

## Off-center cardiac rehabilitation focused on extended emotional relationship and common health gains

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### Letter to Editor

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#### Dear Editor-in-Chief

In recent years, cardiac rehabilitation (CR) programs have been well advanced.<sup>1,2</sup> However, failure to adhere to these programs by patients and failure to follow a healthy lifestyle during and after CR is still a serious disadvantage.<sup>2,3</sup> In Iran, hospital-based delivery format is still the preferred approach. Although, obstacles such as access have challenged active presence of patients.<sup>4,5</sup> Thus, providing measures to increase adherence by patients and prevent withdrawal of the treatment program is one of the priorities of the management of CR field.<sup>2</sup> In this regard, previous studies have contributed to several factors. But, it seems that the strategies for solving this problem must be the function of social and cultural context of each society.<sup>4</sup> Therefore, proposing practical suggestions tailored to social and cultural situation of each country can be effective in solving this problem.

A brief study of the executive structure of CR centers in Iran shows that these centers are generally active during before midday time (ante meridiem or am). All patients attending hospital-centered CR take part in exercise and lifestyle modification training within 8-12 weeks (three times a week) during the hours of before midday.<sup>2</sup> Despite the awareness of the centers' health team of different levels of patients heart risk (low, moderate, and high risk), the limited number of CR centers throughout the country has led all patients to be managed in a single timetable and delivery format. Obviously, the level of heart risk is effective in choosing exercise schedules, and its duration and severity.<sup>5</sup> Hence, it is better to design the structure of the treatment plans of each group based on heart risk.

Based on these considerations and in order to optimally use the physical space and hardware facilities of the CR centers, it is recommended that patients be divided into two groups of low-medium

risk and high risk.<sup>6</sup> Then, low-medium risk and high-risk patients respectively participate in the comprehensive CR programs during the hours of before and after midday (post meridiem or pm). Secondly, it is recommended that several health centers be set up in several different parks in each city. The members of these centers consist of a sports medicine specialist, a nutritionist, and two nurses.

In the next step, the provision of services can be designed based on the cultural context of the country. For example, designing and implementing health promotion side plans with the emphasis on developing emotional relationships of the CR group is likely to be helpful.<sup>7</sup> In the framework of such approaches, patients can participate in off-center group activities. Group exercise and conduct retraining sessions around a health facility are helpful for patients. Given that patients only exercise for three days at a CR center, on other days of the week, group sports can be transferred to out-of-center (adjacent health centers). Previous reports indicate that perceived social support is associated with an increase in the quality and quantity of walking.<sup>8</sup> A group walking with an emphasis on the extended emotional relationship and common health gains makes the low-medium risk patients benefit and enjoy a lot of common interactive and targeted activity. Meanwhile, according to the nutritionist guidelines, patients can use a designated food basket and use healthy food after the rest at the terminal. It seems that the creation of this health program with a positive emotional atmosphere is also effective in managing patient's stress.<sup>9</sup>

In relation to high-risk patients, it is evident that participation in hospital-centered CR is safer. These patients need to be fully supervised by the CR team. Therefore, off-center programs are not very suitable

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for them.<sup>5</sup> In addition; patients away from the center and living in remote areas cannot participate in off-center programs. However, our proposed program can be appealing for a significant proportion of patients and increase their adherence to CR. Implementing our proposed program may also be effective in adopting a healthy lifestyle in the long-term.<sup>3</sup> Therefore, we recommend that this approach is used as a pilot in country's CR centers.

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### Conflict of Interests

Authors have no conflict of interests.

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