

# Cardiac rehabilitation



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## Introduction

The Irish Heart Foundation (IHF) became involved with cardiac rehabilitation during the early stages of its development in the United States and Western Europe. Through its important role in the foundation of the International Society & Federation of Cardiology (ISFC), Professor Risteárd Mulcahy developed close links with Nanette Wenger in the USA, Kurt Koenig in West Germany and Alan Goble in Australia, who were active in developing the idea of rehabilitation for patients who had suffered myocardial infarction. The long-proposed idea that physical fitness and abstention from smoking had a beneficial effect in patients with atherosclerosis was finally beginning to achieve a level of credibility amongst the cardiovascular community and one of the major *raison d'être* of the IHF was to espouse the cause of prevention as a mainstay in the battle against coronary heart disease.

## The importance of primary prevention

At that time, total cholesterol was not deemed elevated unless measured above 6.5mmol/l and there were many who did not agree that it was an important risk factor. The Council on Cardiac Rehabilitation of the ISFC in conjunction with the IHF held a meeting in Dublin in early 1976, at which the importance of preventive measures embodying the employment of regular physical exercise, smoking cessation and reduction in saturated fat intake was endorsed.

It is surprising to consider that only a small number of physicians and a section of cardiologists at that time actively supported primary prevention as a method of dealing with coronary atherosclerosis. It was a short step, which had already been taken in the United States and some European countries, to apply these principles to secondary prevention, particularly in those individuals who, in increasing numbers, were undergoing coronary artery bypass graft surgery, as well as those patients who had suffered a myocardial infarction. The Heart Foundation, through its countrywide network, actively supported physicians willing to disseminate the prevention message, by helping to organise and finance educational meetings.

## The Cardiology Prevention Unit

The Cardiology Prevention Unit at St Vincent's Hospital was the pathfinder in the Republic of Ireland in employing the special insights of coronary care nurses in patient education. Having been fortunate enough to obtain a European Economic Community (EEC) grant directed at assisting return to work in patients who had sustained myocardial infarction and/or bypass graft surgery, I replicated in St Laurence's Hospital (The Richmond) a programme which I had initiated at the Virginia Medical Institute in 1973. This programme added dimensions which had not previously been utilised in Ireland, namely, the employment of a psychologist to deal with the stress of having sustained a myocardial infarction and/or undergone bypass graft surgery and the introduction of the use of a pharmacist to aid patients in understanding and complying with medication. This programme also introduced formal exercise training with pre- and post-programme assessments to quantify the training effect. With the assistance of the Heart Foundation, annual meetings took place, which addressed various aspects of the rehabilitative process. These meetings were very well attended, particularly by members of the nursing profession, whose propinquity to patients in the period of early recovery after heart attack and surgery had taught them that the rehabilitation programmes which existed at that time in St Vincent's and St Laurence's hospitals filled a very necessary role during a vulnerable period in patients' recovery.

## Education programmes

An increasing awareness of the necessity to expand the provision of such services led to the establishment in 1992 at Beaumont Hospital of a diploma course aimed at training nurses and other medical personnel to co-ordinate and provide a comprehensive rehabilitation system, which could be applied universally.

The IHF played a major role in supporting the educational programme at Beaumont by making available educational grants to those who undertook the diploma, which required a six-month secondment to the department in Beaumont for hands-on training. The subventions from the Heart Foundation,

coupled with support from health boards, created a cadre of individuals who now run viable rehabilitation programmes in almost every Health Board hospital in the country. This diploma was later expanded to an MSc awarded by UCD/RCSI.

During this period, the Irish Association for Cardiac Rehabilitation came into existence and was also assisted by the Heart Foundation during its early years. It continues to avail of facilities at the Heart Foundation's offices in Clyde Road.

### **Reassessing cardiac rehabilitation**

In this era of rapid development in cardiac therapies, it has become clear that cardiac rehabilitation, while of accepted value, needs to undergo reassessment. The original application of rehabilitation to post-myocardial infarction and coronary artery bypass graft surgery patients has been expanded to include angioplasty and heart failure patients. It is now acknowledged that post-angioplasty patients benefit from all aspects of the rehabilitation process, in particular, those relating to compliance with medication, smoking cessation and participation in exercise programmes. The realisation that heart failure patients benefit by exposure to carefully modulated

exercise training and obviously benefit by enhanced compliance with medication and other preventive measures has also led to the incorporation of this group of patients into the rehabilitation ambit. Furthermore, the establishment of community surveillance programmes such as Heartwatch create a further aspect with which linkage is mandatory.

At an international level, the recognition that cardiac rehabilitation programmes offer an excellent mechanism of delivering secondary prevention has led to the amalgamation of rehabilitation and prevention working groups both in the successor to the ISFC, namely the World Heart Federation, and the European Cardiac Society. It may well be that cardiac rehabilitation as a term may disappear as the multifaceted modality is subsumed into the world of heart failure clinics and outreach programmes. This appears appropriate, as the education and skills of those engaged in cardiac rehabilitation can readily be adapted to embrace these other adjunctive areas. The Heart Foundation will undoubtedly continue its valuable role as an advocate of preventive strategies within these new structures.