Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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Clinical benefits in patients with home-based cardiac rehabilitation in the era of COVID-19 pandemic

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I read the study by Jafri et al.[1] with great interest. The authors evaluated outcomes of patients with or without home-based cardiac rehabilitation (HBCR). Although HBCR was significantly associated with a lower risk of the combined all-cause mortality and all-cause hospitalizations up to 12 months, the adjusted hazard ratios (95% confidence intervals) of HBCR for all-cause mortality, cardiovascular hospitalization, and all-cause hospitalization were 0.43 (0.18−1.0), 0.57 (0.22−1.4), 0.53 (0.28−1.01), respectively. About half of the center-based cardiac rehabilitation (CBCR) programs stopped during the coronavirus disease-19 pandemic.[2] Jafri et al. pointed out that randomized controlled trials (RCTs) are needed to evaluate the effectiveness of HBCR; therefore, I am presenting some comments about the effectiveness of HBCR based on recent academic papers.

Batalik et al.[3] conducted an RCT to evaluate the effectiveness of home-based cardiac telerehabilitation (HBCTR) over a period of 1 year in patients with coronary heart disease (CHD). Although the average of peak oxygen uptake significantly increased, there was no significant change in scores of health-related quality of life (QOL) by intervention. Ramachandran et al.[4] conducted a meta-analysis of RCTs to evaluate the effectiveness of HBCTR as an alternative to CBCR in patients with CHD. Patients with HBCTR showed a significant improvement in functional capacities such as 6-min walking test distance, daily step count, and exercise habits than patients with usual medical care. In addition, depression scores and QOL scores also improved with HBCTR. Furthermore, HBCTR and CBCR were comparable in terms of their impact on functional capacity, physical activity, depression, QOL score, medication adherence, cardiac-related hospitalization, and behavioral risk factors, including smoking.

There is not enough data present regarding the effectiveness of HBCR/HBCTR in the literature; therefore, further studies are required. In the era of the coronavirus disease-19 pandemic, valid HBCR/HBCTR may serve as an effective alternative to manage patients with CHD.

Declaration of Competing Interest

There is no conflict of interest in this study.

There is no financial or other relationship with other people or organizations, that may inappropriately influence my work.

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