

# HEART | MIND

In May of this year when we sent you our last Newsletter, we were just emerging from a very challenging summer of catastrophic bushfires, and were in the early days of learning how to deal with another major challenge, the COVID-19 pandemic.



## From the Director

This is proving to be one of the greatest health and economic challenges that Australia has faced. We have avoided the very high rates of infection and mortality levels experienced by many other countries, due to factors such as a pretty robust public health system, a comparatively high level of underlying health quality, and a willingness, until recently, to deal with it as a public health issue that required a whole of government response. It has also exposed weaknesses, not the least of which is the aged care sector which proved itself wholly unable to deal with deadly outbreaks in aged care facilities, which showed also how a poorly paid and poorly prepared workforce contributed to the damage experienced in that sector of health care.

We know that the economic impacts of the pandemic will be felt for years to come. So also, will the health impacts. We now understand more about the long-term health impacts of smoke and poor air quality, not only on the lungs, but very importantly on the heart, and we are learning more every day about the immediate effects but also the longer term effects of COVID-19 on the heart.

Heart failure, arrhythmia, myocarditis and myocardial infarction have all been documented in patients with COVID-19. Studies also suggest that many patients who have recovered from the virus have ongoing structural cardiac abnormalities which will very likely increase the chances of future cardiac problems well after COVID-19 recovery. Many people with existing cardiac issues who recover from COVID-19, as well as people who develop cardiac issues as a result of infection, will also have to contend with the mental health effects such as post-traumatic stress and the effects of months of isolation and living with anxiety. These are issues that Dr Barbara Murphy, Dr Rosemary Higgins and I discuss in an article to be published on World Mental Health Day by the British Journal of Cardiac Nursing.

The Centre is now very well placed to respond to the immediate needs of people unable to attend cardiac rehabilitation or to attend for counselling for their cardiac-related emotional and psychological issues, with our telehealth services – Back on Track, Teleheart, and telephone or video counselling. Elsewhere in this Newsletter you can read about how we were able to develop these with your support. With your continuing support we will meet the longer-term needs of people during their recovery.

Can we ask you to show your support by making an online donation to the Centre so that we can continue to deliver, and develop further, our specialist telehealth programs?

Professor Alun C Jackson  
Director

## IN THIS ISSUE

02 Telling the patient's story of heart surgery

03 Research Update

05 Getting the Centre's message out there

06 Congenital heart health research and practice

# Telling the patient's story of open-heart surgery: PUMPHEAD



had open heart surgery in 2011, has sought to capture in PUMPHEAD. This is a film about the patient experience.

The Centre is proud to have contributed to the film and sponsored its first public showing at the recent Australian Cardiovascular Health and Rehabilitation Association Annual Scientific Meeting, held online in August. A third of the health professionals who evaluated the conference rated the film as the best session of the conference. Andrew Pike describes PUMPHEAD as a case study of challenges that the medical establishment can face in responding to problems that are emotional, intangible and hard to quantify. As one patient puts it in the film, the 'roller-coaster ride' that some patients experience after open-heart surgery is "invisible" to other people. He says that the film was designed to make the "invisible" more apparent and to promote awareness, empathy and understanding.

Three decades of research have shown that cognitive impairments, including delirium, are common after coronary artery bypass grafting (CABG) surgery. Recently, a review of 215 studies incorporating data from 91,829 patients showed that pre-surgical cognitive impairment was seen in 19% of patients. Post-operatively, cognitive impairment was seen in around 43% of patients acutely; this resolved to 19% at 4–6 months and then increased to 25% of patients between 6-months to 1-year post-operatively. In the long term, between 1 and 5-years post-operatively, cognitive impairment increased and was seen in nearly 40% of patients.

This post-perfusion syndrome, also known as "pumphead", also carries an emotional and psychological burden as the Centre's research has shown for a number of years.

It is this complex mix of post-operative impacts, that award-winning filmmaker Andrew Pike, who



**PUMPHEAD**  
LIVING WITH MEDICAL MIRACLES

The filmmaker, Andrew Pike, is an award-winning documentary filmmaker who had open-heart surgery in 2011.

Pumphead is a documentary feature film exploring patient experiences following major heart surgery. Through the stories of seven patients, including the filmmaker himself, this observational documentary indicates the complex diversity of emotional and cognitive changes that often occur after open-heart surgery, simultaneous with physical recovery.

Through this composite story, the film also delves into the gulf that can exist between advances in medical science on one hand, and patient experiences on the other. In particular, the film raises the difficulties that the medical establishment often faces in responding to problems that are emotional, intangible and hard to quantify. As one patient contemplates in the film, the "roller-coaster ride" that some patients experience after open-heart surgery is "invisible" to other people. The film is designed to make the "invisible" more apparent and to promote awareness, empathy and understanding.

All of the patients in the film volunteered to tell their stories, and all reveal aspects of "post-traumatic growth" – marked changes in personal values and priorities, life-style, creativity, and social and family relationships, leading to a life that in many cases is profoundly different from the time before surgery.

Producer, director, writer **Andrew Pike**  
Editor **James Lane**  
Cinematographer **Zeebali van der Klooster**

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A film about patient experiences after open-heart surgery

**PUMPHEAD**  
LIVING WITH MEDICAL MIRACLES

*"Postperfusion syndrome, also known as 'pumphead', is a constellation of neurocognitive impairments attributed to cardiovascular bypass (CPB) during cardiac surgery..."*  
- Wikipedia

*What's happening here?  
I knew after this heart surgery,  
something changed  
and I didn't know what.  
They think "I fixed you" –  
thank God,  
I'm extremely grateful for that.  
Something else takes over.  
So much more is stirred up.*

Produced and directed by **Andrew Pike**

CLASSIFICATION: EXEMPT (FOR EDUCATIONAL USE ONLY)  
RONIN RECOMMENDS: PARENTAL GUIDANCE

The film will be released on DVD and via streaming services with details from October available on the Centre's website: [www.australianhearthealth.org.au](http://www.australianhearthealth.org.au)



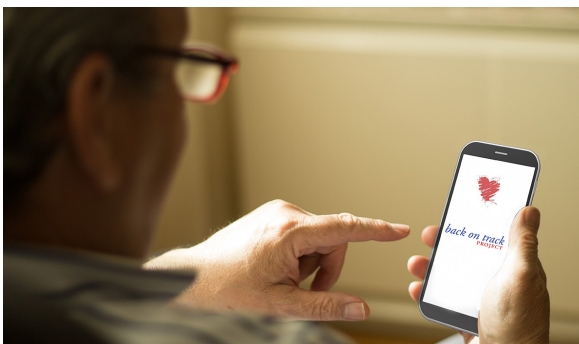
# Research Update



We all know how difficult it is to make changes to our lifestyle. Often we try to start a new habit – eating more healthily, starting an exercise program, or quitting smoking – only to fall back into our old ways before too long. For people who have had a heart attack or heart surgery, making healthy lifestyle changes becomes all the more important and urgent.



Our *Back on Track* online program is designed to help people who have had a heart event to not only start new healthy habits, but also to stick to them. The program, designed by our Health Psychologist Associate Professor Rosemary Higgins, draws on behaviour change theories to give people tools and strategies to plan and prepare for each lifestyle change, to manage difficulties along the way, and to cope with set-backs and slip-ups. The aim of the program is to help people make changes and to sustain them in the longer term.



Thanks to your support as well as a generous grant from the HCF Research Foundation, we are currently trialling the Back on Track program. The trial began in January this year and so far almost 50 people who have had a recent cardiac event have joined the trial. Being a participant involves doing the online modules and completing an online questionnaire at three stages throughout the project. If you or anyone you know would like to be involved in the trial, go to our website to register or email [backontrack@australianhearthealth.org.au](mailto:backontrack@australianhearthealth.org.au).



People experience a range of emotions in the weeks and months after a heart attack or heart surgery. While the physical recovery usually goes to plan, the emotional recovery varies greatly from person to person, depending on their history, current life circumstances, life stage, and a range of other factors.

Many people grapple with anxiety, anger, irritability, and low mood. Many worry about their physical recovery, and whether they will get back to their usual roles and activities, both family-related and work-related. Sometimes relationship difficulties emerge during cardiac recovery, causing further concern for patients. Some people worry about their future and fear having another cardiac event; some are plagued by fears of death.

In the *Cardiac Emotions Study*, generously funded through a bequest from Ms Angela Anita Reid, we are aiming to learn more about the range of issues and challenges that people face during their cardiac recovery. The study is being undertaken in conjunction with cardiologists and other medical professionals at Barwon Health. We are currently recruiting for the study and are seeking people who have had a cardiac event in the last 12 months. Participation involves completing an online questionnaire. If you or anyone you know would like to participate in the study, go to our website to find out more about registering.





We are very pleased to let you know that our Women's CR Project is now complete!

The Women's CR Project involved piloting a women-only yoga-based cardiac rehabilitation (CR) program designed to enhance the appeal of CR to women. In this Australian-first program, women cardiac patients were offered the yoga-based exercise sessions, designed by our Accredited Yoga Instructor Ms Jenni Morrison-Jack, instead of the usual exercise-based sessions offered as part of traditional cardiac rehabilitation. Funded by a Vanguard Grant from the National Heart Foundation, the project was undertaken by the Centre in conjunction with cardiologists and the cardiac rehabilitation team at Monash Health. The Centre's Research Nurse, Ms Kim Tucker, managed the day-to-day running of the study.

The yoga CR program was designed to assist women in both their physical and emotional recovery. The program was extremely popular with women, and resulted in enhanced completion of CR by those who participated. Women loved the sense of comfort and camaraderie through being in the women-only environment and gained a great deal both physically and mentally from the yoga sessions.

## Top award to ACHH clinician researcher

We are proud to announce that Associate Professor Rosemary Higgins, Senior Researcher and Health Psychologist at the Centre, has been awarded the Alan Goble Distinguished Service Award for extraordinary service to cardiac rehabilitation in Australia. This award is made by the Australian Cardiovascular Health and Rehabilitation Association and named in honour of Dr Alan Goble the co-founder, along with Dr Marian Worcester, of the Heart Research Centre (now the Australian Centre for Heart Health).

Known as the 'father of cardiac rehabilitation', Dr Goble designed cardiac rehabilitation programs and set standards of operation 20 years before

## "Enhancing the uptake and acceptability of cardiac rehabilitation for women."

Dr Barbara Murphy, the lead investigator on the project, presented results of the study at the Australian Cardiovascular Health and Rehabilitation Association (ACRA) conference, held online in August this year. She and her project team were awarded the Research Prize at the conference. Full results of the project are currently being prepared for publication in an academic journal.



Kim recruiting our first participant, Amitha, into the Women's CR Project.



Kim (right) and Jenni (left) with Amitha on her graduation from CR.

most other programs around the world were established. Dr Goble was President of the Cardiac Society of Australia and New Zealand and Chairman of the Council on Rehabilitation and Secondary Prevention of the World Heart Federation, among many other accomplishments. Rosemary's many accomplishments can be seen in the Centre's training program in cardiac secondary prevention and in the telehealth cardiac psychology programs. She is also recognised as an outstanding clinician in delivering a cardiac psychology service through the Centre's Cardiac Counselling Clinic.



Alan Goble  
Distinguished  
Service Award

A/Prof Rosemary Higgins

## Getting the Centre's message about heart health out there

The Centre needs to get its message across to numerous audiences such as funders of research, people who can refer patients to our Cardiac wellbeing Program, healthcare professionals who are interested in our training, existing supporters and potential supporters.

We have always reported our research in national and international journals, and this is an important audience of academic and health professional peers. More recently, however, we have turned our attention to social media to get our message about improving the lives of people living with heart disease out to a broader public. Though Facebook, for example, we have been able to highlight the importance of the behavioural and psychological aspects of heart disease and to let people know of the services we offer.

Using events such as 'Men's Health Week', 'Diabetes Awareness Week', 'World Heart Day' we are able to get a message out to people about the relevance of heart health to these issues and to publicise our clinical programs.

In this Facebook media strategy, over the past 6 months we have been able to reach over 50,000 people with many thousands commenting, sharing or 'liking' our posts.

We want to make sure that our current supporters are kept up to date with Centre news by following us on Facebook. To do this, log on to the Centre's website at [www.australianhearthealth.org.au](http://www.australianhearthealth.org.au) and then click on the Facebook icon. Once you do this, you can then 'like' our page. If you don't have a Facebook account, simply log on to the Centre's website and you will see all of our Facebook items on the right hand side of the page. These give you an idea of the sorts of things we have been commenting on.



**Australian Centre for Heart Health**  
about 3 months ago

**The Link Between Sleep Disorders and Heart Health**

How many times a day should I feel sleepy? Do we need less sleep as we get older? Are people who get up earlier healthier? Can I catch up on sleep? Will not getting enough sleep lead to weight gain? These are just some of the questions that people ask themselves as they wrestle with the problem of sleep quality.

At the ACHH, we are concerned about the connections between sleep disorders and cardiovascular health. With increa...

[See More](#)

213 likes, 1 comment, 22 shares



**Australian Centre for Heart Health**  
about 2 months ago

**DURING LOCKDOWN, PEOPLE ARE MORE LIKELY TO IGNORE SYMPTOMS OF A HEART ATTACK, WITH POTENTIALLY DIRE OUTCOMES**

According to research conducted by the University of Melbourne and Austin Health, during Victoria's first lockdown, many people who were suffering symptoms of a cardiac event, including chest pains, waited up to 12 hours before seeking assistance potentially causing greater damage to their heart.

People were reluctant to seek help for a range of reasons, including fea...

[See More](#)

344 likes, 17 comments, 74 shares



**Australian Centre for Heart Health**  
about 4 months ago

**Heart disease, loneliness and COVID-19**

Social isolation is associated with poor physical and mental health, including heart disease, high blood pressure, cognitive decline, dementia, depression, and suicide. The general health risk associated with social isolation is comparable to that associated with smoking.

The COVID-19 lockdown is increasing feelings of loneliness in an already vulnerable group – people with heart disease - and, particularly, those currently hospitalised... [See More](#)

261 likes, 9 comments, 58 shares

## Wrapping the family around congenital heart health research and practice

The reduction in morbidity and mortality for children with serious congenital heart conditions means that many children now survive into adulthood resulting in around 65,000 people now living with these conditions in Australia. On the journey to adulthood, however, significant numbers of these children will experience neurodevelopmental, psychological and emotional issues.

Reviews conducted by the Centre of the impact of congenital heart disease (CHD) on parents and families and the way they cope have highlighted a range of other mental health impacts in these parents, such as anxiety and depression. Up to 80% of parents experience a broader distress caused by fear of their child's death and uncertainty around both the quality and quantity of their child's life. For these reasons there are increasing calls for the immediate better integration of psychosocial support services within paediatric cardiology services.

One very important reason for addressing parental mental health and coping is the clear evidence that compromised parental mental health, if untreated, can adversely affect a parent's ability to care for his or her child and can lead to long-term cognitive, health-related, and behavioural problems in children. As well as treating parents' psychological and adjustment issues directly, gains can be made in family and parental functioning through enhancing coping and building resilience. This is what the Centre did with its Family Resilience Program, a co-production with HeartKids Australia (HKA).

### The CHD Family Resilience Program

This collaborative research and translational project brought together the Melbourne Graduate School of Education's research on child and adolescent coping and parenting style; the ACHH Director's research on the family impact and management of complex paediatric oncology cases, and the expertise of HeartKids Australia in CHD-related parental support.

From interviewing parents of children with CHD we learned what was important to them. These were things like disease management, management of transitions (e.g. hospital to home, home to school) and social support. We also learned in designing our program, the importance of using the right language. Language is important in the way people frame their perception and their responses to their circumstances, so that we started to talk of congenital heart health, rather than congenital heart disease; heart difference, rather than heart defect.

When piloted, the program attracted mainly parents of children with major conditions, who were experiencing high levels of stress. There were significant increases in parents' self-efficacy both immediately and six months after program participation with the parents actually increasing their ability to cope over time as they put into practice new skills acquired through the program, and built resilience.

With support from our donors, we will offer the original face-to-face version as a group-based 'virtual' group using Zoom and develop an online self-managed version which would be an ideal way of extending program reach for families who are unable to use scheduled sessions, whether face-to-face or 'virtual'.

