

## PATIENT REACTION TO THE SINGAPORE GENERAL HOSPITAL CARDIAC REHABILITATION PROGRAMME

Fred R. Sabapathy

This programme was started in March 1979 on the firm belief that a CONTROLLED, REGULATED, SUSTAINED, ENDURANCE EXERCISE PROGRAMME is a key factor in the rehabilitation of a heart patient. This programme is also to maintain him or her, at the approved level and thus achieving the objective – in the words of Dr T Cavanagh of the Toronto Cardiac Rehabilitation Centre – an endurance trained heart, an endurance trained blood and an endurance trained muscle.

In the initial stage, four heart patients, after being examined by the doctors, were put into this programme. Later, other heart patients on the recommendations of the doctors, joined in. At this moment of time, there are 28 active participants (note: no longer called patients), whilst three others have opted out and seven faded out of the exercise programme.

The strategy in this present programme is the use of an exercise prescription to enable a walk and jog which is related to the condition of the heart patient. We have entered into a rhythmic exercise programme that involves particularly the larger muscles. Exercises of isometric contractions are avoided. The patients in this programme meet at the Singapore General Hospital Rehabilitation Centre for three times a week to undergo the prescribed exercise programme under the supervision of a doctor, an ICU Nurse and a physiotherapist per session, who ensure that the exercises are not competitive in nature and that the participants are following the exercise prescriptions without any untoward effects. The hospital staff also keep equipment and drugs for immediate application if needed.

The following danger factors are brought, amongst other things, to the attention of the participants:

1. **Cigarette Smoking:** It's dangers and methods of reducing it.
2. **Diet:** The various types of diet in relation to the physical condition of the participant is stressed upon. Some patients must have a low cholesterol diet whilst for others, the emphasis could be on a low salt diet.
3. **Illness:** The treatment of ailments like diabetes, hypertension and the presence of high uric acids, etc., is administered.

**Chairman**  
**Singapore Coronary Club**

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4. **Stress and Tension:** This factor happens to be very common among all the participants because of the nature of our life style in Singapore living. The avoidance or reduction in stress and tension is reiterated.

The participants in the programme have experienced changes in the following areas of their lives:

1. **Physical:** Those who are continuing regularly in the programme have seen their life style change from an essentially sedentary living habit to one of light activity. This process has been gradual as the exercise programme is so regulated that the first session which starts with a slow "funeral" walk ends up after months into an active walk and jog. This has led to a better physical well-being and with less complaints of the common ailments of flu, headaches, etc.

The participants feel stronger and healthier and those with the smoking habit have either given it up or reduced it considerably.

2. **Psychological:** At every session, the doctor and nurses give immediate attention to any complaints from the participants. The records are kept up-to-date and are available immediately. A close observation is kept on the participants by accompanying them in their walk and jog circuits. A regular stress test is also instituted. All these factors are a morale booster for the participants and an aid in their recovery.
3. **Emotional:** This has been a sensitive area in the life of the heart patient, as his whole life has been shocked in realising that a very important organ in his body has been adversely affected. A dreadful gloom is cast over his life. But the exercise programme revealed the real "heart interest" shown by the doctors and nurses. The encouragement shown by his own family contributed to his overcoming his own personal emotions, helping him to gain confidence in himself through this programme. It must be said that when a recent drop-out from the programme had a fatal heart attack, his family were very upset. And yet, at the funeral, they paid tribute to this cardiac rehabilitation programme which had given their loved one not only a greater lease of life but a more meaningful, though limited active life.
4. **Social:** One of the first complaints made by members of the family of a heart patient is that he becomes a recluse. He doesn't want to do anything for fear that he might get another heart attack and this leads him into a morbid life. Families have come to breaking points because of the dark cloud that a heart patient has brought into the family circle. But wives now testify how their husbands are able to live a "normal" life again through this cardiac rehabilitation programme.
5. **Spiritual:** This may be an unwarranted factor but participants (patients) have been made more conscious that this "bonus" life-span has been designed by God. They become conscious in their belief in God who has given them a new lease of

life, and are therefore eager to live a useful and meaningful life at home, at work and in the community, determined through their exercise programme. A determination propelled by the conviction that this Cardiac Rehabilitation Programme as prescribed, is the right thing to do rather than be driven by the fear of having another heart attack.

Attention is drawn to the two categories of ex-participants mentioned in paragraph 2 above:-

- a. **Those who have opted out:** One of the main reasons why this takes place is because complacency creeps in after a short time in the programme and they feel they can carry on living either without the exercise programme or doing it on their own. Others have complained that the pressure of their work as such does not give them time for an exercise programme. Some have found that it causes them heavy transport expenses to come to the Singapore General Hospital for their exercise programme. Whilst others have been discouraged in their unsuccessful attempts of reducing their smoking habits.
- b. **Those who have dropped out:** Such participants have revealed that they are disappointed in the programme because it is a waste of time as no mystical changes have taken place in their health conditions during the early stages of their exercise programme. The younger set of the ex-participants do not want to be associated with a heart attack as they feel it is a stigma to their social positions and sex life. As this programme is something new to the community or society in Singapore, these participants who have felt no benefit in their short time of exercises, consider themselves in the exercise programme as guinea pigs or being experimented upon.

It is sad to note that people in these two groups who are so optimistic that they can perform their own controlled prescribed exercises at home have either failed to do so or have overdone it. Three of such participants had to be readmitted to the hospital with angina.

We have formed the Singapore Coronary Club with the blessings of the Ministry of Health, Singapore National Heart Association and Singapore Sports Council and we hope to play a more important part in community research from the findings of the participants of the programme. Although there had been no fatal casualties from amongst the active participants in the prescribed exercise programme, we do not take any pride in it but wish to emphasize that exercise cardiology has changed our living style and habits and made us more conscious of the ill effects of wrong diets, smoking habits and stress.

I would like to close this presentation with suggestions in two areas in the Singapore Cardiac Rehabilitation Programme:

- a. Educational talks in the Exercise Programme like on Resuscitation etc. would be beneficial to the

participants in the programme if 5 to 10 minutes talks be given at each session and also reminding participants of the risk factors that are commonly ignored and to encourage them in the features that will enhance their physical well-being. A question time should follow.

- b. As this prescribed exercise programme is a new and young project, all encouragement and exhortations be given in love and concern, to both

active and non-active participants, the latter being disciplined for failure to attend the programme.

I want to mention that these suggestions take into account of the tribute we pay to our doctors and nurses who have bent backwards in promoting this programme inspite of their heavy schedules and I am sure they will implement it if they are able to find more than 24 hours in a day!