AGING PSYCHOLOGY

Janjani & Ziapour., Aging Psychology, 2025, 11(2), -
DOI: 10.22126/JAP.2025.12292.1859

Policy Brief

Heart Failure and COVID-19: Challenges for older Patients: A Public Health Policy Brief

Parisa Janjani [1] and **Arash Ziapour** [1*]

[1] Cardiovascular Research Center, Health Policy and Promotion Institute, Kermanshah University of Medical Sciences, Kermanshah, Iran

Article Info

Article History

Received: 05.02.2025
Revised: 04.05.2025
Accepted: 12.07.2025
ePublished: 12.07.2025

Keywords

challenges, covid-19, older adults, heart failure, policy brief, health promotion

How to cite this article

Janjani, P., & Ziapour, A. (2025). Heart Failure and COVID-19: Challenges for older Patients: A Public Health Policy Brief*Aging Psychology, 11*(2), -.

*Corresponding Author

Arash Ziapour

Email

arashziapoor@gmail.com

Publisher: Razi University

Abstract

Individuals diagnosed with heart failure (HF) underwent further hardship during the COVID-19 pandemic, particularly older patients. This policy brief explores the challenging experiences of older patients with HF, as well as strategies to improve their health in the aftermath of the COVID-19 pandemic.

The Policy Problem

The COVID-19 virus is a risk factor for all age groups. However, among the highest risk groups are older individuals, with the number of older patients with COVID-19 greater than other age groups (Wang et al., 2020). Additionally, along with the COVID-19 pandemic compounding the critical conditions of older adults, data reveals that 8 out of 10 mortality cases caused by COVID-19 are comorbid with cardiovascular diseases such as hypertension and diabetes (Safania et al., 2021). Although COVID-19 was initially represented as a respiratory disease, the severity of impact that COVID-19 has on heart health reveals that patients with the virus often develop heart disease (Liu et al., 2020; Sandoval et al., 2020; Tomasoni et al., 2020; Zheng et al., 2020; Ziapour et al., 2023).

Heart failure (HF) is a clinical syndrome that is progressive, chronic, and debilitating. Symptoms of HF include fatigue and shortness of breath and it is considered a significant threat to public health (Dhar et al., 2021). There is a complex relationship between COVID-19 and HF. Patients with a history of HF are at higher risk of experiencing and transmitting more severe cases of COVID-19, and HF can result from myocardial damage induced by COVID-19. The findings of the research verify the relationship of comorbidity. After the emergence of COVID-19, older adults' reports from China revealed that cardiovascular diseases, such as HF, were a common comorbidity in patients with COVID-19 (Wang et al., 2020).

Research reveals evidence that heart diseases, such as HF, and COVID-19 primarily damage the health of the older population than that of other age groups (Chen et al., 2020; Lionakis et al., 2012). Quarantine measures focused particularly on protecting older adults as they were more vulnerable to the virus (Falvo et al., 2021). However, there were negative social impacts from quarantine and lock-in rules, causing some older patients to feel confined and even imprisoned (Gonçalves et al., 2022; Han & Mosqueda, 2020).

As a result of quarantine-related isolation, participants reported feeling more dependent on others than ever before, even for daily tasks and mundane chores (Alkouri et al., 2022). Evidently, due to the higher vulnerability of older adults, there was also a greater perceived experience of anxiety, stress (Alkouri et al., 2022) and a fear of disease and death among the group (Stephens et al., 2020). Our goal was to create a policy brief to support healthcare by raising awareness about the difficulties faced by older patients with HF during the COVID-19 pandemic. This policy brief is intended for government policymakers, health authorities, and advisory bodies to improve healthcare and quality of care.

The Study

A qualitative research was employed to examine policy development and implementation (Yin, 2014). Data were collected from older patients with heart failure referring to Imam Ali Hospital during the Kermanshah-19 epidemic.

The researcher used purposive sampling to select participants from older adults who had extensive knowledge and could clearly articulate their experiences. Findings indicated that older patients with heart failure faced increased challenges during the COVID-19 pandemic. Initially, participants were recruited from the cardiac unit at Imam Ali Hospital in Kermanshah, Iran. The researchers explained the study's objectives and invited them to participate. Semi-structured interviews were conducted at times and in settings chosen by the participants. Each interview began with the interviewer introducing the study's purpose, followed by questions about the impact of the COVID-19 pandemic as portrayed in mainstream media. Data collection took place from August 5, 2022, to November 21, 2022.

Because the study relied on self-reported data, recall bias, which may affect the accuracy of participants' responses, was considered. Interviews continued until 12 participants had completed the questions, achieving data saturation. The study's findings revealed that during the COVID-19 pandemic, older patients with heart failure experienced significant adverse effects in multiple areas of their lives, including physical, mental, economic, familial, and social aspects. Future research should include more diverse samples to improve the generalizability of results and consider using longitudinal designs to track changes over time.

Conclusion

The results revealed that patients with HF who also contracted COVID-19 were affected throughout all aspects of their health, including mental, economic, social, as well as physical health. Understanding the challenging experiences of these patients, as well as their concerns regarding infection, can help guide healthcare workers to understand the consequences of older patients with comorbid HF and COVID-19. During the period of quarantine, the role of the psychiatrists and psychologists was crucial in helping aforementioned patients overcome the psychological effects, such as depression and stress, resulting from COVID-19. Provision of telemedicine and telephone-delivered counseling services, patient education, and medication are all effective methods in supporting these patients. We suggest that health officials, as well as politicians, act to financially support older adults with HF in order to prevent and lessen the severity of potential future crises and epidemics through providing insurance coverage and free medical services. In addition, we urge public health policymakers, development and humanitarian partners, as well as the donor community, to support the implementation of the proposed policy shifts in all fragile, conflict-affected, and vulnerable settings and to do so holistically, encompassing any potential public health threats.

Recommendations for Elderly Patients with Heart Failure

The following policy recommendations aim to address the multifaceted challenges—physical, psychological, social, and economic—faced by elderly patients with heart failure (HF) during the COVID-19 pandemic. These recommendations are evidence-based, actionable, and aligned with the findings of a qualitative study conducted at Imam Ali Hospital in Kermanshah, Iran, while drawing on global best practices tailored to the needs of elderly HF patients.

- Develop a centralized digital database to identify and monitor elderly patients with HF, integrating electronic health records from hospitals and primary care centers. This registry should encompass demographic data, HF severity, and COVID-19 exposure history to facilitate targeted interventions, such as prioritized telemedicine access or medication delivery.
- Deploy user-friendly telemedicine platforms featuring simplified interfaces for elderly HF patients to access remote cardiology and psychological consultations. These platforms should include video tutorials and multilingual support to overcome technological barriers.
- Provide targeted financial subsidies for HF medications and supplemental health insurance for elderly patients to alleviate economic stress. These subsidies should cover essential medications (e.g., beta-blockers, ACE inhibitors) and necessary diagnostic tests.
- Establish virtual peer support groups facilitated by psychologists and cardiologists to address feelings of isolation and anxiety among elderly HF patients. These groups should emulate successful psycho-oncology models, fostering community and emotional resilience.

- Launch multimedia campaigns (television, radio, and social media) to deliver simplified health education on HF management and COVID-19 prevention. Content should be tailored for elderly audiences, utilizing clear language and visual aids.
- Coordinate with local health authorities and NGOs to provide home delivery of medications and groceries for elderly HF patients, minimizing social contact and infection risk during pandemics.
- Develop online training modules for family members and informal caregivers to support HF management and address psychological distress in elderly patients. Training should cover medication adherence, stress management, and infection prevention.
- Form interdisciplinary teams, including cardiologists, psychologists, and social workers, to deliver holistic care for elderly HF patients. These teams should adapt models from psycho-oncology and diabetology for integrated care delivery.
- Develop rapid-response systems to monitor and alert healthcare providers about worsening HF symptoms or COVID-19 infections in elderly patients using wearable devices or remote monitoring tools.
- Establish community-based mental health programs, including telephone counseling and in-person support (where safe), to address depression and anxiety in elderly HF patients.
- Advocate for national policies to provide social protection packages (e.g., pension adjustments, emergency grants) for elderly HF patients to mitigate economic stressors during pandemics.
- Adapt successful international strategies, such as the UK's NHS telehealth model or Australia's home-based care programs, to the local context for managing elderly HF patients during pandemics. This includes stakeholder collaboration to ensure feasibility.

Acknowledgments

The authors would like to thank all the participants who patiently participated.

Ethics approval and consent to participate

Ethical approval was obtained and approved for the study from the Ethics Committee at the Kermanshah University of Medical Sciences. The ethic code allocated to this study is IR.KUMS.REC.1401.314. The required permission was gained to enter the Imam Ali Hospital in Kermanshah. Informed consent and written was obtained from all subjects. The principle of confidentiality was adhered to by not distorting the participants' statements and using the same phrase in writing the research findings. To maintain the participants' confidentiality about the information provided, an identification number was assigned to each interviewee. All methods were carried out in accordance with relevant guidelines and regulations. This policy brief is based on the data and findings of a previously published study, accessible at [https://doi.org/10.1186/s12877-023-04568-9].

Competing interests

The authors declare that they have no conflict of interest.

References

Alkouri, O., Khader, Y., Hweidi, I. M., Gharaibeh, M. K., Jarrah, M., Hamdan, K. M., Al Marzouqi, A., & Khamaiseh, K. (2022). COVID-19 Fear and Anxiety among Patients with Chronic Heart Failure: A Cross Sectional Study. Journal of Clinical Medicine, 11(21), 6586. https://doi.org/10.3390/jcm11216586

Chen, T., Wu, D., Chen, H., Yan, W., Yang, D., Chen, G., Ma, K., Xu, D., Yu, H., & Wang, H. (2020). Clinical characteristics of 113 deceased patients with coronavirus disease 2019: retrospective study. BMJ, 368, 1-12.https://doi.org/10.1136/bmj.m1091

Dhar, R., Vidya, G., & Kashyap, R. (2021). Morbidity Pattern among the Geriatric Population in an Urban Area of Davangere, Karnataka. National Journal of Community Medicine, 12(08), 230-235. https://doi.org/10.5455/njcm.20210709064840

Falvo, I., Zufferey, M. C., Albanese, E., & Fadda, M. (2021). Lived experiences of older adults during the first COVID-19 lockdown: A qualitative study. Plos One, 16(6), e0252101. https://doi.org/10.1371/journal.pone.0252101

Gonçalves, A. R., Barcelos, J. L. M., Duarte, A. P., Lucchetti, G., Gonçalves, D. R., Silva e Dutra, F. C. M., & Gonçalves, J. R. L. (2022). Perceptions, feelings, and the routine of older adults during the isolation period caused by the COVID-19 pandemic: A qualitative study in four countries. Aging & Mental Health, 26(5), 911-918. https://doi.org/10.1080/13607863.2021.1891198

Han, S. D., & Mosqueda, L. (2020). Elder abuse in the COVID-19 era. Journal of the American Geriatrics Society, 68(7), 1386–1387. https://doi.org/10.1111/jgs.16496

Lionakis, N., Mendrinos, D., Sanidas, E., Favatas, G., & Georgopoulou, M. (2012). Hypertension in the elderly. World Journal of Cardiology, 4(5), 135. https://doi.org/10.1111/jgs.16496

Liu, P. P., Blet, A., Smyth, D., & Li, H. (2020). The science underlying COVID-19: implications for the cardiovascular system. Circulation, 142(1), 68-78. https://doi.org/10.1161/CIRCULATIONAHA.120.047549

Safania, P., Barahmand, R., & Safania, A. M. (2021). Oral health of elderly during the corona virus pandemic: A review article. Journal of Dental Medicine, 34(1), 8. [Persian]

Sandoval, Y., Januzzi Jr, J. L., & Jaffe, A. S. (2020). Cardiac troponin for assessment of myocardial injury in COVID-19: JACC review topic of the week. Journal of the American College of Cardiology, 76(10), 1244-1258. https://doi.org/10.1016/j.jacc.2020.06.068

Stephens, E. H., Dearani, J. A., Guleserian, K. J., Overman, D. M., Tweddell, J. S., Backer, C. L., Romano, J. C., & Bacha, E. (2020). COVID-19: crisis management in congenital heart surgery. World Journal for Pediatric and Congenital Heart Surgery, 11(4), 395-400. https://doi.org/10.1177/2150135120931398

Tomasoni, D., Italia, L., Adamo, M., Inciardi, R. M., Lombardi, C. M., Solomon, S. D., & Metra, M. (2020). COVID-19 and heart failure: from infection to inflammation and angiotensin II stimulation. Searching for evidence from a new disease. European Journal of Heart Failure, 22(6), 957-966. https://doi.org/10.1002/ejhf.1871

Wang, D., Hu, B., Hu, C., Zhu, F., Liu, X., Zhang, J., Wang, B., Xiang, H., Cheng, Z., & Xiong, Y. (2020). Clinical characteristics of 138 hospitalized patients with 2019 novel coronavirus–infected pneumonia in Wuhan, China. JAMA, 323(11), 1061-1069. https://doi.org/10.1001/jama.2020.1585

Yin, R. (2014). Case study research design and methods (5th ed.). Thousand Oaks, CA: Sage. 282 pages, 30(1), 1-5. https://doi.org/ 10.3138/CJPE.BR-240

Zheng, Y. Y., Ma, Y. T., Zhang, J. Y., & Xie, X. (2020). COVID-19 and the cardiovascular system. Nature Reviews Cardiology, 17(5), 259-260. https://doi.org/10.1038/s41569-020-0360-5

Ziapour, A., Lebni, J. Y., Mohammadkhah, F., Chaboksavar, F., Janjani, P., & Yıldırım, M. (2023). Challenging experiences of the elderly with heart failure in the COVID-19 pandemic: a phenomenological study in Iran. BMC Geriatrics, 23(1), 834. https://doi.org/10.1186/s12877-023-04568-9