

PREVENTING RHEUMATIC HEART DISEASE IN CAPE YORK

ABOUT THE PROJECT

Apunipima received funding under the Australian Government's Rheumatic Fever Strategy, to develop and implement a prevention focused project to reduce the incidence and improve the management of Acute Rheumatic Fever (ARF) and Rheumatic Heart Disease (RHD) in Aboriginal and Torres Strait Islander communities. The project is focused in the Cape York communities of Kowanyama and Napranum and will run until June 2021.

The project objectives are to:

- Develop a comprehensive project plan incorporating a range of evidence based strategies (primordial and primary prevention)
- Foster stronger engagement with council, community leaders, organisations and community members
- Develop and distribute locally appropriate social marketing messages
- Facilitate appropriate service provider, school, and family based education and training
- Create healthy living environments through improvements to home hygiene and health hardware
- Evaluate, report on, and share project learnings and outcomes

Ending RHD will not just eliminate the disease for the next generation of Aboriginal and Torres Strait Islander children - it will help to close the gap caused by other diseases of inequity.⁽⁷⁾



RATIONALE - WHY THIS PROJECT

Acute rheumatic fever (ARF) is a communicable disease caused by a Group A Streptococcus (GAS) infection^(1,2). A painful and debilitating condition in its own right, ARF is also a precursor to rheumatic heart disease (RHD)^(1,2). RHD is a preventable non-communicable condition that involves damage to the heart valves and imposes a lifetime of morbidity and a high degree of suffering^(1,2).

Both ARF and RHD occur in very high rates among Aboriginal and Torres Strait Islander people and disproportionately affect the young⁽³⁾. The highest rates of ARF are found in children aged 5-14 years⁽³⁾. The average age of mortality from RHD among Indigenous Australians is 40 years⁽²⁾. The need to prevent ARF and subsequent RHD is particularly compelling when considered in terms of the relative inequality of rheumatic fever and the burden of disease it inflicts, rather than just the absolute magnitude^(2,3).

Clinical records show that the prevalence and incidence of ARF and RHD is high among Aboriginal and Torres Strait Islander people living in Cape York communities. In 2018 the Queensland RHD register showed a prevalence of ARF and RHD in the project communities, Kowanyama and Napranum 4.3% (n=43) and 5% (n=54) respectively.

RHD disproportionately affects the poorest and most vulnerable people^(1,2,4). Environmental conditions that promote high GAS exposure are the major determinant of ARF and subsequent RHD. The most consistent determinant of RHD is overcrowding, with a strong association between RHD risk and household or bedroom crowding^(3,5). While GAS throat infections are traditionally considered the antecedent to ARF, in Australia skin infections also appear to play a key role, potentially as a reservoir for GAS infection⁽⁵⁾. Aboriginal and Torres Strait Islander children living in remote Australian communities lead in prevalence of both impetigo and scabies⁽⁶⁾. This is contributed to by a lack of access to health infrastructure such as healthy housing, food security, safe drinking water, and effective sanitation⁽⁶⁾.

The recent release of *The RHD Endgame Strategy: The blueprint to eliminate rheumatic heart disease in Australia by 2031* has highlighted the need for continued concerted efforts from communities, clinicians, Aboriginal Community Controlled Health Organisations, government and non-government organisations, to achieve RHD elimination⁽⁷⁾. Strategies need to address the structural, environmental and social determinants in addition to primary, secondary and tertiary level care. Apunipima Cape York Health Council will continue to focus its RHD Prevention Project on both the environmental and social determinants with further coordination with community primary health care clinics.

EXAMPLE OF PROJECT ACTIVITIES TO DATE

Strengthening of community relationships, including onboarding of a community support worker; meetings and support received from local council and community leaders, engagement with local housing and environmental health officials

Launch of subsidised home care packs, addressing social and environmental determinants of ARF and RHD

Development of campaign resources, including flyers, posters and bags

Delivery of education under Healthy Kids Healthy Habits Program

Health Promotion and awareness generating activities implemented at events such as World Heart Day

Implementation of RHD Australia e-learning modules as part of mandatory training for maternal child health staff and clinicians at Apunipima

Provision of personal care packs

LOOKING FORWARD: THE NEXT 6 MONTHS

Primordial prevention: healthy living practices

- Healthy living practices, such as frequent hand washing and washing of household bedding, clothes and mattresses are needed to help prevent the spread of GAS and scabies infections associated with ARF and RHD⁽⁷⁾.
- Audits conducted by environmental health officers across Cape York communities, have demonstrated a lack of access to hygiene consumables such as soap and cleaning products. Lack of access to these products is a further barrier to RHD prevention.
- In light of this, the Project will continue to provide subsidised home care and personal hygiene packs to communities across the next 6 months.
- 2021 will see continued discussions with housing and environmental health officers and local stores to develop longer term and more sustainable solutions to address the primordial determinants of RHD.

Generating awareness: education delivery and social marketing

- In order to generate community awareness of RHD and enhance understanding of RHD prevention methods, education programs and activities will be designed and delivered. Settings for education include schools and community centres, such as PCYC and women's groups. The content and mode of delivery of these activities will be confirmed in consultation with community representatives, with the roll out scheduled for March 2021.
- The aforementioned activities will be underpinned by the implementation of a social marketing strategy to disseminate key messages around RHD and RHD prevention. Key marketing activities will include the development of a short film with Hudson media, featuring community RHD champions; development and distribution of branded merchandise, such as T-shirts and featured messaging in local media such as community Facebook pages and newspapers.

Primary health care: linking social determinants with clinical outcomes

- Primary health clinic ARF-RHD Bicillin Recall Lists demonstrate low Bicillin adherence in our focus communities. Difficulties with adherence demonstrate a need to improve the link between social, environmental and clinical focused interventions.
- The next 6 months will see further collaboration between Apunipima health promotion staff, clinical staff and community health workers to determine how RHD management at the primary health care level can be best supported. Strategies which may be explored include: development of primary health care clinician and consumer packs, coordination of Bicillin incentives and/or development of new and targeted primary care resources.
- Discussion to be coordinated for early 2021.

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