



HEART RESEARCH CENTRE NEWSLETTER

ISSUE 3 | 2008



Medical Journal of Australia publishes Centre's research



Ms Rosemary Higgins
Research Fellow and Training
Program Manager

Cardiac rehabilitation attendance rates can be improved by hospitals adopting simple improvements to their referral practices. This was the key finding of a Heart Research Centre study published in the Medical Journal of Australia on 16 June 2008. The study tracked rehabilitation attendance of 184 patients who had coronary artery bypass graft surgery at The Royal Melbourne Hospital (RMH). Exceptional rates of rehabilitation attendance were achieved, with three-quarters of all eligible patients participating in a program after leaving hospital.

First author of the report, Ms Rosemary Higgins, said: "The targeted referral strategies routinely employed at the hospital's cardiothoracic surgical unit ensured a very high attendance at cardiac

rehabilitation among patients in the study". She commented that other audits within Australia indicate that only 30 to 50% of patients attend such programs after bypass surgery. "Referral of patients to cardiac rehabilitation needs to be much more proactive to ensure that all patients are given an opportunity to attend", Ms Higgins said.

The RMH has adopted the referral practices recommended in the Heart Research Centre's Best Practice Guidelines which were commissioned by the Victorian Department of Human Services in 1999. Dr Goble, senior author of the guidelines, congratulated both the Unit's director, Associate Professor James Tatoulis and Cardiac Rehabilitation Coordinator, Ms Kath Kelly, from RMH on the pleasing results. Dr Goble commented that:



Ms Kath Kelly
Cardiac Rehabilitation Coordinator,
The Royal Melbourne Hospital

"Patients generally will attend cardiac rehabilitation if they are properly referred. The results of this study demonstrate the importance of improving hospital systems to ensure higher attendance rates at cardiac rehabilitation programs which offer group exercise, education and support".

Principal Research Fellow at the Heart Research Centre, Dr Barbara Murphy, emphasised that the findings of this study should lead to better outcomes for cardiac patients, including quicker recovery. "Other hospitals need to consider implementing the same referral strategies currently in place in the cardiothoracic surgical unit at the RMH".

Referral practices recommended

- Automatic referral after acute cardiac event
- Referral included in discharge planning
- Invitation and explanation in hospital
- Written invitation also provided
- Referral to nearest program
- Doctors should reinforce benefits of rehabilitation
- Spouses encouraged to attend with patient

Sri Lankan health professionals seek Centre's help



Dr Janani Pinidiyapathirage
Visiting Research Officer

With the rise in heart disease in Sri Lanka, the government is encouraging the development of cardiac rehabilitation and prevention programs. Three health professionals were recently sent to the Heart Research Centre, with support from the Sri Lankan Government, to learn more about best practice cardiac rehabilitation and how it could be achieved in Sri Lanka.

Dr Janani Pinidiyapathirage is on a government scholarship for a year which she is spending at the Heart Research Centre. Recently she was joined by two colleagues. Together, they attended the Centre's *Five day training program in cardiovascular disease rehabilitation and prevention*, followed by a week visiting model programs in Melbourne. Shalin Peiris is a pharmacist from the Institute of Cardiology and Kishan Wasala is a technical officer from the Department of Health.

Kishan hopes to work as part of the team establishing cardiac rehabilitation programs throughout Sri Lanka. He thinks there are more barriers in the health professional-patient relationship in Asian cultures but after attending the course, he feels he can now understand and appreciate a patient's point of view better. He expects to be able to communicate more effectively with patients in the future.

As a pharmacist, Shalin felt the sessions helped her to broaden her outlook. Prior to coming to the course, she had concentrated more on the role of the pharmacist. The program helped her to understand cardiac rehabilitation as a whole. She was particularly interested in the session about diabetes and said it was explained extraordinarily well with the use of a 'body link model'. Shalin thought she could apply this approach in Sri Lanka when presenting information during her quit smoking program.

They all agreed the training program was very informative and they had learnt much that was new to them. They also enjoyed their first visit to Melbourne.



Ms Shalin Peiris and Mr Kishan Wasala,
Dr Pinidiyapathirage's Sri Lankan colleagues

Sri Lanka serves as a model for "good health at low cost" for many countries in South East Asia. In 2001, with a population close to 19 million, life expectancy at birth was 76.4 for women and 71.7 for men. It is interesting to note that despite the increased life expectancy public health sector spending has not significantly increased over recent years. In contrast to the Australian government which spends 8.8% of GDP on health, the Sri Lankan government spends only 4.1% of its GDP on health. In 2005, per capita health expenditure was 189 (International \$) for an average Sri Lankan. The comparative figure for an Australian was 3,001 (International \$).

Special Offer

Heart Health at Your Fingertips

Last remaining copies
\$15.00 incl p&p

A practical and informative book
for the general public and
health professionals

Contact Us

**HEART
RESEARCH
CENTRE**



Heart Research Centre

Postal Address:

PO Box 2137
The Royal Melbourne Hospital
VIC 3050

Street Address:

Level 7
14-20 Blackwood Street
North Melbourne VIC 3051

Telephone: (03) 9326 8544

Facsimile: (03) 9326 5066

Email:

heart@medicine.unimelb.edu.au

Website:

www.heartresearchcentre.org

ACN 060 479 763

ABN 87 267 901 425

A company limited by guarantee

Heart attack: how does it occur?



Dr Alan Goble
Cardiology Consultant

A heart attack is a medical emergency. Its main symptom is pain, often severe, over a wide area and usually in the front and middle of the chest. The pain may also be present in the left (or right) arm, in the throat, in the back of the chest or in the neck or jaw. The pain is usually very unpleasant and threatening, coupled with a sense of pressure in or on the chest. Shortness of breath, sweating and nausea may also be present. It usually comes without apparent provocation by effort or stress. The pain usually persists for many minutes or some hours.

Heart attack occurs in people who have coronary artery disease, often unrecognised, but is also common amongst those who have angina pectoris (from Latin – strangling in the chest). With angina pectoris, pain comes with effort or stress and is eased by rest, and lasts only a few minutes.

Coronary artery disease occurs in the

arteries running back along the surface of the heart, supplying blood to the heart muscle. These coronary arteries form a “crown” around the heart (Latin again). Coronary artery disease develops through the deposition of cholesterol in the walls of the arteries. These fatty deposits form plaques which may narrow the arteries in places. Cholesterol deposits are due to recognised “risk factors” (high blood cholesterol, high blood pressure, obesity and overweight, inactivity, smoking and diabetes). Most of us have at least one risk factor.

From time to time, a crack or fissure may occur in one of the plaques. This may heal or may not. If not, blood clotting may form on the plaque. The blood clot may then block the artery. A blocked artery means that a portion of the heart muscle is deprived of blood supply. Some of that heart muscle may be damaged, either patchily (with only a few muscle cells dying) or a sizeable portion of heart muscle may be sufficiently deprived of blood supply so that it starts dying over the few hours from the onset of the chest pain. This is where the emergency becomes critical. During the first few hours, the threatened portion of heart muscle can be saved, either in whole or in part. The blocked artery can be opened up by an intervention (coronary angioplasty) and held open by a metal mesh (a stent). Alternatively, thrombolytic (clot dissolving – Latin again) drugs may be given. Major medical centres now have facilities and

rostered cardiologists around the clock to cover reception and management of people having heart attacks.

Heart attacks nowadays are referred to as “acute coronary syndrome” which may be a) acute myocardial infarction with specific changes in the electrocardiogram (“ST segment elevation”) or b) acute myocardial infarction without changes in the electrocardiogram (“non ST segment elevation”) or c) unstable angina where the occurrence of the heart attack with coronary occlusion is confirmed, but no loss of heart muscle cells is detected by blood tests. The three groups are related to the descending severity of the acute illness and may merit different treatment approaches. The conditions are well defined.

The advances in management over the past decade have been enormous. Damage to heart muscle is greatly reduced.

But don’t forget. It could all be avoided by changing your health behaviours and by medical management to prevent the development of coronary heart disease in the first place.

The views expressed are those of the author and not necessarily those of the Heart Research Centre



“This is where I have the pain”

Centre's research presented at international conferences



Dr Alan Goble with Dr Nanette Wenger at the 2008 World Congress of Cardiology in Buenos Aires

Dr Goble and Dr Worcester were invited to present at the World Congress of Cardiology held in Buenos Aires in May. Their sessions concerned the benefits of exercise and organisational aspects of cardiac rehabilitation

programs, including referral policies and procedures.

The meeting brought together cardiologists, nurses and other health professionals from all parts of the world. It provided an opportunity to meet key figures in the field with whom Dr Goble and Dr Worcester have worked in the past. Dr Nanette Wenger (see picture) from Atlanta in the USA and Dr Alan Goble were previously active members of the World Heart Federation Council on the Rehabilitation of Cardiac Patients, producing several educational booklets together.

One of the chairs of the session, Dr Pekka Puska, who is the incoming president of the World Heart Federation, was delighted to hear about the Heart Research Centre's training programs for overseas health professionals,

offering his support for the continuation of this project. To date, the Heart Research Centre has conducted joint training programs in countries such as India, Pakistan, Malaysia, Hong Kong, Thailand, Iran and the Philippines. Australia's low cost model programs are especially suitable for developing countries where resources are limited.

On their way to Buenos Aires, Dr Worcester and Dr Goble also presented the Centre's research at a major conference held in Paris entitled EuroPREvent. This occasion also enabled them to discuss future research plans with major contributors to the field, including Professor Neil Oldridge from Milwaukee, USA and Professor Bob Lewin from York, UK, both of whom have visited the Centre in the past.

Visit to Mayday Hospital, London

During their recent visit to London, Dr Alan Goble and Dr Marian Worcester observed cardiac rehabilitation programs in London, including one at the Mayday University Hospital in Croydon. These visits were organised by the director of the South East and South West London Cardiac and Stroke Networks.

The clinical head of cardiac rehabilitation at the Mayday Hospital, Ms Elaine

Hayward, said she was delighted to meet Dr Goble and Dr Worcester in person, especially having read their Best Practice Guidelines. "I have quoted their work often". She added that the photo of the rehabilitation staff and patients in the group (see below) now has "pride of place on our gym wall".

The exercise and education program at Mayday Hospital is very similar to

those conducted in Australia but Mayday Hospital is fortunate to have more staff helping during the exercise sessions than we provide in Australia. The visit enabled a sharing of information about how cardiac rehabilitation is conducted in both countries.



Dr Marian Worcester and Dr Alan Goble with the cardiac rehabilitation team and patients at Mayday Hospital, London

Another successful five day training program



Mr Barry Fewquandie, training program participant

In June, the Centre conducted its thirty-second *Five day training program in cardiovascular disease rehabilitation and prevention*, held this time at the recently renovated Graduate House at the University of Melbourne.

The Centre is recognised as the leading provider nationally of short courses in these areas. As usual this training program attracted several interstate nurses and other practitioners from locations such as Cairns, Brisbane, Sydney, Katoomba, Gosford, Port Pirie and Adelaide. Rural Victorians came from as far afield as Mildura, Warrnambool, Rochester, Bendigo, Horsham, Wangaratta, and the Latrobe Valley. One intrepid participant commuted to the course daily from Seymour! The training program also included three overseas health professionals from Sri Lanka (overleaf) and one from Kenya.

Feedback from all of the 32 participants was most favourable. For example, one nurse said it was a very comprehensive course which had motivated her to make a number of changes to her current program. She added: "It also improved my confidence in delivering

the cardiac rehabilitation program by extending my knowledge and reinforcing my existing knowledge. I learnt something from every session, without a doubt". Another participant told us that it had been the MOST interactive, well run program, performed by people with passion and enthusiasm, "I have renewed enthusiasm" she said. Practitioners from rural and remote areas of Australia, who have very limited access to experts, were especially appreciative of the opportunity to meet other health professionals from various locations and facilities. Others praised the course organisers for using inspirational and capable facilitators, many of whom used humour and group discussion to keep the course stimulating and interesting over the five days. All aspects of designing, conducting and evaluating cardiac rehabilitation programs were covered.

The Centre was delighted to welcome three indigenous participants to this course. One was Barry Fewquandie (pictured above), who is the Program Coordinator at the Healthy Hearts Cardiac Rehabilitation Program at Wuchopperen Health Services in Cairns. Barry said the training program was extremely valuable and was both relevant and practical. He will use the information gained to review currently available services for cardiac patients at his centre. Barry made

a major contribution to a special session conducted during the course on improving services for indigenous people. Participants found this particular session to be very thought provoking.

Welcome to our new look Newsletter. We hope you find it informative and easy to read. If you have any feedback you would like to give us on content, readability or any aspect of the Newsletter, we would like to hear from you. Please don't hesitate to call or send an email to prue.georgeson@heartresearchcentre.org

Did you know all past Newsletters are posted on our website? A variety of information can be found there. To check out our website, go to www.heartresearchcentre.org

Did you know?



The class of 2008, participants at the *Five day training program in cardiovascular disease rehabilitation and prevention* along with Dr Worcester, Rosemary Higgins and Kate Middleton from the Heart Research Centre