



## Sub-obstacles related to long distance and lack of easy access to outpatient cardiac rehabilitation services

Behzad Heydarpour<sup>(1)</sup> , Maryam Ahmadi<sup>(1)</sup>, Saeid Komasi<sup>(2)</sup> 

### Letter to Editor

*Date of submission:* 27 Jan. 2019, *Date of acceptance:* 20 Mar. 2019

#### Dear Editor

Cardiac rehabilitation programs (CRs), as one of the third-level prevention services, plays a significant role in improving the quality of life of patients, and reducing sudden deaths.<sup>1</sup> In recent years, the importance of participating in various forms of CRs has been well highlighted.<sup>2-4</sup> However, the rate of participation in Iran is less than 15%, and almost half of the patients will not be able to complete the programs.<sup>5,6</sup>

This problem is due to several barriers, such as the lack of awareness of the benefits of CRs, illiteracy, aging, anxiety, depression, lack of insurance coverage, and long distances and lack of easy access.<sup>5,6</sup> Although the long distance is considered as one of the obstacles to complete CRs, the indirect effects of this problem appear to have a more negative effect on the continuity of treatment. Distance-related effects include increased costs of metropolitan transportation, disruptions to the normal routine of daily life, need for a family member's permanent help and assistance, lack of sleep, low intake and delays in meals, and lack of individual healthcare facilities in CR centers.

In most CR centers, training classes and aerobic exercise begin at 8.30 am. The patients who live in adjoining cities and remote areas are facing numerous challenges for timely attendance. They usually wake up very early, and do not eat enough breakfast. This causes lack of sleep, sleepiness, and loss of blood sugar in patients, and it mostly causes them to be nervous and agitated. The patients' entourages, who are generally young people, are experiencing occupational, economic, and family problems because of the length of sessions (26-40 sessions of 3 hours). The patients are disturbed by the observation of this condition. Patients, especially those who suffer from financial problems, have to bear additional cost of transport.<sup>7</sup> At the end of each session, the patients return to their

place of residence immediately, and these travels will shift their meals. Meanwhile, because of the limitations of physical space, some CR centers do not have enough health facilities that cause the patients to suffer until they reach home.

These factors, all of which are effective in not registering and not adhering to CRs, are directly related to long distance and lack of easy access to these centers. Despite the numerous patients in Iran and the vastness of the country's territory, there are currently only 16 CR centers in 11 cities.<sup>8</sup> This challenge makes it difficult for patients to access these services. Hence, we recommend that short and accessible delivery formats, such as hybrid and home-centered programs, be used alongside traditional hospital-based programs.<sup>2</sup> In this case, patients with cardiovascular diseases are more likely to participate in CRs and complete the programs.

#### Acknowledgments

We appreciate the **Clinical Research Development Center of Imam Reza Hospital, Kermanshah University of Medical Sciences, Kermanshah, Iran.**

#### Conflict of Interests

Authors have no conflict of interests.

#### References

1. Lee JY, Ahn JM, Park DW, Kang SJ, Kim YH, Lee SW, et al. Impact of exercise-based cardiac rehabilitation on long-term clinical outcomes in patients with left main coronary artery stenosis. *Eur J Prev Cardiol* 2016; 23(17): 1804-13.

**How to cite this article:** Heydarpour B, Ahmadi M, Komasi S. **Sub-obstacles related to long distance and lack of easy access to outpatient cardiac rehabilitation services.** *ARYA Atheroscler* 2019; 15(3): 152-3.

1- Cardiac Rehabilitation Center, Imam Ali Hospital, Kermanshah University of Medical Sciences, Kermanshah, Iran

2- **Clinical Research Development Center, Imam Reza Hospital, Kermanshah University of Medical Sciences, Kermanshah, Iran**

Correspondence to: Saeid Komasi, Email: [s\\_komasi63@yahoo.com](mailto:s_komasi63@yahoo.com)

2. Saeidi M, Soroush A, Komasi S, Singh P. A hybrid cardiac rehabilitation is as effective as a hospital-based program in reducing chest pain intensity and discomfort. *Korean J Pain* 2017; 30(4): 265-71.
3. Komasi S, Saeidi M. Case formulation and comprehensive cardiac rehabilitation programs tailored to the unique risk factors and consequences profile. *ARYA Atheroscler* 2018; 14(6): 276-7.
4. Komasi S, Soroush A, Saeidi M. Off-center cardiac rehabilitation focused on extended emotional relationship and common health gains. *ARYA Atheroscler* 2018; 14(1): 44-5.
5. Moradi B, Maleki M, Esmaeilzadeh M, Abkenar HB. Physician-related factors affecting cardiac rehabilitation referral. *J Tehran Heart Cent* 2011; 6(4): 187-92.
6. Heydarpour B, Saeidi M, Ezzati P, Soroush A, Komasi S. Sociodemographic predictors in failure to complete outpatient cardiac rehabilitation. *Ann Rehabil Med* 2015; 39(6): 863-71.
7. Shanmugasegaram S, Oh P, Reid RD, McCumber T, Grace SL. Cardiac rehabilitation barriers by rurality and socioeconomic status: A cross-sectional study. *Int J Equity Health* 2013; 12: 72.
8. Komasi S, Saeidi M. Hybrid cardiac rehabilitation as an alternative to common hospital-based cardiac rehabilitation in Iran: An appropriate model for the Iranian health system limitations, culture, and patients. *Res Cardiovasc Med* 2017; 6(2): e39367.