Preventing chronic diseases in remote Aboriginal communities with nutrition and integrative medicine

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Introduction

“We used to live long time, we didn’t get sick”—Daisy Goingulu, Hope For Health Strategic Committee Member, Age 73.

It was only 69 years ago that the Yolŋu people were living traditionally in north east Arnhem Land, Northern Territory (NT), enjoying excellent health. When the American-Australian Scientific Expedition to Arnhem Land arrived in 1948, they found the Yolŋu people were in very good health, with no chronic disease apparent.¹ As recently as the 1970s, Yolŋu were renowned for their self-sufficiency and general vitality.¹

Assimilation into the wider Australian society catapulted them into a sedentary Western way of life. Living in remote townships, smoking and eating refined foods, they were provided little information on associated health impacts. White flour, black tea and white sugar quickly became staples along with soft drinks and other processed foods. Today, they find themselves in the midst of a devastating health crisis, losing friends and family prematurely to preventable chronic health conditions. Yolŋu are among the highest at risk in Australia, perhaps the world.

Nationwide, efforts to address this epidemic of disease have not produced significant widespread results. The Prime Minister’s 2017 Closing The Gap Report states that Australia is “not on track”² to close the gap on life expectancy by 2031 and that in order to meet the target, Aboriginal life expectancy would need to increase by 16 years for females and 21 years males. The report indicates that since the 2007 NT Intervention, no real progress has been made (see Figure 22, p. 82) and that in the period 2011 to 2015 the Northern Territory had the highest Aboriginal mortality rate (1,520 per 100,000 population) as well as the largest gap with non-Indigenous Australians. Research indicates that remote Aboriginal communities of NT have significantly higher prevalence of chronic diseases (hypertension, diabetes, ischaemic heart disease, renal disease and chronic obstructive pulmonary disease) than national health survey figures³ ⁴ and that these diseases are responsible for up to eighty percent of the mortality gap between Indigenous and non-Indigenous Australians.⁵

Any preventative measure for chronic disease must place nutrition and lifestyle at the forefront as it has become clear that a nutritionally inadequate diet and sedentary lifestyle now underscore their health crisis. “In 2012-13, Aboriginal and Torres Strait Islander people 2 years and over consumed an average of 75 grams of free sugars per day (equivalent to 18 teaspoons of white sugar) ⁶. Nutrition plays not only a key role in the development of chronic disease, but also it is clear that positive changes can bring about rapid reduction in chronic disease markers.⁷ ⁸ Aboriginal people show a fast and marked improvement in type 2 diabetic indicators when they return to a diet similar to a traditional diet⁹ (in percentage of protein, carb and fats and no added sugars).

Nutrition education programs have long failed to achieve the widespread engagement and the impact hoped for, in the remote communities of Arnhem Land. Forty years’ experience in cross-cultural education in health, centred on the work of Richard Trudgen¹, established that educational approaches were essential to impact the Arnhem Land health crisis, because people lacked access to
fundamental information in forms they could understand. Despite this, like many others, past education programs of Trudgen and others working with Aboriginal Resource and Development Services, generally failed to change widespread community capacity. They did develop some effective cross-cultural education programs around diabetes and heart disease and while these produced significant results in achieving patient compliance and individual health improvements, they still failed to achieve community wide engagement, uptake, and long term application into the life of the community.

New Hope: from grassroots to pioneering heights

"Here at Galiwin’ku there are funerals all the time. So many people, both young and old are affected by chronic disease and early death. We don’t want to continue this way, going through this pain and suffering. We want a different future for this community."—Dianne Biritjalawuy, Galiwin’ku resident and HFH Co-Founder.

In contrast to the small impact of past programs, a new direction, Hope For Health (HFH), a program of Why Warriors Org Ltd (Appendix A), is achieving significant health improvements in participants so far. Further, the obvious health gains seen in Yolŋu participants are motivating individuals, families and communities around them such that a ground-swell of demand is building from within the local community and wider in Arnhem Land.

The key elements of the current program are expanded on later in this paper, though one of the very important features that we believe makes the difference in this program, can be seen in discoveries made during its birthing. Our program Co-Founders, a brilliant Yolŋu cultural consultant suffering from chronic disease and a Non-Aboriginal mother and medical doctor, discovered together that the biggest missing factor to empowering remote Aboriginal people to improve their own health was the opportunity to experience personally, the effect of healthy natural foods.

In 2013 Galiwin’ku resident Dianne Biritjalawuy experienced an acute health scare that left her wheelchair bound with symptoms of unstable ischemic heart disease and uncontrolled diabetes. She was just 47 years old. She turned to her friend Dr Kama Trudgen for answers and assistance. Dr Trudgen had been living and raising her family and doing volunteer community development work on Elcho Island since 2009. She devised the best solution she could, based upon knowledge shared with her from community on healthy Yolŋu traditional foods and on her research into nutrition. With the resources available, particularly food and time, and for one and a half weeks she cooked high nutrient low-carbohydrate dinners for Ms Biritjalawuy. This allowed Ms Biritjalawuy to experience the profound difference that a change in nutrition could make. It was transformative. She went from wheelchair bound, to knowing new levels of vitality. She was able to walk well after 2 weeks, her blood sugar levels normalised, and after 3 months she was able to walk up hills with relative ease.

The educational context of this transformation was crucial. Ms Biritjalawuy is an extremely well educated Yolŋu person and Dr Trudgen had been discussing nutrition and health issues with her and others in the community for some time. When she accepted the offer to have her dinners cooked, she also committed to working with Dr Trudgen to improve her diet going forward. Their discussions drew heavily on Ms Biritjalawuy’s traditional food knowledge and on Dr Trudgen’s recent research into whole foods diets and into research on traditional diets across the globe. Ms Biritjalawuy’s health outcomes were achieved on a whole food diet with moderate carbohydrate intake, excluding most processed foods.
Her recovery was so profound that other Yolŋu saw it as evidence of the power and effectiveness of nutrition. Soon, a small group of Yolŋu women, were discussing with Dr Trudgen and Ms Biritjalawuy how they too could experience this health transformation, and how their ‘Hope For Health’ for their people might be realised. After months of regular conversation and sharing hopes and vision, reflecting on traditional patterns of eating and exploring mainstream nutrition knowledge, Dr Trudgen became absolutely convinced that it was almost impossible for people to envisage healthy vitality without having had a personal experience.

A year later in May 2015, after successful fund-raising, 12 women together with Dr Trudgen and her husband Mr Tim Trudgen, Cross Cultural Consultant, Why Warriors, were able to attend a thorough two week detox program at Living Valley Health Retreat (LV), South East Queensland. This was again transformative. By the end of two weeks on a low carbohydrate, whole food diet, the women experienced a profound sense of wellness. During the retreat process they were able to explore the links between nutrition and disease in Yolŋu language as translated by the Trudgens, and utilise LV’s 25 years of experience in providing health transformations. The women returned to Galwin’ku excited to share their experience with the community, and ready and motivated to form a Steering Committee together with the Trudgens, to guide the development of the Hope For Health program.

Under the oversight of the Steering Committee (later re-named the Strategic Management Committee) the Hope For Health program started to take shape. The big picture vision was to see a long term Health Retreat opportunity established on Elcho Island which would be shaped by Yolŋu traditional understandings and practices relating to health and nutrition as well as by the best of mainstream knowledge and practices. In the immediate time frame participants required on-going support to sustain and further the health gains made. They required opportunities to learn more in Yolŋu matha language about the relationship between nutrition, health and disease, and they required access to healthful foods that weren’t readily available from the local store. They were committed to understanding at a deeper level how traditional food patterns had kept their forebears so strong and healthy, and to ensuring the application of this knowledge in their current context. Over this time the Strategic Management Committee employed several of the participants and a Balanda Naturopath to undertake the many day to day activities and help develop the program.

September 2016 saw a huge milestone achieved. An amazing first Yolŋu health retreat took place in the homelands of Elcho Island. It featured similar medical, nutritional and naturopathic support, musculoskeletal treatment and exercise classes as in the previous LV retreat, but this time foregrounding locally caught foods, and traditional medicine and nutritional workshops explained in Yolŋu matha. The health outcomes from this retreat were again, very encouraging (see impact section below), and the vision is that this now becomes an annual event.

The Hope For Health program today

From small grassroot beginnings Hope For Health is now providing pathways for more Yolŋu to explore and implement better health. The approach is to create a network of healthy and empowered Yolŋu people to proudly implement positive change in their communities.

Program delivery elements are:

- **Intensive health retreats** enabling people to experience the effect of good food on their health, and to initiate their road to good health. These provide a 2-week diet and exercise program with extensive cross-cultural education throughout.
• **Personal health coaching** providing continuous 6 months minimum support for retreat participants which delivers:

  – **Culturally appropriate education** in the areas of nutrition, causes of chronic disease, and traditional health practices

  – **Skill development** including cooking, exercise, shopping and overcoming household challenges.

  – **Exploration of personal and systemic barriers** to lifestyle change and health, and where possible supporting solutions with participants and families.

  – **Integrative health care services** to ensure informed diet choices and regular monitoring of disease indicators and medications.

• **Household and community accessible education and skills** training about disease prevention, nutrition, cooking and exercise.

• **Collaboration with local and Territory wide agencies** to develop solutions to challenges that Yolŋu face in implementing and maintaining changed lifestyle.

**Impact of HFH: Participant results**

Results thus far are demonstrating very positive outcomes for direct participants who, under medical supervision, are maintaining this improvement over 6 months and more.

For the first twelve participants preliminary results were that:

• During the retreat, blood sugar levels and blood pressure normalized in every case, without medication. Most lost kilos of weight, and participants reported feeling the best they could remember.

• Blood pressure: 88% of participants started the health retreat with a BP higher than normal (120/80); at the end, 55% had high blood pressure; at three months, all participants experienced an improvement in BP readings; and at six months 90% had retained a marked improvement.

• Blood Glucose Levels: 100% of participants had blood glucose levels considered out of control—>20mmol; at three months all were near normal (as reflected in HbA1c tests); at six months 60% had maintained the improvement, 40% had experienced some regression.

• 75% of original group had their medications reduced.

• Blood Lipids: At three months, 100% of participants experienced a marked improvement; by six months many lost ground.

• Waist Circumference: at 3 months 90% of participants had reduced waist circumference; at six months, 50% of the participants had maintained this.

• Smoking: 50% of participants were smokers prior to the retreat; all quit smoking during the retreat; at three months 50% of the previous smokers remained non-smokers; at six months 67% of the original smokers had successfully stopped smoking.
The 2016 Post Retreat results
Outcomes are mostly comparable, if not better than the previous retreat results. At this stage we are awaiting the Strategic Management Committee’s approval before these results can be released.

Indirect and community wide impact
As we near the completion of two full years of delivery, almost 50 Yolŋu have participated in health retreats and over 400 Yolŋu individuals have participated in the program via workshops, cooking and exercise classes. Although we have not yet completed our evaluation of community wide impact (the program has barely been funded for 12 months), anecdotal evidence continues to accumulate that individuals and families beyond the direct retreat participants are taking up diet and lifestyle changes independently through their contact with participants.

What makes Hope For Health different?
The current lack of traction in “closing the (health) gap”, especially in remote communities, raises the question, “Why has Hope For Health been as effective as it has?”. And why does it hold so much hope/potential? We believe there are four main elements that together make the program unique.

Experiential education
“This has never just been about community education. It’s about giving people an experience so that they have a choice.”—Dr. Trudgen (Hope For Health Co-Founder)

Ms Biritjalawuy’s experience of diet change lead her to the realisation that previously she never really believed that food could make the difference, even though she knew intellectually that ‘poor diet was causing her condition, and that change would benefit her. Participants in the first retreat verified that insight. Yolŋu have had little to no evidence to demonstrate that changing diet to healthy natural foods can transform a person’s health. HFH is able to give them the opportunity to experience personally the positive effect of natural whole foods on the body, and in turn those visible health and experiential health changes are harnessing the excitement and motivation of others.

The diet change experience that people journey through on retreat cannot be separated from the educational process. It is very important to revisit the concepts covered at the retreat and to expand on this knowledge around food changes. Knowledge gaps Richard Trudgen and other community educators identified over the years remain true. Yolŋu continue to lack the opportunity to access foundational health information about body function, the causes of disease, or even the economic realities of food production that allows unhealthy food choices on supermarket shelves. Without this information they cannot make informed choices. The health retreat addresses these knowledge gaps utilising local language and cultural context wherever possible. Educational content is customised to suit the knowledge gaps, and starts with existing knowledge, worldview and Yolŋu symbols and metaphors to explain modern mainstream systems and new knowledge. The focus is not on advice, or a list of “how to eat”, but on understanding how nutritionally poor food creates disease and how good nutrition and exercise promote good health. Thus, experience and understanding provides Yolŋu with a choice and enables and motivates people towards change in their own lives and in the community.

The content also identifies and highlights social needs and systemic barriers to change. While many of these barriers are beyond the program’s scope to affect directly (such as limitations in family income, poor support from other family members, addictions, high levels of stress and grief) we recognise the primacy of health in people’s ability to advocate and effect change for themselves. That is, as people get healthier they are more able to change their circumstances.
Through this experiential educational approach participants are coming to feel “rom walngaw” (the Yolŋu way to vitality) and to understand the links between lifestyle choice and health, in a relatively short period of time.

**Grassroots partnership**

Hope For Health was birthed out of a deep and trusting relationship that formed between Dr Trudgen, Ms Biritjalawuy and others in the community through many engagements on health and other matters over time. The Trudgens had lived and worked in the community for 4 years engaged in a project that listened carefully to Yolŋu people’s agendas and hopes, and that fostered the development of trusting and long term relationships. We believe that these developmental processes are critically important when working for change in an environment of hopelessness, cross-cultural confusion, and dependency, as is the case in Arnhem Land.

From the outset the HFH process has been a partnership between Yolŋu and Balanda (non-Aboriginal) people and between traditional and mainstream knowledge. While there is a commitment to privileging Yolŋu process knowledge and decision-making in the HFH program, it is the conviction of the Strategic Management Committee that this program needs to continue to be a partnership between Yolŋu and Balanda people, and of traditional knowledge and the best of modern health and nutrition science and practice.

**Valuing traditional knowledge**

Valuing Yolŋu traditional knowledge and marrying this with relevant modern approaches allows all involved, Yolŋu and non-Aboriginal alike, to participate in the program as equals, sharing information and learning from each other.

Many previous education approaches to nutrition have confused people by affirming the importance of traditional foods while at the same time encouraging the moderate inclusion of processed products (such as bread, factory spreads, diet drinks, or fat-free meat cuts). These are not consistent with traditional knowledge and nutrition. HFH is taking a different approach. The dietary framework for the program is based on the successful LV program, (see above) that is consistent with Yolŋu traditional food knowledge and diet. As a result, traditional knowledge is the starting point for all education and discussions about food choices. For example, in discussions about fat we start with its traditional value as an essential component of the “Matha-Yal” implying a satisfaction felt with eating foods such as meats. We then explore its value and use in the body and the fat-soluble nutrients it provides. We look at the way fats have changed in the modern commercialised context including the introduction of transfats and the links with heart disease.

**Integrative approach**

With the knowledge of traditional Yolŋu healing methods, the experience of the health retreats, and when faced with the current epidemic of chronic and often preventable diseases, an integrated approach to health care seemed like an organic solution to the Strategic Management Committee (inclusive of three local clinic staff members and a doctor). They envisioned that this would provide the most holistic solution utilising all available systems, mainstream and Yolŋu, to help facilitate each individual’s health journey.

The importance of orthodox interventions and treatments is well researched and an essential component for monitoring and managing chronic disease. It is however, difficult for Yolŋu to truly value and utilise this model when it is explained in what is often an individual’s 4th language and is based upon such an unfamiliar medical framework. Valuing and understanding Yolŋu traditional...
knowledge and language can provide a very effective framework to explain down to a biochemical level, the concept of a specific disease processes or the mechanism of a medication or nutrition. This restores empowerment, choice and involvement to the individual sitting in a consultation room, and results in increased compliance with orthodox treatments.

The original HFH Working Group and subsequent Strategic Management Committee identified that naturopathy aligned strongly with preventative nutrition-based approaches to health change. Yolŋu greatly appreciated that naturopathy with well-qualified and experienced naturopaths aligned very well with their own herbal and traditional treatments to provide case management support using food, herbal medicine and nutritional supplements. The opportunity is then created to provide a third party encouragement for participants and to engage with the medical system. This combats a tendency for people to want to throw out their medications when diet starts to result in positive changes. We are able to unbiasedly direct people to regular follow up consultations with medical services, which is hugely valuable in creating a coordinated approach to health.

The integrative approach of traditional Yolŋu knowledge and systems, orthodox medicine, nutrition, naturopathy with individualised support enables a synergetic outcome. From our experience and with results thus far supporting it, we view this approach as integral to our success in facilitating the best health outcomes for individuals and the Yolŋu community.

**Barriers to health**

Beyond the need for medical access and nutritional education is the essential role of local individualised support. Health coaching staff must slowly work with participants on systemic barriers that directly impact their ability to live healthily. These include matters such as access to regular income, difficulties in storing fresh produce at home, night-time ramblers that keep people up, regular funerals that interrupt program activities and take people away from home, or the burden of grief and family stress from things such as drug abuse or depression. These often require engagement with family and the gradual coming together of former and current program participants with influence in the community. Our Yolŋu Trainee Health Coaches supported by an experienced Health Coaching professional must work with the individual and group capacity available in each participant’s context, and help them find ways to limit these impacts on lifestyle improvement.

**Recommendations for the future**

The 2017 Closing the Gap Report shows that Australia is not on track to meet indigenous health targets. Hope For Health demonstrates one way to make significant progress. It does so from local Aboriginal motivation and initiative and seeks to integrate with existing health services. Our learnings from the journey so far raise the following recommendations:

- Funding priorities for primary health should recognise the importance of community based health education programs, especially where they might meet the following characteristics.

- Solutions that arise from within communities through Aboriginal and mainstream partnerships are highly valuable because they have the potential to bring together the range of knowledge and practices that are essential for positive health changes in individuals and communities.

- Long term relational presence will often be required in order to build the trust and the necessary local knowledge that enable partnerships for change.
Preventive health programs should utilise experiential approaches to demonstrate the effectiveness of personal health solutions. These experiences should integrate culturally and linguistically relevant education that target underlying knowledge gaps or confusions.

Health education should start with existing knowledge and genuinely utilise and validate traditional knowledge as the people’s very foundation for good health.

Integrative models that make available the expertise of naturopaths should be considered in preventative programs for their alignment with Aboriginal traditional healing knowledge and holistic mindset, providing complementary choice and supporting orthodox medical management.

More research around the positive outcomes that nutrition can have on both prevention and management of chronic disease in indigenous communities is required. Nutritional and educational models in remote Aboriginal communities must utilise existing research to build on and be consistent with local traditional knowledge and valued foods sources.

Conclusion

Preventing chronic disease in remote Aboriginal communities requires far more than traditional health education. We have argued in this paper that the Hope For Health program has found some critical keys to success. These include: facilitating for people an experiential understanding of healthfulness; valuing traditional knowledge including and relating to, food and well-being; providing a linguistically and culturally relevant education that builds on people’s existing knowledge, explores traditional knowledge and which address the knowledge gaps; taking a community development or grassroots approach which may well take significant time at the outset, but which will foster the engagement and sense of ownership by the community; ensuring a partnership between Aboriginal people with their knowledge and Balanda people and the best of western science and practice; and finally adopting an ‘integrative model’ which embraces collaboration between mainstream medical care and other relevant health disciplines such as naturopathy which have particular synergies with traditional Aboriginal approaches.

In its 2 years of operation the Hope For Health program is showing very significant positive health outcomes in participating individuals and a high level of motivation and engagement from the wider community. It requires more resources to ensure its potential to assist Yolgnu to reverse the catastrophic health crisis it faces at the present time; to provide more annual health retreats, more support over time for participants to maintain their health gains, strong outreach to the wider community, and to see that the approaches taken are properly evaluated, researched and documented. Hope For Health would love to respond positively to communities elsewhere in Arnhem Land and wider, who are expressing their hope for health and motivation to embrace this program.

References

2. Commonwealth of Australia, Department of the Prime Minister and Cabinet, Closing the Gap Prime Minister’s Report 2017
Why Warriors Org Ltd is a charity created by Richard, Timothy and Kama Trudgen based on cross-cultural education work of over 40 years with Aboriginal communities in the Northern Territory, including publishing Why Warriors Lie Down and Die, a now popular book for workers in communities. The organisation was created in 2016 to extend and build upon the work undertaken through the private company Why Warriors Pty Ltd. The organisation nurtures locally driven projects across Northeast Arnhem Land with Yolŋu people, providing support for Indigenous visionaries, solutions for Health and lifestyle change, and region-wide education.

Central to Why Warriors’ vision is partnership and “Dharanganamirr” reciprocal understanding between mainstream and Indigenous cultures. Yolŋu people, some of the most traditional Aboriginal people in Australia, are presently suffering the cultural loss and confusion that others experienced years ago. This is an opportunity, through two-way learning and recognition of cultural practice as a primary mode of engagement, to help Yolŋu to create a different result for mutual benefit.

We are committed to build the capacity of Yolŋu people to move away from welfare dependency and marginalisation by partnering to develop their own solutions to the problems they face.

Our primary work is delivered through:

- **The AHED Project**: Exploring with people the visions they have and the opportunities that exist to develop sustainable solutions through locally driven programs and Yolŋu controlled enterprises and by providing support, training and culturally effective education in local language.

- **Hope For Health**: Lifestyle change and health coaching for Yolŋu wishing to address chronic disease. With 80% effectiveness at improving chronic conditions to date, this program has significant momentum and widespread support.
Presenter

As a qualified naturopath, Kate Jenkins brings over nine years of practical experience as a health professional to her role as Clinical Case Manager and Coaching Supervisor for Hope For Health. Born in a small country town, Kate has lived and worked in remote Australian communities and international cross-cultural positions. Kate is actively passionate about integrative healthcare and has an extensive history of working with doctors, specialists and other health professionals. Based on Elcho Island with Hope For Health, Kate has been intensively learning Yolŋu culture and traditional healing practices from local Elders. Kate led the medical team for Hope For Health first 2016 traditionally grounded health retreat on Elcho Island, which successfully blended modern nutrition, naturopathy and medical support into the framework of traditional Yolŋu culture.
Integrative medicine is defined by the Consortium of Academic Health Centers for Integrative Medicine as an approach to the practice of medicine that makes use of the best-available evidence taking into account the whole person (body, mind, and spirit), including all aspects of lifestyle. From: Abeloff's Clinical Oncology (Fifth Edition), 2014. The major goal of scientific integrative medicine is to treat effectively or prevent diseases before they become symptomatic. Chronic activation of allostatic effectors in allostatic states promotes allostatic load.