potential to reduce the negative consequences of COVID-19 pandemic encouraging efforts to overcome the challenges that are posed to older adults.

Keywords: Aged; Ageism; Technology; Coronavirus.

RESUMEN: La pandemia de la enfermedad por coronavirus 2019 (COVID-19) presenta desafíos para las personas mayores, especialmente las de países de ingresos bajos y medios. El distanciamiento social es una de las medidas restrictivas que se adoptan para evitar el contagio, que puede provocar daños en la salud física y mental de los adultos mayores. Además de eso, la exclusión digital, la infodemia y la discriminación por edad también están presentes en este contexto. El acceso digital puede ayudar a las personas mayores en varios aspectos de la vida, incluida la minimización de las consecuencias negativas causadas por el distanciamiento social. Con la ayuda de la tecnología, las medidas educativas tienen un gran potencial para reducir las consecuencias negativas de la pandemia COVID-19 fomentando los esfuerzos para superar los desafíos que se plantean a los adultos mayores.

Palabras clave: Anciano; Edadismo; Tecnología; Coronavirus.

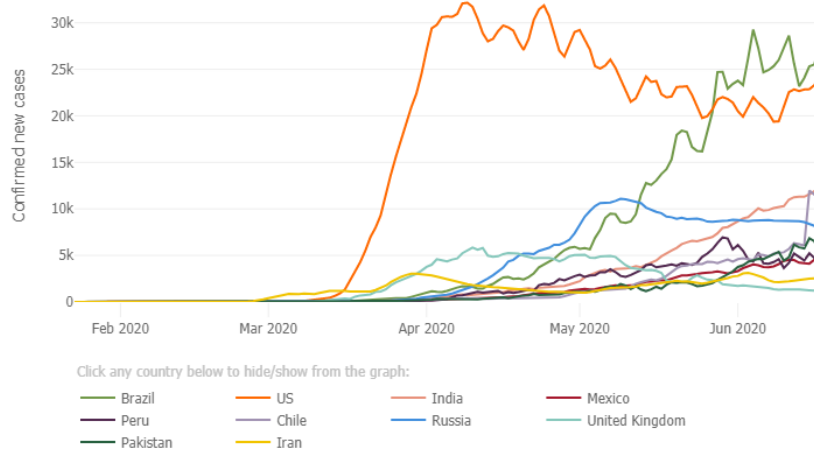
RESUMO: A pandemia da doença do coronavírus 2019 (COVID-19) apresenta desafios para as pessoas idosas, especialmente aquelas de países de baixa e média renda. O distanciamento social é uma das medidas restritivas adotadas para evitar o contágio, que pode desencadear danos à saúde física e mental de idosos. Além disso, exclusão digital, infodemia e idadeismo também estão presentes neste contexto. O acesso digital pode ajudar os idosos em vários aspectos da vida, inclusive minimizando as consequências negativas causadas pelo distanciamento social. Com a ajuda da tecnologia, as medidas educacionais têm grande potencial para reduzir as consequências negativas da pandemia da COVID-19, incentivando os esforços para superar os desafios impostos aos adultos mais velhos.

Palavras-chave: Idosos; Idadismo; Tecnologia; Coronavírus.

COVID-19, a severe acute respiratory syndrome caused by the coronavirus SARS-CoV-2, was characterized as a pandemic by the World Health Organization (WHO) on March 11, 2020. Until June 19, 8.509.393 cases of COVID-19 and 454.380 deaths were reported worldwide (Figure 1) (WHO, 2020).

According to WHO (2020), the consequences of COVID-19 outbreak lead to stress across the world population, which can trigger an increase of depression, anxiety, insomnia, loneliness, harmful use of alcohol and drugs, and even suicidal behaviors.

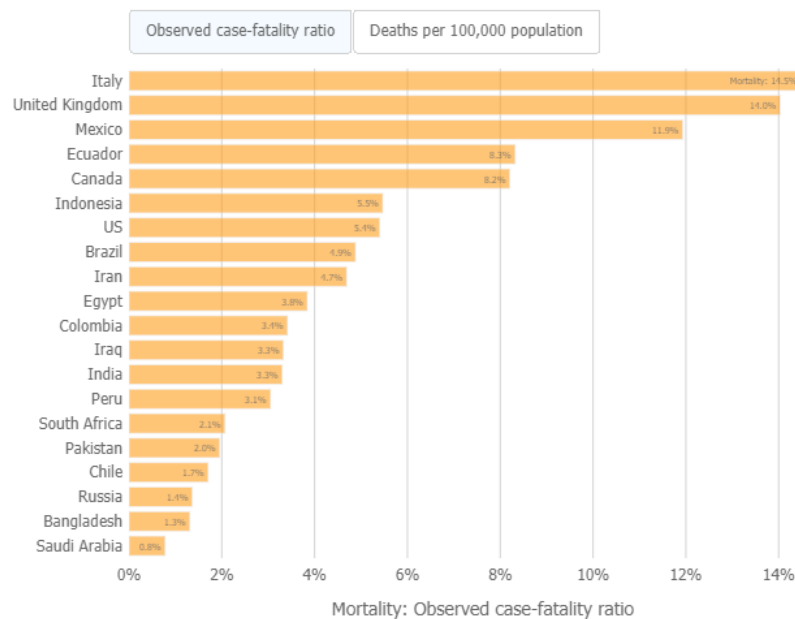
Figura 1: New cases of COVID-19 in the world



Source: Johns Hopkins Coronavirus Resource Center, 2020

In the Brazilian context, COVID-19 pandemic presents even greater challenges, as there are still uncertainties in which way the disease manifests itself in a scenario of extreme social inequality (Barreto, *et al.*, 2020). Up to the present time, 978.142 people have been infected by COVID-19 in Brazil, and 47.748 have died (Figure 2), which corresponds to a lethality rate of 4.9%. As noticed in recent reviews, SARS-CoV-2 has a higher mortality rate in older people affected by specific diseases (Ministry of Health, 2020). On May 19, 2020, the Ministry of Health reported that old people aged 60 and over accounted for 69,3% of deaths, and 64% of the deads had at least one risk factor such as diabetes, hypertension, cardiovascular disorders or neurodegenerative diseases (Ministry of Health, 2020; Shahid, *et al.*, 2020). Immunosenescence increases vulnerability to infectious diseases and chronic conditions worsen prognosis in older adults with COVID-19 (Hammerschmidt, & Santana, 2020).

Figure 2: Mortality rate by COVID-19 in the world



Source: Johns Hopkins Coronavirus Resource Center, 2020

The main preventive measures to face COVID-19 include social distancing and isolation (United Nations, 2020). However, international recommendations highlight that restrictive measures of social contact should be adopted considering the context of older people so that it do not increase the social isolation of those who reside alone, which can trigger damages to physical and mental health (United Nations, 2020). Research shows that social isolation in the elderly may represent a "serious concern for public health" due to the increased risk of cardiovascular, autoimmune, neurocognitive and mental health issues (Armitage, & Nellums, 2020; Gerst-Emerson, & Jayawardhana, 2015). Social isolation leads to greater risk of depression and anxiety in old people (Santini, *et al.*, 2020) causing neurotic disorders, lack of control, and feelings of panic and fear (Kumar, & Nayar, 2020).

Nevertheless, the importance of education is highlighted in times of pandemic. Besides social isolation, digital exclusion, infodemia and ageism are challenging questions posed to older adults. Digital access assists older people in various aspects of

life and minimizes negative outcomes caused by isolation (Szabo, Allen, Stephens, & Alpass (2019) report that the three main purposes for the involvement of older adults in online activities are socialization, performance of instrumental activities of daily life (such as shopping, paying bills) and education (reading health information, for instance). The authors conclude that the use of internet focused on expanding social relations decreases loneliness and increases social involvement, indirectly affecting wellbeing in older adults (Szabo, Allen, Stephens, & Alpass, 2019). In the field of healthcare, technologies monitor the environment (possible falls, warning about medications, behavior responses) and chronic diseases such as diabetes and dementia as well, ensuring care and support for older people (Pierloni, *et al.*, 2015).

In the context of Brazil, the use computer by old adults is limited and many people do not have access to internet (Doll, Machado, & Cachioni, 2016). According to Fernández-Ardèvol (2019), only 14% aged 60 and over use computer devices, against 86% among those aged 10-15 years. However, according to Fernández-Ardèvol (2019), even after a rapid growth in internet use by older adults over the past years – an increase of 56% from 2015 to 2017 – only one in four older people used the internet in 2017 (Table 1). In addition, if we consider different socioeconomic classes, there is an unequal access to technologies; seniors from classes D/E accounted for 2% of the use of smartphones, while those from classes A/B accounted for 40% of the total (Fernández-Ardèvol, 2019).

Table 1 – Activities performed on mobile phones by the old adults. Percentage of mobile phone users (%).

Activities	TOTAL	60-74	+75
Making and receiving phone calls	93	96	92
Taking photos	75	38	31
Sending instant messages	73	37	22
Watching videos	67	26	29

Source: Fernández-Ardèvol, 2019.

In spite of that, older people’s digital exclusion is not only related to access to technologies (Doll, Machado & Cachioni, 2016; Gil, 2019). Overcoming the digital gap observed between younger and older generations requires a broader understanding of

technological models and strategies developed specially for older adults, such as adaptability of digital tools, provision of digital literacy programs, and policies for digital inclusion, among others (Gil, 2019). Considering the pandemic in the digital era, educational campaigns are important measures to be adopted by governments and institutions to hold the epidemic of fear caused by COVID-19 (Usher, Durkin, & Bhullar, 2020). Usher, Durkin e Bhullar (2020) report that fast communication about disease control and prevention aims to prevent the spread of the disease and encourages proactive care. However, there is a need to manage both consumption and access to information that guides protection measures.

In addition to digital exclusion, another concern is related to the infodemic, which refers to "a large increase in the volume of information associated with a specific subject, which can multiply exponentially in a short time due to a specific event, such as the current pandemic" (PAHO, 2020). The excess of information, not always reliable and reliable, is amplified by social networks and triggers false and misleading stories about the virus, which mainly affects people's mental health (PAHO, 2020). Infodemia may represent a threat to health as it hinders old people's access to suitable sources to prevent COVID-19, and reproduces negative stereotypes of older adults as well.

Ageism refers to a stereotype, prejudice and discrimination against people based on age (Rahman, & Jahan, 2020). Considering COVID-19, the classification based on the age for the group at higher risk of the disease presents itself as a complicated social issue, as it ignores cultural, social and contextual differences. According to Rahman, & Jahan (2020), the label of "high risk group" assigned to older people retains a mistaken perception about the overall impact of the illness, as it ignores underlying characteristics, such as personal physical conditions, chances of cure and behaviors that may affect the likelihood of contracting the disease. Therefore, chronological age does not present a strong argument to explain people's general health status and resilience; the impacts of COVID-19 are not limited to older adults as severe infections and morbidities can occur throughout the life cycle (Le Couteur, Anderson, & Newman, 2020).

Efforts should be taken to face the image of old age related to frailty, dependence and vulnerability (United Nations, 2020). According to United Nations (2020), as the virus spreads across developing countries, concerns are growing about the broader effects

of COVID-19 on older people (neglect and institutional abuse, limited access to health care, increased poverty and unemployment, discrimination and prejudice, and negative impacts on physical and mental health). In the post-pandemic analysis of the American context, Morrow-Howell, Galucia e Swinford (2020) suggest that ageism assigned lower value and concern to older people's lives during assesment and treatment of COVID-19. The adoption of arbitrary criteria based on age can place older adults in disadvantageous situation about returning to work and accessing physical and mental health services (Morrow-Howell, Galucia, & Swinford, 2020).

However, several opportunities like increasing digital connectivity, interaction among family members through frequent communication, promotion of self-care and time management and triggering the interest of workers from different areas to deal with issues related to the aging process can improve older people's lives reducing ageism during and after the COVID-19 pandemic (Morrow-Howell, Galucia, & Swinford, 2020). Rahman e Jahan (2020) recommend the positive use of digital platforms and other media to refrain the advance of misleading information about this population.

To better advise Brazilian older adults about the disease and its risks, informational campaigns are being broadcast mainly on television and radio programs. With the help of technology, educational manuals and booklets were designed on the preventive care of COVID-19. As an example, the booklet prepared by the LabEduca 60+ of the School of Arts, Sciences and Humanities of the University of São Paulo introduces explanatory contents on the main symptoms of COVID-19 and includes recommendations for mental health care in times of pandemic. The booklet also presents physical exercises for older people to workout at home and offers tips on films and technologies in an educational way to improve comprehension.¹ Another example is the free mobile application "Coronavirus SUS",² in which the government sends out informations to the general population or specific agencies regarding COVID-19. Explanatory videos and booklet with essential information on prevention against the disease³ were also available on the Department of Health website.

¹ Retrieved on May 30, 2020, from: <https://jornal.usp.br/universidade/cartilha-orienta-como-idosos-podem-se-manter-saudaveis-durante-epidemia/>.

² Retrieved on May 30, 2020, from: www.gov.br/pt-br/apps/coronavirus-sus.

³ Retrieved on May 30, 2020, from: www.saude.gov.br/campanhas/46452-coronavirus.

In summary, awareness of the risks of the pandemic is crucial. Brazil faces not only a new disease, but also an unique healthcare crisis, which requires efforts both at individual and community levels. The pandemic situation highlights the urgency of educational investments for general population and especially for older people. Educational measures have great potential to minimize the negative consequences of COVID-19 and to foster efforts to overcome the problems faced by old adults: social isolation, digital exclusion, infodemia and ageism. There is an imperative need for immediate action to protect older people and preserve their rights and dignity, as the challenges caused by the pandemic are unprecedented, and many of them are not new (United Nations, 2020).

References

Armitage, R., & Nellums, L. B. (2020). COVID-19 and the consequences of isolating the elderly. *The Lancet Public Health*, 5(5), e256. Retrieved on May 30, 2020, from: DOI: [https://doi.org/10.1016/S2468-2667\(20\)30061-X](https://doi.org/10.1016/S2468-2667(20)30061-X).

Barreto, M. L., Barros, A. J. D., Carvalho, M. S., Codeço, C. T., Hallal, P. R. C., Medronho, R. A., Struchiner, C. J., Victora, C. G., & Werneck, G. L. (2020). What is urgent and necessary to inform policies to deal with the COVID-19 pandemic in Brazil? *Revista Brasileira de Epidemiologia / Brazilian Journal of Epidemiology*, 23, e200032. Retrieved on May 30, 2020, from: <https://doi.org/10.1590/1980-549720200032>.

Brasil. (2019). Ministério da Saúde. Centro de Operações de Emergência em Saúde Pública. Doença pelo Coronavírus. (COE COVID-19). *Boletim Epidemiológico Especial*, Brasília, DF, Retrieved on May 21, 2020, from: <https://portalarquivos.saude.gov.br/images/pdf/2020/April/03/BE6-Boletim-Especial-do-COE.pdf>.

Doll, J., Machado, L. R., & Cachioni M. (2016). O idoso e as novas tecnologia. In: Freitas, E. V., et al. (Orgs.). *Tratado de Geriatria e Gerontologia*, 2503-2515. (4th ed.). Rio de Janeiro, RJ: Guanabara Koogan.

Fernández-Ardèvol, M. (2019). Práticas digitais móveis das pessoas idosas no Brasil. *Panorama setorial da Internet*, 1, (Ano 11). Centro Regional de Estudos para o Desenvolvimento da Sociedade da Informação, CETIC.br. Retrieved on May 30, 2020, from: https://www.cetic.br/media/docs/publicacoes/1/panorama_estendido_mar_2019_online.pdf.

Gerst-Emerson, K., & Jayawardhana, J. (2015). Loneliness as a public health issue: the impact of loneliness on health care utilization among older adults. *American Journal of Public Health*, 105(5), 1013-1019. Retrieved on May 30, 2020, from: <https://doi.org/10.2105/AJPH.2014.302427>.

Gil, H. (2019). The older people and the digital inclusion: A brief reference to the initiatives of the European Union and Portugal. *MOJ Gerontol Geriatr*, 4(6), 213-221. Retrieved on May 30, 2020, from: <https://medcraveonline.com/MOJGG/MOJGG-04-00209.pdf>.

Hammerschmidt, K. S. A., & Santana, R. F. (2020). Saúde do idoso em tempos de pandemia COVID-19. *Cogitare Enfermagem*, 25, e72846. Retrieved on May 30, 2020, from: <https://pesquisa.bvsalud.org/portal/resource/pt/biblio-1095404>.

Kumar, A., & Nayar, K. R. (2020). COVID 19 and its mental health consequences. *Journal of Mental Health*, 1-2. Retrieved on May 30, 2020, from: <https://www.tandfonline.com/doi/full/10.1080/09638237.2020.1757052>.

Le Couteur, D. G., Anderson, R. M., & Newman, A. B. (2020). COVID-19 through the lens of gerontology. *J Gerontol A Biol Sci Med Sci*, 75(9), e119-e120. Retrieved on May 30, 2020, from: doi: 10.1093/gerona/glaa077.

Morrow-Howell, N., Galucia, N., & Swinford, E. (2020). Recovering from the COVID-19 pandemic: A focus on older adults. *Journal of Aging & Social Policy*, 32(4-5), 526-535. Retrieved on May 30, 2020, from: <https://doi.org/10.1080/08959420.2020.1759758>.

PAHO. (2020). Pan American Health Organization. World Health Organization. Entenda a infodemia e a desinformação na luta contra a COVID-19. (OPAS). Retrieved on May 30, 2020, from: <https://iris.paho.org/handle/10665.2/52054>.

Pierleoni, P., Belli, A., Palma, L., Pellegrini, M., Pernini, L., & Valenti, S. (2015). A high reliability wearable device for elderly fall detection. *IEEE Sensors Journal*, 15(8), 4544-4553. Retrieved on May 30, 2020, from: <https://ieeexplore.ieee.org/abstract/document/7087338?section=abstract>.

Rahman, A., & Jahan, Y. (2020). Defining a 'Risk Group' and Ageism in the Era of COVID-19. *Journal of Loss and Trauma*, 25(Issue 8), 1-4. Retrieved on May 30, 2020, from: <https://doi.org/10.1080/15325024.2020.1757993>.

Santini, Z. I., Jose, P. E., Cornwell, E. Y., Koyanagi, A., Nielsen, L., Hinrichsen, C., Meilstrup, C., Madsen, K. R., & Koushede, V. (2020). Social disconnectedness, perceived isolation, and symptoms of depression and anxiety among older Americans (NSHAP): a longitudinal mediation analysis. *The Lancet Public Health*, 5(1), e62-e70. Retrieved on May 30, 2020, from: [https://doi.org/10.1016/S2468-2667\(19\)30230-0](https://doi.org/10.1016/S2468-2667(19)30230-0).

Shahid, Z., Kalayanamitra, R., McClafferty, B., Kepko, D., Ramgobin, D., Patel, R., Aggarwal, C. S., Vunnam, R., Sahu, N., Bhatt, D., Jones, K., Golamari, R., & Jain, R. (2020). COVID-19 and older adults: what we know. *Journal of the American Geriatrics Society*, 68(5), 926-929. Retrieved on May 30, 2020, from: <https://doi.org/10.1111/jgs.16472>.

Szabo, A., Allen, J., Stephens, C., & Alpass, F. (2019). Longitudinal analysis of the relationship between purposes of internet use and well-being among older adults. *The Gerontologist*, 59(1), 58-68. Retrieved on May 30, 2020, from: DOI: 10.1093/geront/gny036.

United Nations. (2020). Policy Brief: The Impact of COVID-19 on older persons. United Nations Sustain. Retrieved on May 30, 2020, from: <https://www.paho.org/en/documents/policy-brief-impact-covid-19-older-persons>.

Usher, K., Durkin, J., & Bhullar, N. (2020). The COVID-19 pandemic and mental health impacts. *International Journal of Mental Health Nursing*, 29(3), 315. Retrieved on May 30, 2020, from: <https://doi.org/10.1111/inm.12726>.

World Health Organization. (2020). Mental Health and Psychosocial Considerations During COVID-19 Outbreak. World Heal Organ. Retrieved on May 30, 2020, from: <https://www.who.int/publications/i/item/WHO-2019-nCoV-MentalHealth-2020.1>.

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