Schedule of Cardiac Rehabilitation in Iran

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Cardiovascular disease especially coronary heart disease is a major problem in many countries. Cardiovascular diseases account for nearly 29% of all cause mortality and 10% of disease load in 2001. Post myocardial infarction survivors suffer a re-infarction 5 times the healthy population. Secondary prevention protocols can help the patients to live healthier with fewer morbidity and mortality. Cardiac rehabilitation decreases coronary heart disease mortality for nearly 26%.

The old population is expanding in most countries, including I.R. Iran, and 36.8% of Iranian elderly have cardiac diseases.

There are some specialized cardiac rehabilitation centers in large cities in Iran in which their program consist of:

1. in- patient programs with an early assessment for risk factor management and mobilization,
2. transition cares and discharge planning design for daily activities like driving, lifting, sexual activity and so on,
3. out-patient rehabilitation and secondary prevention, the patients are assessed for risk factors and they will be divided into different categories.

Necessary interventions for minimizing the effects of risk factors explained to patients such as non pharmacologic interventions or a healthier life style (quitting tobacco use, healthier diet, regular physical activity, weight management, stress reduction).

In this stage, the patients undergo medical evaluation and exercise testing and based on the results, exercise plan is prescribed and ECG monitoring and medical supervision applied when indicated.

Appropriate equipment, staffing and safety measures were utilized appropriately by the rehabilitation programs. In Iran, specialized physiatrists, nurses, physiotherapists, nutritionists, psychologists work as a group.

National health systems and Iranian health ministry together with insurance companies have started their supports of rehabilitation protocols, however they are only for secondary prevention strategies (post CABG, post angioplasty, post AMI,...).

Despite this, the current status in Iran is far from optimum in terms of facilities, knowledge, attitude and of course clinical practices.

Our future direction is making our efforts for changing life style habits in the population for primary prevention. On the other hand, we have to expand cardiac rehabilitation centers and enhance education of the staff; also we ought to try our best to get together the insurance companies to suppor primary prevention protocols in high risk individuals.

There is very limited researches in Iran. However, there are important results in the organization of secondary prevention strategies. The effectiveness of secondary prevention measures, the costs of disease and its consequences compared to the costs of prevention, the KAP analysis on the target population can help a fruitful organization.

In a study of 118 coronary artery disease patients in Shahid Rajaee Hospital, after the monitoring period, BMI, weight, waist circumference, and waist to hip ratio decreased ($p<0.001$) however, these indices returned to the pre rehabilitation period after 12 months (Masoumi 2005).

In another study of 8 weeks exercise rehabilitation on 100 patients (Farahani 2003), 10% increase in METs was observed compared to pre exercise situation ($p=0.001$). A 6% decrease in resting heart rate and 18% increase in maximal attainable heart rate were found. There is a slight decrease in systolic blood pressure and improvement in lipid profile.

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