



Curtin University

CURTIN HEALTH INNOVATION  
RESEARCH INSTITUTE

Indigenous health

# HEALTH AT CURTIN

VOLUME 4

# HEALTH AT CURTIN: VOLUME 4 INDIGENOUS HEALTH

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## HEALTH SCIENCES OVERVIEW



**T**he Faculty of Health Sciences is internationally recognised for its leadership in health research, policy and practice. We are engaged in developing practical solutions to global health challenges, preparing our students for leadership roles in healthcare, and working with our partners and communities to advance health and wellbeing around the world.

The fourth volume of *Health at Curtin* spotlights Indigenous health research undertaken by the Curtin Health Innovation Research Institute (CHIRI), as well as other research groups and schools working to improve Indigenous health outcomes. The projects address a wide range of research areas, including heart disease, drugs and alcohol, and cancer.

In this issue we present articles on:

- how the Indigenous population perceives Attention Deficit Hyperactivity Disorder
- the mistreatment of elders in their communities
- the high rate of smoking that contributes to chronic disease in Indigenous populations
- research that hopes to reverse the increasing rate of interpersonal violence among Indigenous people.

Cutting-edge research informs our teaching, and in this issue you can read about how our award-winning health sciences academic team provide teaching excellence in Indigenous education.

I invite you to read about the innovative, integrated and collaborative approaches that our health sciences researchers and academics are committed to, which will ultimately make a significant impact on improving the health and wellbeing of Indigenous people and communities.

**Professor Jill Downie**  
Pro Vice-Chancellor  
Faculty of Health Sciences

## MESSAGE FROM THE DIRECTOR



**A**ustralia's population is undergoing dramatic changes in health, ageing and longevity patterns. While medical advances have improved child and maternal health, and prolonged our life spans, chronic illnesses associated with longevity, lifestyle and the ageing process – diabetes, obesity, cancer and cardiovascular disease – are increasing.

Traditional, reactionary healthcare models based on providing acute, episodic care are no longer sufficient to deal with our changing health needs, and infrastructure is crumbling under a widespread lack of resources and funding.

Innovative, future-focused models of healthcare are required, and Curtin, through the Faculty of Health Sciences, has responded to this major national issue with the establishment of the Curtin Health Innovation Research Institute (CHIRI).

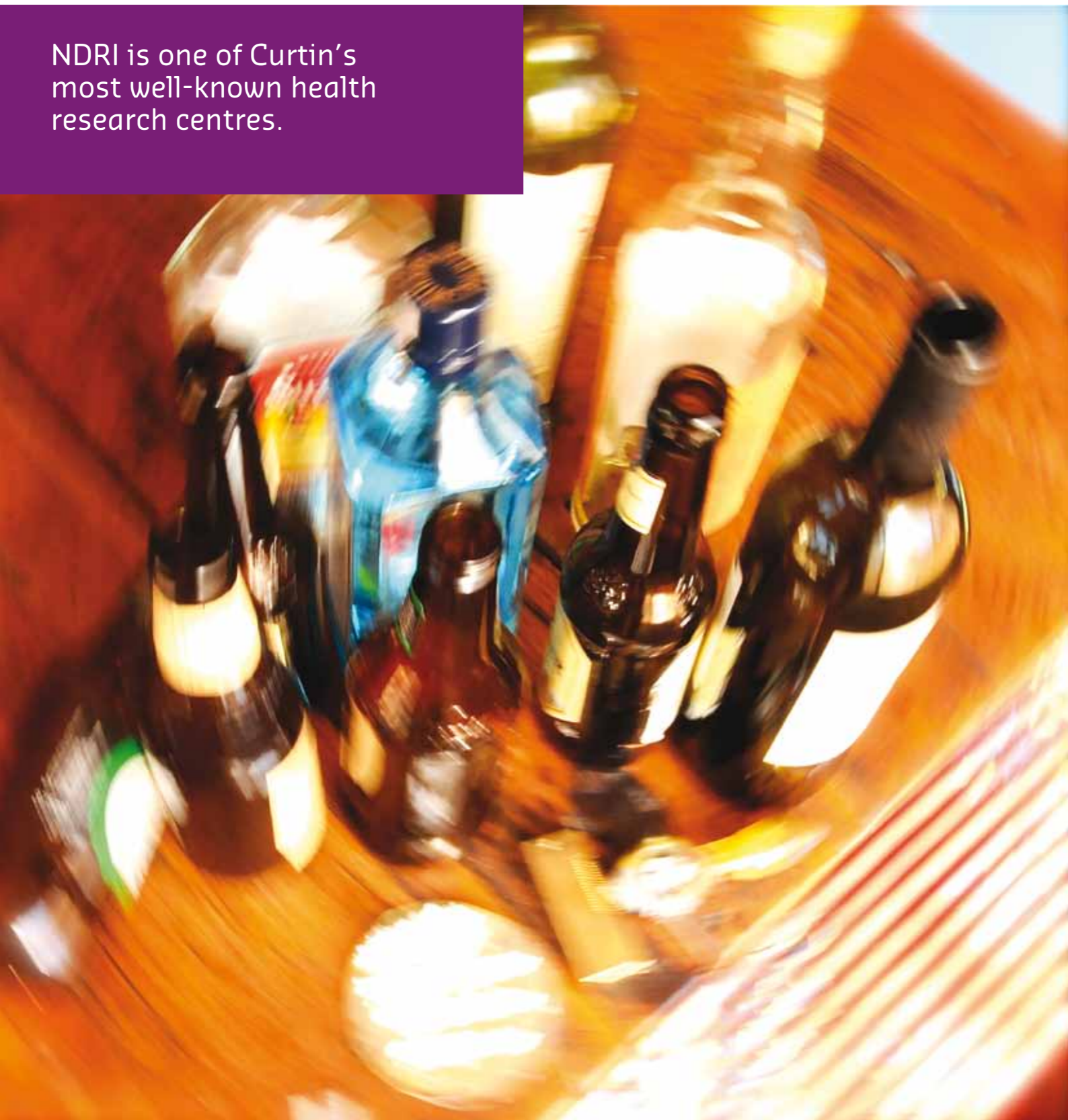
CHIRI facilitates high-quality translational health research in a number of key areas including ageing and dementia, prevention and management of chronic conditions, Indigenous health, mental health, population health services research and biomedical and clinical sciences.

It is engaged in developing practical solutions to global health challenges; preparing our students for leadership roles in healthcare; and working with our partners and communities to advance health and wellbeing around the world.

CHIRI is about bringing people, knowledge and creative energy together in an amazing environment where working as a team, constantly pushing the limits, will lead to greater success. This is certainly evidenced in this issue of *Health at Curtin*, which highlights how our researchers have been working collaboratively to make real improvements in health outcomes for Indigenous Australians.

**Professor Neale Fong**  
Director  
Curtin Health Innovation Research Institute

NDRI is one of Curtin's most well-known health research centres.



## INDIGENOUS AUSTRALIAN RESEARCH PROGRAM

In 1995 the National Drug Research Institute (NDRI) responded to recommendations from the Royal Commission into Aboriginal Deaths in Custody with the establishment of the Indigenous Australian Research Program (IARP).

NDRI is one of Curtin's most well-known health research centres. Based at the University's health campus in Shenton Park, the institute's role is to develop harm-prevention strategies through research, which will enhance the preventive potential of legislative, economic, regulatory and educational interventions.

The IARP is one of eight research priority areas for NDRI, and involves a research team working to prevent and reduce the burden of harm caused by alcohol and other drugs (AOD) in Indigenous communities. The team's research has included evaluations of specific interventions, early identification of AOD-related problems, interventions in primary healthcare settings and identification of gaps in service provision.

Led by Professor Dennis Gray – who is recognised on the National Drug and Alcohol Honour Role for his contributions to addressing harmful alcohol use in Indigenous communities – the team has been awarded a Drug and Alcohol Award for Excellence in Research. The IARP has three Indigenous health researchers: Associate Professor Edward Wilkes, a Nyungar elder who has worked in the area of Indigenous health for 25 years; Ms Anna Stearne, a Nyungar woman with a background in education and public health who has been at NDRI for 10 years; and Maurice Shipp, a Wuradjari man who coordinates a blood borne virus research project. The multidisciplinary research team also includes Mr Ed Garrison, an educationalist; clinical psychologist Dr Julia Butt; and anthropologist Dr Mandy Wilson.



The IARP's recent work has included a major report commissioned by the National Indigenous Drug and Alcohol Committee (NIDAC), a sub-committee of the Australian National Council on Drugs. The report details AOD services for Indigenous Australians, including funding of current AOD services for Indigenous Australians, the appropriateness of current services and associated funding, and an identification and assessment of unmet needs.

While the report concluded there were some positive responses to continuing and emerging projects – the Petrol Sniffing Prevention Program, for example – it outlined serious gaps in service provision, particularly for projects specifically targeting a reduction in tobacco use in Indigenous populations. The report also identified the critical lack of Indigenous health professionals for service provision and intervention programs, and the need for recurrent funding that will enable further capacity-building within Indigenous health.

NIDAC will use the IARP team's findings and recommendations to provide advice to the Australian Government for additional funding for Indigenous-specific AOD services.

## DRUGS AND ALCOHOL EARLY PREVENTION IS KEY

**P**roblematic use of drugs and alcohol in marginalised populations has led to a Curtin research team at the National Drug Research Institute (NDRI) working to realise more equality in health outcomes, reduced substance misuse, safer children and more cohesive communities.

Stress in early childhood increases the risk that a child will embark on a pathway of harmful substance use later in life.\* In response, NDRI has established the Prevention, Early Intervention and Inequality program.

The program unites three approaches to the study of drugs and alcohol prevention and early intervention: the sociology of childhood, the social determinants of health and substance use, and the impact of environmental experiences on early brain development.

Program leader Professor Sherry Siggers says various international studies have demonstrated that high-quality, community-based early childhood programs can alter the developmental trajectory of at-risk children.

“To achieve this efficiently in Australia, we need to establish an Australian evidence-base for the efficacy of early intervention,” Siggers says.

“This requires drawing upon diverse theoretical and methodological approaches, and applying knowledge from many disciplines – anthropology, sociology, education, psychology and the creative arts – to explore models of leadership and development.”

The NDRI team is currently evaluating early childhood care and development programs for high-risk children and families in rural and remote communities of Western Australia and the Northern Territory.

Supported by a collaboration between the Australian Government, Save the Children Australia and World Vision Australia, the work involves annual site visits to each community to monitor the progress of early learning and care activities against indicators developed by the communities.



“For example, with the early intervention program at Warmun, in the East Kimberley region of WA, we observe and record activities over the course of a full day’s schedule in the learning centre attended by three to five year olds,” Siggers explains.

“We assess the extent to which children demonstrate the behavioural objectives of the program – including personal hygiene routines, recognising and eating nutritious food, listening skills, and learning to participate in structured learning activities.”

An important component is parents’ participation in focus group discussions about the impact of the program.

“Parents tell us their children listen and speak more clearly, speak better English, read and tell stories from their books, sing, and play more independently,” Siggers says.

The team also assesses a child’s progress and readiness for school through interviews with external stakeholders, such as child health nurses and pre-school teachers with first-hand knowledge of the program.

As Siggers points out, a rigorous evaluation program will incorporate quantitative measures of children’s health, development and wellbeing.

“Qualitative data is complemented with documentary data such as attendance records, photographic records of events and, where available, statistical material on the health and wellbeing of children and their families,” she says.

“This mixed-method approach will enable us to determine the combination of qualitative and quantitative indicators that will best evaluate interventions for prevention of early and problematic use of alcohol and other drugs.”

“Parents tell us their children listen and speak more clearly, speak better English, read and tell stories from their books, sing, and play more independently.”



## HOME VISITS IMPROVE CHILD HEALTH



The program aims to improve self-esteem and self-efficacy in mothers.



**Indigenous community care workers in Halls Creek have embraced a successful community-based maternal and child health education program, and named it 'Yanan Ngurra-ngu Walalja' (Halls Creek Community Families Program).**

Situated in the remote East Kimberley region of Western Australia, Halls Creek is a small town struggling with chronic social and health issues related to alcohol and drug abuse, including a high rate of foetal alcohol syndrome.

In 2008 the town was selected for the implementation of a capacity-building program funded by the Australian Better Health Initiative: the Indigenous Healthy Lifestyle Project (IHLP).

From 2008 to 2010 the coordinator of the WA Community Mothers Program at Curtin's School of Nursing and Midwifery, Ailsa Munns, worked with Indigenous community care workers to develop the Halls Creek Community Families Program (HCCFP).

Munns says the program helps Indigenous families in Halls Creek and nearby communities to build their capacity to improve lifestyle and reduce risk factors of chronic disease through supporting families with young children.

"Of the five WA sites selected for the IHLP, the Halls Creek program was the only one comprising a peer-led home-visiting program to facilitate an environment of support and empowerment for parents," Munns says.

Adapted from the Community Mothers Program, a proven intervention delivered in the UK and WA, the HCCFP provides parents with support and education in aspects of child healthcare, within a broader framework of maternal and family empowerment.

Under the program, experienced Indigenous mothers and grandmothers are trained as community care workers to support parents by increasing the skills and knowledge of families in key areas of maternal and child health and wellbeing. The program aims to improve self-esteem and self-efficacy in mothers; improve the physical, emotional and social wellbeing of young children; and improve the antenatal care and outcomes of pregnant women.

"We found that the Halls Creek program successfully empowered mothers, families and community care workers, improved health and development outcomes for children, and enhanced social networks and communication between healthcare professionals and Indigenous mothers and their families," Munns says.

## SCREAM FOR FEMALE INDIGENOUS PRISONERS

**F**emale Indigenous prisoners are an extremely vulnerable population. They are likely to come from families with a history of having relatives taken away from them, and are more likely to experience mental health issues, homelessness, self-harm in prison, and a lower life expectancy after they are released from prison.

Despite the evidence, the health and treatment needs of female Indigenous prisoners have been overlooked in research on Indigenous communities. Similarly, research on Indigenous women in prison has not included health and justice agencies as participants.

The newly funded National Health and Medical Research Council project SCREAM – Social and Cultural Resilience of Aboriginal Mothers in Prison – will seek to describe the social and emotional health of Indigenous mothers in prison in Western Australia and New South Wales. The project, a collaboration between Curtin University and the Perinatal and Reproductive Epidemiology Research Unit at the University of New South Wales, is funded until 2014.

Dr Mandy Wilson, Research Fellow from the National Drug Research Institute at Curtin, says the project will also explore the extent of access these women have to culturally safe healthcare in prison.

Indigenous adults are imprisoned 14 to 19 times more frequently than non-Indigenous people in Australia, with the female Indigenous imprisonment rates particularly startling. The number of Indigenous women imprisoned increased by nine per cent between June 2009 and June 2010.

“This makes Indigenous women the fastest growing sub-group among the prisoner population,” Wilson says.

“Although they usually serve shorter sentences than non-Indigenous women, they are likely to be imprisoned multiple times, and the consequences of imprisonment on these women and their families are far-reaching.”

Recent research shows that 20 per cent of Indigenous children in New South Wales had experienced the loss of a parent to incarceration.

“The SCREAM project, directed by Indigenous researchers, will also explore how culturally safe care can be transferred to settings outside of prison, to maximise health outcomes for them as well as their families and communities, post-release,” Wilson says.

“Although [female Indigenous prisoners] usually serve shorter sentences than non-Indigenous women, they are likely to be imprisoned multiple times, and the consequences of imprisonment on these women and their families are far-reaching.”



## CLOSING THE GAP ON INDIGENOUS HEART DISEASE



“We are committed to seeing our findings adopted to improve heart health outcomes for Indigenous Western Australians.”

**L**atest figures indicate that Indigenous Australians are almost five times more likely to suffer from cardiovascular disease than non-Indigenous Australians. Although this alarmingly increased rate has been well-documented, it is not until now that a detailed investigation has been undertaken to examine the disparities between the two populations in Western Australia.

In 2008 a National Health and Medical Research Council grant was awarded for an Indigenous heart health project – a collaboration led by Professor Sandra Thompson at the Combined University Centres for Rural Health (CUCRH). The project involves researchers from CUCRH, the School of Population Health at The University of Western Australia, and the Curtin Health Innovation Research Institute (CHIRI), in ascertaining and reviewing the rates of heart disease and inequities in medical care to prompt action to improve the cardiovascular health of Indigenous Australians.

Researchers are examining linked hospital and death data to investigate Indigenous heart disease incidence, prevalence and outcomes. Their first published paper reports on disparities in the incidence rates of heart attack between Indigenous and non-Indigenous Western Australians.

Results revealed that in the age range of 25 to 54 years there was a very high incidence of heart attack in Indigenous Australians. Compared with their non-Indigenous counterparts in this age bracket, Indigenous males were 6.4 times, and Indigenous females 13.3 times, more likely to have their first-ever heart attack.

Clinical notes from hospitals across WA for the period 2002 to 2004 are being analysed to establish how long people had to wait until they were admitted to hospital, what medicines were prescribed, what procedures were performed, and what other diseases and behaviours – such as diabetes and smoking – may have contributed to disease.

Dr Judith Katzenellenbogen, from the Aboriginal Health and Education Research Unit (AHERU) at CHIRI, says that valuable information was gathered during in-depth interviews with patients, families and healthcare workers.



“The interviews disclosed barriers to improved healthcare outcomes from both patient and health provider perspectives,” she says.

“These include the difficulty for some in getting to hospital promptly (especially from remote areas), patient denial of the seriousness of their symptoms, stress, lack of heart health education and understanding of the disease, and cultural/spiritual issues which can get in the way of seeking treatment.”

According to the research, health providers may also experience difficulties when diagnosing patients, including disease diagnosis, patient communication and patient follow-up.

“For example, there may have been no follow-up by health professionals when a patient had been asked to return for further tests,” Katzenellenbogen explains. “These are scenarios that can be avoided with better protocols in place and training of health professionals.”

“As well as improving linkages between hospitals and GPs, we need health professionals to be more culturally aware. Crucial information may not be volunteered, and sensitive questioning using appropriate language may be needed.”

“We are committed to seeing our findings adopted to improve heart health outcomes for Indigenous Western Australians.”

As results become available, they will be incorporated into fact sheets produced by the Heart Foundation for distribution to health professionals and the Indigenous public. Case studies are being used in a series of presentations and seminars at conferences and workshops over the next year.

## EXERCISE AND 'YARNING' FOR A HEALTHY HEART

Over the past two years the Derbarl Yerrigan Aboriginal Health Service, in East Perth, has run a regular Thursday drop-in centre for those recovering from heart disease.

During the four-hour session, attendees can participate in a supervised exercise program at the centre and join the walking group. Additionally, the program offers both formal and informal education through 'yarning' sessions that allow people to sit down and share stories while learning about health topics such as nutrition, activity, heart disease risk factors and medication adherence. Such is its success that organisers are seeking to roll out similar centres at other Perth and WA locations.

Dr Andrew Maiorana, from Curtin's School of Physiotherapy and Royal Perth Hospital, says the program offers Indigenous patients a readily accessible service where they feel comfortable to just drop in to a culturally secure environment.

"Indigenous patients are under-represented in rehabilitation programs, despite being much more likely to have heart disease than non-Indigenous Australians. In the under-45 age group, the rate of heart disease is nine times higher," Maiorana says.

This collaborative initiative was set up in March 2009 between the Heart Foundation, Curtin University, Royal Perth Hospital and Derbarl Yerrigan, and was originally funded by a seeding grant from the Office of Aboriginal and Torres Strait Islander Health.

"Although it was initially for those who had established heart disease, it's now inclusive of people who self-refer and want to improve their health to reduce their risk of heart disease – word-of-mouth has been really important," Maiorana says.

The program sessions are run by Royal Perth Hospital cardiac nurse Ted Dowling and chronic disease nurse Jane Jones, from Derbarl Yerrigan, and are supported by Indigenous health professionals.



Maiorana says the program offers valuable social support for the Indigenous community.

"A great amount of trust and rapport has been established, and attending participants have also sought information on other health issues, from optometry to incontinence," he says.

"It has become much more than a cardiac rehabilitation program. A neighbourhood watch scheme has been established and a musical band, The Heart Aches, has been formed by some of the participants. The philosophy of the program is 'people coming together, sharing and supporting one another in health', and this is printed on the back of t-shirts worn by participants."

The organisers are mindful of the importance of holistic health by including the family and community in managing health conditions. The walking group, for example, consists of all ages, from babies in prams to grandparents in their 70s.

"We are seeing improvements in the weight, activity level, medication compliance, blood sugar levels and blood pressure of participants," Maiorana says.

"There is also a greater awareness about heart health, the link between diabetes and heart disease, and understanding about medications."

It is hoped that with further funding the program can extend to the other sites of Derbarl Yerrigan and also other Aboriginal Medical Services in WA.



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# INDIGENOUS PERSPECTIVES ON CANCER

Indigenous Australians experience poorer outcomes from cancer compared with the non-Indigenous population, despite its overall incidence being lower. And while Indigenous people are more likely to have cancers that are preventable, they are usually diagnosed at a later stage, are less likely to receive adequate treatment, and are more likely to die from cancers than non-Indigenous Australians.



Recent PhD graduate Dr Shaouli Shahid, from the WA Centre for Cancer and Palliative Care, undertook a qualitative study that explored the perspectives of Indigenous people regarding cancer, as well as their experiences with cancer services, to understand their care-seeking behaviour in Western Australia. She conducted in-depth interviews with 35 Indigenous men and women who had been diagnosed with, or had close but indirect experience of, cancer in rural, remote and urban locations in WA.

Shahid says the main findings of the study indicated that views and experiences of Indigenous people regarding cancer are strongly influenced by their historical, socio-political and cultural context.

“Many Indigenous people believe cancer means death and that makes them scared to talk about it, as death is not openly discussed in some of their cultures,” she says.

“This is a major factor as to why Indigenous people ignore early symptoms and don’t access treatment – even after medical diagnosis. There is not even a word for cancer in some of their dialects.”

It was also found that cancer is sometimes associated with the spiritual world of curses, a form of punishment resulting from a misdeed in the person’s past. It is often seen as a ‘white man’s disease’, and there is shame associated with the belief that there has been close interaction with a white person to ‘catch’ this disease.

The poor educational background and socio-economic conditions experienced by many Indigenous Australians have restricted their access to information, which has contributed to misunderstandings and lack of knowledge about biomedical aspects of cancer and associated outcomes.

“The study found that a lack of understanding also leads people to think that if they are treated then the cancer is cured. When this doesn’t happen, mistrust towards doctors and western medicine is generated,” Shahid says.

“Also, when people believe they are cured, they often don’t come back for the subsequent treatment and follow-up that is needed.”

As for the general population, more than 60 per cent of Australian cancer patients survive more than five years after diagnosis, and the survival rate for many common cancers has increased by 30 per cent over the past two decades. Indigenous Australians, however, are 2.5 times more likely to die within five years of cancer diagnosis, therefore it is vital to ensure they utilise healthcare facilities to benefit from modern cancer treatments.

The study concludes that underlying beliefs must be specifically addressed to develop appropriate educational, screening and treatment approaches to better facilitate engagement of Indigenous people – a goal Shahid is working towards in her latest research.

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A commitment to 'courageous communication', together with well-defined pathways for collaborative working, is essential to build the strong and sustainable partnerships necessary in the improvement of Indigenous access to mainstream services.



Treatment  
 health in. Medical is  
**CANCER**

## COURAGEOUS COMMUNICATION A PATH TO HEALTH SERVICES

**B**i-cultural partnerships are important in improving Indigenous access to health services. However, when different cultures work together, they require a commitment to the sensitive handling of potential misunderstandings and communication difficulties that may arise within such partnerships.

The high rate of late diagnosis in preventative cancers among Indigenous Australians has underlined the critical need to improve access to cancer treatment. Poor understanding of the disease and its treatment and prevention, together with cultural alienation from the westernised medical system, are the main reasons why Indigenous Australians are less likely to access early detection and medical intervention services.

Dr Lizzie Finn, from Curtin's School of Psychology and Speech Pathology, says the appointment of more Indigenous liaison officers in health services is helpful; however, these new positions are not based in the community.

"The question is not what happens when Indigenous people reach health services, but how to assist them to get to the door," Finn says.

"One important answer to increasing access is on-the-ground collaborations with Indigenous community members who can encourage disease-prevention behaviours and access to appropriate medical treatment."

To help facilitate such collaborations, Associate Professor Dawn Bessarab, from the Centre for International Health, has been working with Finn and the Geraldton-based Indigenous Women's Cancer Support Network (IWCSN) on a project funded by the WA Palliative Care Network.

The IWCSN provides support across the Gascoyne region for Indigenous women with cancer, as well as carers and relatives of cancer patients. Since its establishment in 2007, it has formed linkages with mainstream cancer, palliative care and allied health services operating out of Geraldton Hospital, as well as other cancer support and welfare agencies in the region.



IWCSN founding members Annie Pepper (left) and Pauline Gregory (far right) pictured with West Australian Country Health Services project worker Karina Thomason (centre).

"Our aim was to assess the effectiveness of IWCSN's bi-cultural partnerships," Bessarab says.

"As little research has been done in this area, we aimed to determine the principles that can be applied in the setting up of collaborative bi-cultural working partnerships, and to describe an emerging framework for a best practice Indigenous-mainstream partnership model."

The project involved interviews and workshops with IWCSN members and palliative care and cancer service providers to determine what worked well in their collaborative working relationship and what could be improved.

"For example, the meaning of 'partnership' and 'collaboration' was discussed, as these were often seen to be imbalanced in terms of influence and control," Bessarab says.

"Facilitating opportunities for open and frank communication about any difficulties encountered by the partners in their joint work was also very important."

Finn agrees, saying a commitment to 'courageous communication', together with well-defined pathways for collaborative working, is essential to build the strong and sustainable partnerships necessary in the improvement of Indigenous access to mainstream services.

## INTERPRETING ADHD



“We want to determine what Indigenous people think of the symptoms described by western medicine as ADHD.”



**A**s a childhood disorder, Attention Deficit Hyperactivity Disorder (ADHD) is still shrouded in much controversy. Sometimes it can be hard to decide whether a child who is loud, naughty or has a poor attention span is normal or is showing signs of a behaviour disorder. When working on these types of mental health issues in Indigenous communities, it is even more important to appreciate that different cultures can interpret behaviours quite individually.

Based at the School of Psychology and Speech Pathology at Curtin, Research Fellow Dr Pek Ru Loh has been working with Curtin’s Building Mental Wealth project to examine, for the first time, how the Indigenous population perceives ADHD.

The project, funded by the National Health and Medical Research Council through a Capacity Building Grant, has enabled extensive collaborations across the Curtin Health Innovation Research Institute (CHIRI) and aims to discover how the Indigenous community interprets and understands ADHD.

“We want to determine what Indigenous people think of the symptoms described by western medicine as ADHD,” Loh says.

The study involves interviewing up to 25 individuals from the metropolitan area and collecting data about their understanding of ADHD and its management in the Indigenous community. The qualitative study engages a wide range of Indigenous people – adults with or without children, parents with ADHD children, and Indigenous health professionals.

“Preliminary data are indicating that the community have heard of ADHD – they know that it’s a condition that requires some form of treatment,” Loh says.

However, he adds the main question is how culturally appropriate the current identification and management of ADHD is to the Indigenous community.

There are three subtypes of the disorder: inattention, hyperactivity/compulsivity or both. Hyperactive-impulsive behaviour is more noticeable, therefore individuals suffering the inattention subtype sometimes receive less focus.

Acknowledging this fact, Loh aims to build a mental health model for identifying and treating ADHD for Indigenous communities: “We hope to develop a culturally appropriate measurement tool that better reflects the ADHD behaviours in an Indigenous child.”

Loh hopes to speak to more Indigenous parents with ADHD children, and has also been invited to Carnarvon to talk to the community about their experiences with the disorder.

Other researchers working with Loh on the project include George Hayden, Jan Piek and Dave Vicary, from the School of Psychology and Speech Pathology, and Dawn Bessarab, from the Aboriginal Health and Education Research Unit at CHIRI.

## ASSESSING THE VULNERABILITY OF 'GRANNIES'

**In Indigenous communities care is informal and is commonly shared within families. A greater proportion of Indigenous households tend to be larger and more multi-generational than non-Indigenous households.**

Grandmothers, aunts and sisters are expected to care for the children and grandchildren in the household when the parents are unable to look after them. This may be due to a variety of difficult circumstances, including illness, substance abuse or crime. However, Indigenous Australians have identified the challenges involved in meeting such expectations.

Associate Professor Frances Crawford and Dr Angela Fielding, both from Curtin's School of Occupational Therapy and Social Work, have been working with Indigenous health workers to better understand and address the mistreatment of elders in their communities.

Crawford says that for Indigenous families there is an overwhelming responsibility for grandparents to care for children, much more so than for non-Indigenous grandparents.

"Traditionally, this was accepted. Now there is growing anger at the situation," Crawford says.

"In Indigenous communities 'Grannies' is a widespread term for both grandparents and grandchildren, which captures the reciprocity involved in this particular kinship relationship. Being a Grannie, however, puts Indigenous elders in a vulnerable situation. Families can place an unfair demand on them, and older people often cannot do everything that younger and fitter family members can."

The research has shown Grannies to be at risk of abuse and mistreatment, both physically and emotionally.

"To effectively address older people's needs and reduce situations of mistreatment, it is important to prepare Indigenous health workers to deal with difficult situations and be able to recognise abuse and offer support for families," Crawford says.

"In Indigenous communities 'Grannies' is a widespread term for both grandparents and grandchildren, which captures the reciprocity involved in this particular kinship relationship."

However, the concern over the wellbeing of Grannies is not limited to the elder generations.

In 2007 a Curtin Strategic Research Grant and partnership with the Ministerial Advisory Council on Child Protection enabled Crawford and fellow researchers to host a three-day summit, where more than 60 Indigenous child protection practitioners from across the state shared their experiences. The discussions about mistreatment and vulnerability focused on the younger generation of Grannies: the grandchildren. Care workers reported it was often difficult with Grannies to know who was caring for whom, and who was most vulnerable to abuse."

Through the summit, people 'named up' how they faced the same issues. They were then able to discuss some of the solutions that had been used successfully," Crawford says.

Dr Angela Fielding, Head of Curtin's Department of Social Work, says often care workers don't feel it is their place to speak out, nor do they feel they have the power to be responsive to abusive situations.

"'Dobbing-in' someone suspected of abusing an elder or a child doesn't necessarily achieve a good outcome, and can often make things worse," Fielding says. "These are sensitive situations, and intervention needs to be specific and relevant."

"There is a lot of silence about this issue. While intervention has the potential to make things safer for Grannies, if not handled appropriately it can be quite destructive."



## TAILORING QUIT SMOKING STRATEGIES

**I**ndigenous populations throughout the world suffer a higher burden of disease than their non-Indigenous counterparts, and a significant amount of this disability is due to smoking.

While rates of smoking in non-Indigenous people in Australia, New Zealand, Canada and the US have declined over the past 30 years, this is not the case for Indigenous populations of those countries.

At the Centre for Cardiovascular and Chronic Care, in Sydney, Curtin Postdoctoral Research Fellow Dr Michelle DiGiacomo is focusing on the high rate of smoking that contributes to chronic disease in Indigenous populations. The centre is a joint initiative between Curtin and the University of Technology, Sydney, with the project funding supported by the National Health and Medical Research Council through a Capacity Building Grant in Population Health and Health Services Research.

The grant aims to improve mental health in Indigenous Australians through better health outcomes. For the past five years, DiGiacomo has worked closely with Indigenous health workers and staff of the Aboriginal Medical Service Western Sydney, with the aim of developing and delivering programs to address the management of chronic conditions, such as cardiovascular disease and one of its principal risk factors – smoking.

DiGiacomo says that smoking rates in Indigenous populations worldwide far exceed those of their non-Indigenous counterparts.

“We need to determine why tobacco control strategies have not been universally effective, and then develop interventions that are targeted towards Indigenous populations,” she says.

Recently, DiGiacomo undertook a comprehensive review of interventions for smoking cessation in Indigenous populations of Australia, New Zealand, Canada and the US. The review, which included researchers from The University of Western Australia, confirmed the lack of interventions tailored to Indigenous populations.

In addition, Dr DiGiacomo is investigating mental health issues of Indigenous people associated with living with a chronic condition. She has found that stress is a pervasive barrier to quitting smoking, yet is often not addressed in interventions that are not culturally appropriate.

“The reasons for continued high smoking rates are complex and are likely to include issues of access and appropriateness of services and support – which reflect systemic barriers to improving the health of Indigenous peoples – as well as social and historical factors,” DiGiacomo says.

“Like other health interventions for marginalised populations, smoking cessation strategies should facilitate community ownership of programs to ensure the needs and preferences of the population are met, and that interventions are delivered in culturally safe, community-based settings.

“One way to address the problem of access to support, at least in part, is to provide cost-free pharmacotherapy in conjunction with tailored counselling, for the duration of quit attempts.”

Rather than impose non-Indigenous perspectives and methods on Indigenous people, DiGiacomo says it is necessary to act in consideration of their beliefs, cultures and preferences.

“Indigenous populations are diverse and, as such, interventions must be relevant, feasible, and acceptable to contexts and preferences,” she says.

“Addressing the burden of smoking requires policy development that embraces a shift from the monocultural health systems that marginalise Indigenous people, to intercultural health systems in which different cultures are valued and incorporated.”

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## REDUCING THE BURDEN OF INTERPERSONAL VIOLENCE



Pregnant Indigenous women accounted for 67 per cent of all hospitalisations for violence.

Interpersonal violence has a significant impact, not only on a personal level, but also on community and health system costs. A Curtin research team is hoping their findings on the issue will be the starting point of efforts to reverse the increasing rate of interpersonal violence, specifically among Indigenous people.

In 2008 the *Medical Journal of Australia* published the findings of a population-based study on hospitalisations in Western Australia for interpersonal violence. Associate Professor Lynn Meuleners, from Curtin's School of Public Health and the Curtin-Monash Accident Research Centre, led the study, which found a much higher risk of hospitalisation and death from interpersonal violence for Indigenous Australians compared with non-Indigenous Australians – particularly for women.

"Because interpersonal violence impacts so heavily on Indigenous people, it's important to know the characteristics of violence victimisation – such as the type of violence, whether by an instrument or bodily force, the age of victims and the incidence of co-morbid conditions," Meuleners says.

"Targeted public health interventions can then be developed to reduce the burden of interpersonal violence on Indigenous people and the healthcare system."

Funded by the Criminology Research Council, the study used linked data from the WA Mortality Database and the Hospital Morbidity Data System for the period 1990 to 2004.

One of the most alarming findings was that over the 15-year period, the rates of Indigenous male and female hospital admissions for interpersonal violence increased, with the rate for females consistently higher than that of males. Moreover, 65 per cent of those admitted to hospital more than once because of interpersonal violence were female.

"We also found that almost half of Indigenous hospital admissions for interpersonal violence recorded more than one co-morbid condition. Mental illness was the most common co-morbidity for both males and females, followed by alcohol, which affected a higher proportion of Indigenous males," Meuleners says.



However, she explains, these are not the only attributing reasons to Indigenous interpersonal violence: "Multiple causes are involved in Indigenous violence. Alcohol and substance misuse exacerbate violence, but factors probably include economic disadvantage, loss of culture and spiritual identity, and broken family ties."

Other studies of interpersonal violence by the research team include a whole-population study of adverse maternal and foetal outcomes. Completed in 2010, the research found that pregnant Indigenous women accounted for 67 per cent of all hospitalisations for violence, and that Indigenous status was significantly associated with a two-fold increased risk for adverse foetal outcomes – including pre-term labour and foetal/infant death.

The WA Office of Crime Prevention is now funding the team to examine more recent data on interpersonal violence in a study that will include hospitalisations up to 2009. In addition, Australian Rotary Health is providing support for research into the association between mental illness and interpersonal violence.

Meuleners is hoping that more rigorous prospective investigation will determine the contributing factors of interpersonal violence hospitalisations for Indigenous people.

"Hospitalisation data under-represents the incidence of violent events, especially those in domestic situations, because most aren't reported or don't require hospital treatment," she says.

"Future research should examine in greater detail the long-term impact of violence on mental and physical health, and lifestyle factors such as living conditions, alcohol and drug use."

## THE ABC AND D OF IMPROVED HEALTHCARE DELIVERY

In 2009 Curtin University was part of a successful five-year National Health and Medical Research Council partnership initiative to gain continuation funding to support the successful Audit and Best Practice for Chronic Disease (ABCD) Indigenous primary healthcare project.

Led by the Menzies School of Health Research in Brisbane and supported by the Cooperative Research Centre for Aboriginal and Torres Strait Islander Health, the initiative represents a partnership between health services and researchers around Australia working together to improve the quality of care in Indigenous primary healthcare settings.

WA coordinator Professor James Semmens, Director of the Centre for Population Health Research at the Curtin Health Innovation Research Institute, says the main aim of the ABCD project is to help health services provide better care for Indigenous patients and families.

“We want to develop and test measures of quality; identify best ways to collect, compare and communicate information on quality; and share information about the most effective strategies for improving quality of care,” Semmens says.

A National Centre for Quality Improvement in Indigenous Primary Health Care program – One21seventy – has been set up as a not-for-profit organisation, the first organisation established specifically to support continuous quality improvement in Indigenous primary healthcare centres.

“One21seventy will involve a regional network of researchers working directly with health centres and health services to learn more about how to deliver the best quality care in their local contexts, with a particular focus on chronic disease,” Semmens says.

The One21seventy data collection will include the Health Centre and Community Survey, the Systems Assessment Tool, and a range of clinical audit tools to collect data about how health centres deliver recommended services in the support and management of chronic conditions.

One21seventy will provide better primary healthcare services and health outcomes for Indigenous people.

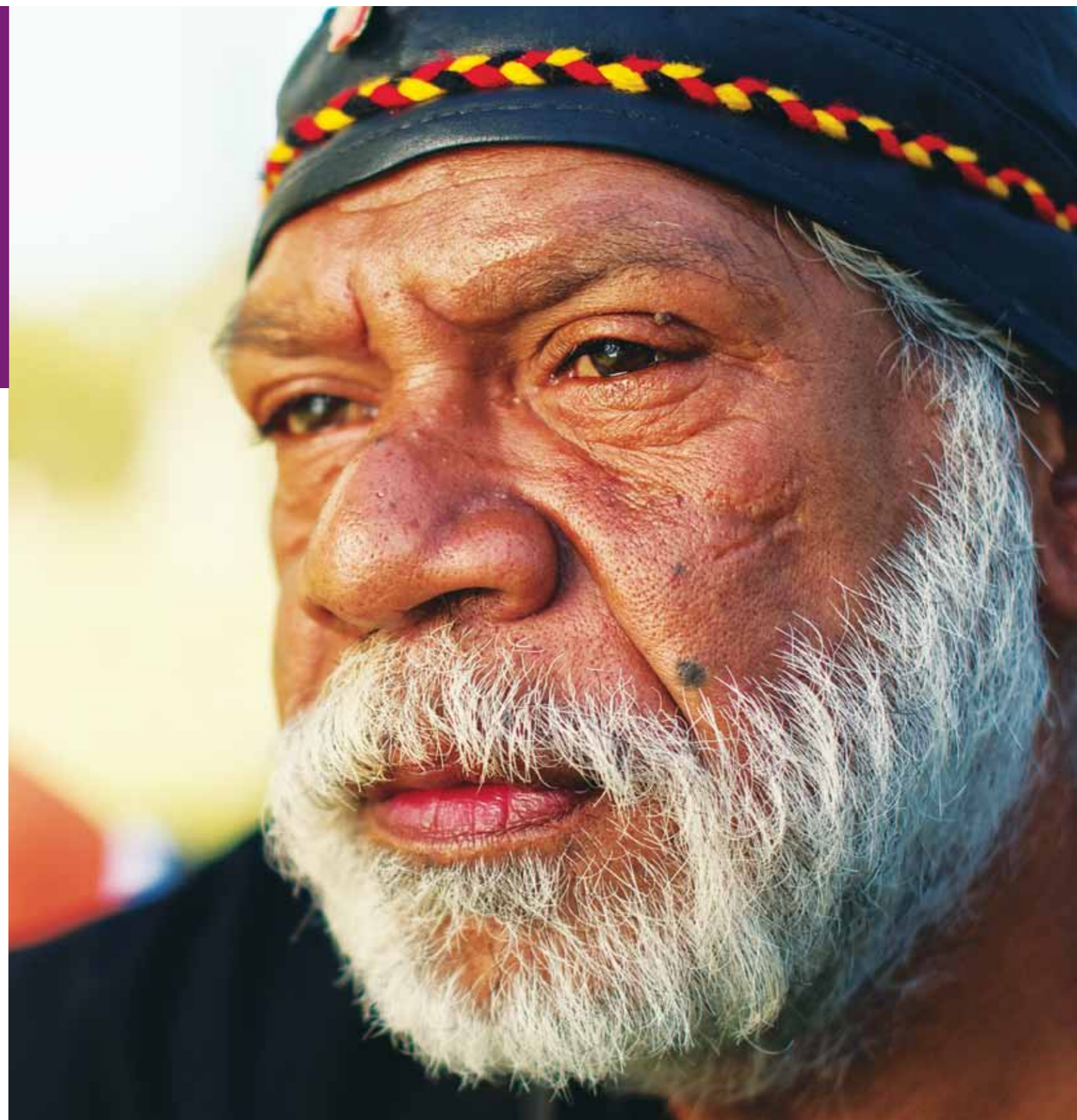
In 2011 the WA project will be operated in Geraldton, in collaboration with Professor Sandra Thompson, from the Combined Universities Centre for Rural Health, to provide a regional base in the Geraldton, Pilbara and Kimberley areas. ABCD Project Officer Ms Rhonda Cox has relocated to Geraldton to establish ties with the Geraldton Aboriginal Medical Service and Mawarnkarra, as well as the Aboriginal Medical Services located in the Pilbara.

“We aim to reset the operations base to focus on the regions, providing greater opportunities for direct community involvement and engagement with Indigenous health services,” Semmens says.

“Ultimately, it is hoped that One21seventy will provide better primary healthcare services and health outcomes for Indigenous people, improved information for the management of health services by community health boards, and a quality information base to inform policies and strategies in Indigenous primary healthcare.

“Continued funding will support the development of a regional focus directly with the local Indigenous community and health service involvement. We have an opportunity to learn from other states like the Northern Territory, Queensland and northern New South Wales, which have been running very successful programs for several years.”

The ABCD project has also contributed to the design and processes of other national, state and territory initiatives, including the Healthy for Life program.



## INDIGENOUS HEALTH ISSUES BOOSTED

**A** new radio show launched on Perth's only Indigenous radio station, Noongar Radio, is boosting awareness in the Indigenous community about important health issues across Western Australia.

The Wanginying health show, established in October 2010, is just one of the outcomes of the Aboriginal Health Communications Project (AHCP) initiated by Curtin University health researchers.

The AHCP, funded by a \$308,000 grant from Healthway, was established to research issues surrounding the representation of Indigenous health issues in the Western Australian news media. It aimed at evaluating how media could be more effectively utilised by the Indigenous health sector to generate positive and accurate media coverage about Indigenous people and their health.

Consultation and collaboration with the Aboriginal health sector and Indigenous and non-Indigenous media professionals resulted in the development of a media skills training program. The program aimed at enhancing key Indigenous health professionals' use and engagement with the news media, and developing collaborative partnerships with journalists.

Project Manager Verity Leach, from the Aboriginal Health and Education Research Unit (AHERU) at the Curtin Health Innovation and Research Institute (CHIRI), says the initiative was successful and that the whole team was thrilled about the creation of the radio show.

Positive outcomes from the AHCP include an increased number of media contacts in the Indigenous health sector, a positive engagement between AHCP participants and journalists, and a number of Indigenous articles published in newspapers as a result of the training.

"We made some inroads with mainstream media, and the fact that participants established a dedicated health show on Noongar Radio was an unexpected but terrific outcome," Ms Leach says.

"Noongar Radio is popular in the Indigenous community and broadcasts to people that will directly benefit from the radio show and any health advice provided.

"The health program is creating awareness about different health topics such as breast and cervical cancer, diabetes and heart health."

Other positive outcomes from the AHCP include an increased number of media contacts in the Indigenous health sector, a positive engagement between AHCP participants and journalists, and a number of Indigenous articles published in newspapers as a result of the training.

The project was led by Professor Sandra Thompson, AHERU; the Combined Universities Centre for Rural Health; Associate Professor Alexandra McManus, from the Centre of Excellence for Science, Seafood and Health at CHIRI; and Adjunct Professor Ross James, from the School of Public Health. Ms Verity Leach project managed the initiative.



## INDIGENOUS EDUCATION TEAM AWARDED



John Mallard, Julie Hoffman, ALTC representative and Rosalie Thackrah.

**In October 2010 Dr Julie Hoffman, from the School of Nursing and Midwifery (SoNM), Mr John Mallard, from the Centre for Aboriginal Studies (CAS), and Ms Rosalie Thackrah, from the SoNM, were awarded the highly competitive Neville Bonner Award for Indigenous Education from the Australian Learning and Teaching Council in the category of Teaching Excellence.**

The accolade recognises the country's top university teachers who have made a significant contribution to enhancing the quality of student learning in teaching and education. In particular, the award acknowledged the excellence in teaching in the Indigenous Australian Health and Culture 132 unit, provided in partnership between CAS and the SoNM from 2006 to 2010.

Initially introduced by Rosalie Thackrah, senior lecturer in the SoNM, the unit was originally proposed as a teaching unit focusing on Indigenous Australian culture, for inclusion in the nursing and midwifery curriculum.

Ultimately, many people contributed to the realisation of the unit, which comprised impacts of colonisation with past policies and practices on Indigenous people in terms of their health and wellbeing.

The introduction of the unit prompted the Western Australian Nursing Board to include Indigenous health in the curriculum for undergraduate nursing and midwifery students across the state.

Dr Julie Hoffman, unit coordinator from 2007 to 2010, says the team was extremely proud to receive the prestigious award, particularly because it was in recognition of teaching excellence in Indigenous education.

"An awareness and understanding of the diversity of Indigenous cultures is something to be valued, not only because Indigenous cultures continue to survive for more than 50,000 years as the oldest living culture in the world, but also because it represents a richness and complexity of life found in the essence of Indigenous people's world view," Hoffman says.

## INDIGENOUS CULTURE AND HEALTH UNIT FOR ALL HEALTH SCIENCES STUDENTS



**In 2011 more than 1,800 health sciences students commenced Australia's first interprofessional curriculum across 19 disciplines, from biomedical sciences through to occupational therapy.**

Students currently complete five core units in first year, with one of these being a new unit on Indigenous Culture and Health.

In 2010 the interprofessional health sciences design team, led by Dr Julie Hoffman, senior lecturer in the School of Nursing and Midwifery (SoNM), and Associate Professor Kim Scott, from the Aboriginal Health and Education Research Unit at the Curtin Health Innovation and Research Institute, were tasked with developing the Indigenous Culture and Health 130 unit.

Hoffman, unit coordinator in the former Indigenous Australian Health and Culture 132 unit taught solely in the SoNM from 2006 to 2010, supplied topics and themes for the new interprofessional Indigenous unit.

Scott's creative talents provided innovative and insightful contributions in the development of different teaching tools – such as vodcasts, where personal narratives from Indigenous people were incorporated into the curriculum.

In the unit, students examine culture and diversity in local, national and global Indigenous populations, as well as the impacts of specific policies and historical events on Indigenous people, and the effects on health and healthcare access.

The Dean of Teaching and Learning at the Faculty of Health Sciences, Sue Jones, says the new unit is already proving successful.

"Our students are already stating that the unit is adding value to their understanding and knowledge as health professionals, and contributing to their personal growth," Jones says.

"By educating the future health workforce about Indigenous culture we hope to make a positive impact on Indigenous health outcomes."

# CURTIN HEALTH INNOVATION RESEARCH INSTITUTE

**T**he establishment of the multi-million-dollar Curtin Health Innovation Research Institute (CHIRI) – the first of its kind in Australia – brings together Curtin’s health researchers to work with industry partners, government and the wider community. CHIRI will evolve the education of our health professionals, focusing on interprofessional education programs and research opportunities while providing vital clinical practice opportunities to enhance student learning and experiences.

CHIRI aims to facilitate high-quality translational health research in a number of key areas, including:

- ageing and dementia
- prevention and management of chronic conditions
- Indigenous health
- mental health
- population health services research
- biomedical and clinical sciences.

Australia’s population is undergoing dramatic changes in its health, ageing and longevity patterns, and these key areas will be the focus of extensive research by CHIRI to improve the standard of healthcare in Australia.

## Curtin Health Innovation Research Institute

Centre for Behavioural Research in Cancer Control

Centre for Research on Ageing

Centre of Excellence for Science, Seafood and Health

Centre for Population Health Research – Public Health

Western Australian Centre for Cancer and Palliative Care – Nursing and Midwifery

Centre for Research into Disability and Society – Occupational Therapy and Social Work

Research Centre for Applied Psychology – Psychology and Speech Pathology

Western Australian Biomedical Research Institute – Biomedical Science and Pharmacy

Western Australian Centre for Evidence Informed Healthcare Practice – Nursing and Midwifery

Western Australian Centre for Health Promotion Research – Public Health

WHO Collaborating Centre for Environmental Health Impact Assessment – Public Health

National Drug Research Institute

Public Health Advocacy Institute

Australian Technology Network of Universities Centre for Metabolic Fitness

Curtin–Monash Accident Research Centre – Public Health

WA Centre for Public Health – Public Health





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