Nephro-Urol Mon. 2023 August; 15(3):e140193. https://doi.org/10.5812/numonthly-140193.

Published online 2023 October 15. **Letter**

Home Hemodialysis as a Suitable Alternative as COVID-19 Pandemic Resurges

Nader Aghakhani [1], Mohammad Delirrad [2] and Ebrahim Aliafsari Mamaghani [3,*]

[1]Food and Beverages Safety Research Center, Urmia University of Medical Sciences, Urmia, Iran
[2]Department of Medical Toxicology and Forensic Medicine, Faculty of Medicine, Urmia University of Medical Sciences, Urmia, Iran
[3]Department of Nursing, School of Nursing and Allied Medical Sciences, Maragheh University of Medical Sciences, Maragheh, Iran

[*]*Corresponding author*: Department of Nursing, School of Nursing and Allied Medical Sciences, Maragheh University of Medical Sciences, Maragheh, Iran. Email: ealiafsari@gmail.com

Received 2023 August 21; **Revised** 2023 September 18; **Accepted** 2023 September 29.

Keywords: Home Hemodialysis, Suitable, Alternative, COVID-19, Pandemic

Dear Editor,

The appearance and spread of COVID-19 have become a concerning medical issue worldwide. Patients undergoing hemodialysis therapy have been significantly impacted during the pandemic, as have healthcare professionals providing care to this vulnerable group who are not immune to the virus according to their treatment method. Medical settings where patients receive hemodialysis treatment are known to be high-risk environments, with the most vulnerable patients having a greater risk of infection and mortality (1).

Most of these patients are elderly with multiple comorbidities, making them part of a high-risk group for contracting COVID-19 despite several preventive measures and guidelines. In addition, they share common spaces and stay in restricted locations for extended periods, including transportation, which poses significant logistical challenges (2).

Alternative methods, such as home hemodialysis, have been developed to treat severely ill COVID-19 patients who face shortages of supplies, manpower, and available equipment for their treatment at home. Home hemodialysis allows for an adaptable timetable, more frequent treatments, the avoidance of long interdialytic intervals, greater travel ability, and self-administration, all of which improve patients' self-efficacy, independence, and capacity to take appropriate infection control measures to reduce COVID-19 exposure and spread (3).

Patients can avoid exposure and infection risks by receiving hemodialysis treatment at home, keeping them safe while maintaining treatment efficacy and staying closely connected with their healthcare professionals. Home hemodialysis provides a wide range of medical and quality of life benefits, including safety and protection (4), and innovative technological solutions like telemedicine help address patient concerns, recognize issues, facilitate remote tracking of patients, promote social distance, and ensure continuous care (5).

In conclusion, home hemodialysis is an effective treatment strategy that enhances patients' endurance and quality of life. It enables them to avoid exposure and transmission of infectious diseases like COVID-19 by remaining at home and complying with effective measures.

Footnotes

Authors' Contribution: All three authors actively participated in all stages, especially in the initial idea and its writing.

Conflict of Interests: There is no conflict of interest.

Funding/Support: There was no funding/support.

References

1. Sanchez-Alvarez JE, Perez Fontan M, Jimenez Martin C, Blasco Pelicano M, Cabezas Reina CJ, Sevillano Prieto AM, et al. SARS-CoV-2 infection in patients on renal replacement therapy. Report of the COVID-19 Registry of the Spanish Society of Nephrology (SEN). *Nefrologia (Engl Ed)*. 2020;**40**(3):272–8. [PubMed ID: 32389518]. [PubMed Central ID: PMC7161531]. https://doi.org/10.1016/j.nefro.2020.04.002.

Copyright © 2023, Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY 4.0) (https://creativecommons.org/licenses/by/4.0/) which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

2. Albalate M, Arribas P, Torres E, Cintra M, Alcazar R, Puerta M, et al. High prevalence of asymptomatic COVID-19 in haemodialysis: learning day by day in the first month of the COVID-19 pandemic. *Nefrologia (Engl Ed)*. 2020;**40**(3):279–86. [PubMed ID: 32456944]. [PubMed Central ID: PMC7190471]. https://doi.org/10.1016/j.nefro.2020.04.005.
3. Sachdeva M, Jhaveri KD, Fishbane S. Home Dialysis in the Time of COVID-19: Reflections on Rapidly Changing Policies. *Kidney Med*. 2021;**3**(1):1–5. [PubMed ID: 33251508]. [PubMed Central ID: PMC7685041]. https://doi.org/10.1016/j.xkme.2020.09.008.
4. Bonenkamp AA, van Eck van der Sluijs A, Hoekstra T, Verhaar MC, van Ittersum FJ, Abrahams AC, et al. Health-Related Quality of Life in Home Dialysis Patients Compared to In-Center Hemodialysis Patients: A Systematic Review and Meta-analysis. *Kidney Med*. 2020;**2**(2):139–54. [PubMed ID: 32734235]. [PubMed Central ID: PMC7380444]. https://doi.org/10.1016/j.xkme.2019.11.005.
5. Lew SQ, Wallace EL, Srivatana V, Warady BA, Watnick S, Hood J, et al. Telehealth for Home Dialysis in COVID-19 and Beyond: A Perspective From the American Society of Nephrology COVID-19 Home Dialysis Subcommittee. *Am J Kidney Dis*. 2021;**77**(1):142–8. [PubMed ID: 33002530]. [PubMed Central ID: PMC7521438]. https://doi.org/10.1053/j.ajkd.2020.09.005.