Fighting disadvantage

Two preventable diseases are running rife in remote Aboriginal and Torres Strait Islander communities, and two healthcare projects are working hard to eliminate them.

The recently released Closing the gap: Prime Minister’s report 2017 revealed that out of seven targets for Aboriginal and Torres Strait Islander peoples – closing the life expectancy gap; halving mortality rates for children under five; improving access to early childhood education; improving reading, writing and numeracy skills among children; halving the gap in employment outcomes; improving school attendance; and improving year 12 attainment rates – only the final target was on track to be achieved.1

Such a shortfall has led to calls from Aboriginal and Torres Strait Islander communities for all levels of Australian government to work with them more closely. The Federal Government has responded with a promise to honour this vision and forge a new and positive way of working together.1 However, many healthcare providers and Aboriginal Community Controlled Healthcare Services (ACCHSs) have already been working together in an attempt to improve life expectancy and mortality rates in remote Aboriginal and Torres Strait Islander communities. The Northern Territory (NT) features two examples of projects focused on coordinating healthcare efforts, from primary care to hospital services, in order to reduce the impacts of preventable diseases.

**Strong hearts**

Rheumatic heart disease (RHD) is a cardiac complication of acute rheumatic fever, an auto-immune illness that can follow group A streptococcal infection. It now tends to be rare in developed countries, but Australia has one of the highest rates in the world, largely among Aboriginal and Torres Strait Islander peoples in remote communities in the northernmost parts of the NT.2 Its prevalence in children in this area has been found to be nearly twice as high than in other remote communities.3

Globally, RHD is the most common cause of cardiac death in children and adults under the age of 40.2 Almost all cases of RHD and subsequent death are preventable.2

Dr James Doran migrated to Australia from Ireland in 2010. Not long after arriving in Australia he started general practice training, for which travelled to Nhulunbuy in the NT’s East Arnhem Land to practise at Miwatj Health Aboriginal Corporation, the local ACCHS.

‘The medicine was really interesting,’ he told *Good Practice*. ‘I absolutely loved it.’

The experience, which involved working closely with patients living in extreme poverty, was one Dr Doran also found very confronting.

‘Too many people living in the one house, the houses falling asunder,’ he said. ‘Not even doors on the hinges, people just coming and going. It was like nothing I’ve seen.

Social determinants of rheumatic heart disease have a major impact in prevention and require efforts in public health and policy.”

‘And the morbidity and mortality that was going with it – people were talking about crusted scabies, rheumatic heart disease.’

Markedly high rates of cardiac surgery undergone by many of the Aboriginal and Torres Strait Islander patients, much of it caused by RHD, was a health issue that particularly struck Dr Doran during his time in East Arnhem Land.

The situation inspired him to work towards addressing the problem in a practical way. He began a Fellowship of Advanced Rural General Practice (FARGP) with the RACGP in 2015 after leaving Miwatj Health Aboriginal Corporation, undertaking further training at Danila Dilba, a ACCHS in Darwin.

After choosing cardiology as the skill he wanted to learn under the Advanced Rural Skills Training component of the FARGP, Dr Doran spent a year working with Dr Nadarajah Kangaharan, a cardiologist with a focus on improving cardiac services in the NT, especially for Aboriginal and Torres Strait Islander patients.
Dr Nadarajah Kangaharan feels primary healthcare has a key role to play in providing cardiac screening services for Aboriginal and Torres Strait Islander communities.

‘Part of my vision was to have people in the primary care sector contribute [to cardiac screening services],’ Dr Kangaharan told Good Practice. ‘I proposed to upskill general practice registrars.’

During this time Dr Doran learned to conduct echocardiograms – a procedure in which a doctor uses ultrasound imaging to view the size, shape and motion of the heart – using a portable, iPhone-size ultrasound tool called a Vscan.

‘The social determinants [of RHD] have a major impact in terms of prevention and these require efforts in public health and policy,’ Dr Kangaharan said. ‘But the second-best thing we can do is early detection and efficient treatment, and GPs are best placed to identify the problem.’

Early detection can allow diagnosis and treatment of rheumatic fever before it develops into heart disease and, in more advanced cases, help identify patients who require surgery. This identification can often mean the difference between life and death.

To this end, Dr Doran and Dr Kangaharan also helped to establish a successful GP cardiology clinic at Danila Dilba.

Although Dr Doran was pleased with these achievements, he wanted to continue working towards change that might help to ‘close the gap’, rather than simply treating health problems as they arise. This effort began in a community-based project that was part of his FARGP and involved compiling data on RHD surgery patients in the NT from multiple records into one single database, available at Northern Territory Cardiac in Darwin.

The overview provided by the collated patient information was sobering.

‘It highlighted the morbidity and mortality of patients in the NT who required RHD surgery,’ Dr Doran said.

RACGP resources

RACGP Aboriginal and Torres Strait Islander Health is dedicated to improving the health of Aboriginal and Torres Strait Islander peoples. RACGP members can join the faculty at no additional cost.

Working together with the National Aboriginal Community Controlled Health Organisation (NACCHO), RACGP Aboriginal and Torres Strait Islander Health has produced the National guide to a preventive health assessment for Aboriginal and Torres Strait Islander people, a practical resource for primary healthcare professionals.

Visit www.racgp.org.au to learn more about the faculty and the benefits of membership, as well as it publications and other resources.
Dr Lucas de Toca believes any efforts to improve Aboriginal and Torres Strait Islander health must be made in conjunction with people in the communities.

>> ‘Those preliminary results have shown that the average age of death is 42, so it’s very young.’

The database remains open for collection of information and will enable outcomes to be easily monitored by healthcare professionals involved in patients’ cardiac care.

This is not to be Dr Doran’s last word on the subject of improving identification and treatment of RHD among Aboriginal and Torres Strait Islander patients, however, as his research has ‘spiralled out of control’ and grown from a FARGP project to a PhD.

This research now includes a planned project to assess the feasibility of training Aboriginal health workers to perform focused cardiac ultrasounds within ACCHSs, as well as a proposed pilot randomised control trial to test the impact of this screening on RHD management and patient outcomes.

Dr Kangaharan is supportive of these efforts and believes upskilling some of the ACCHS workforce to provide screening services may help improve patient outcomes in remote NT communities.

‘That would mean problems could be identified early and referred on,’ he said.

‘Also, patients won’t be referred unnecessarily just because a murmur was heard.

‘This avoids unnecessary echocardiograms and, at the same time, picks up the right patients so we can start treating them early.’

Dr Doran is passionate about increasing general practice’s contribution to improving treatment and health outcomes for Aboriginal and Torres Strait Islander peoples in remote communities, and about encouraging people in those communities to learn more about their own healthcare.

‘The idea of this project is that it’s trying to empower the community to take control and develop their skillset,’ he said. ‘That’s what I’m interested in; the empowerment of Aboriginal and Torres Strait Islander communities to look after their own health.’

Skin deep

Another disease that is overrepresented in remote Aboriginal and Torres Strait Islander communities is scabies, a parasitic infection caused by a mite that burrows into the skin.

It is a disease rarely seen in developed urban areas and is thus likely to be unfamiliar to most, but many Aboriginal and Torres Strait Islander peoples in remote NT communities – areas with hot, tropical climates, overcrowding and poverty – are living in perfect conditions for the disease.

Almost 70% of children in the remote NT present with their first case of simple scabies by the age of one.

Crusted scabies, the more severe form of the infection that afflicts patients whose immune system is insufficient to fight off the mites, is found in these communities more often than anywhere else in the world. The condition is treatable and preventable, but can result in death if left untreated.

Dr Sam Prince, founder of not-for-profit philanthropic organisation One Disease, is determined to reverse these grim statistics. He has directed the organisation’s efforts since 2010 towards the elimination of crusted scabies in remote Aboriginal and Torres Strait Islander communities in the NT.

Dr Prince described One Disease’s focus on crusted scabies as ‘a triage situation’.

‘With simple scabies, you have 10 or so mites on the body that can cause inflammation,’ he told Good Practice. ‘But with crusted scabies, you have millions of mites per cubic centimetre of skin, causing widespread, whole-body injury, including kidney and heart damage, as well as crusting of the skin and open skin sores.

‘It’s a very different disease and people with crusted scabies are suffering most.’

Dr Lucas de Toca, Chief Health Officer at Miwatj Health Aboriginal Corporation, believes his ACCHS, One Disease and the NT Centre for Disease Control have been able to work together to help shape an effective healthcare approach for tackling crusted scabies at every level, from primary care to hospital services.

‘This collaborative work has produced clear guidelines on the management of crusted scabies as a disease that is an ongoing, potentially recurrent situation for patients that needs to be addressed holistically,’ he told Good Practice.

Crusted scabies ... is an ongoing, potentially recurrent situation for patients that needs to be addressed holistically

Scabies treatment and management can be difficult to implement at the primary care level in remote Aboriginal and Torres Strait Islander communities; its eradication requires an often onerous whole-household effort.

And, because the disease often recurs, it can be hard to be persuade a disappointed family to continue with eradication efforts in the face of such a setback.

In this setting, it is vital to ensure that GPs and other healthcare professionals work with families and the broader community.

‘The only way any impact can be made in [Aboriginal and Torres Strait Islander] health is from the community. Any initiative that comes externally is doomed to fail,’ Dr de Toca said.
Effective treatment also requires a coordinated effort throughout the healthcare system, which must extend to the period after discharge.

‘Ensuring the patient is discharged into an appropriate scabies-free environment is paramount,’ Dr de Toca said. ‘Otherwise you can start that cycle as soon as you send that person home.’

‘This is often complicated in remote environments and involves a duty of coordination between hospitals and primary healthcare.’

One Disease and its partners aim to eliminate crusted scabies in the NT by the end of 2019, and throughout Australia by the end of 2022. However, Dr Prince remains mindful of the need to work together with communities.

References