Sowing the seeds of change: Urapuntja food gardens project

Susannah Summons
Northern Territory Medicare Local

Aims

Urapuntja (Utopia) is a remote indigenous community located 280 km north-east of Alice Springs. Uniquely, it is not a centralised community, but a collection of 16 outstations spread across 70 km. As is the case in many remote communities, diabetes and obesity pose a significant health burden, and the healthy food required to address these issues is expensive and difficult to source. Community members discussed these difficulties with the visiting Dietitian over a 12 month period, and requested assistance to establish food gardens to supplement the fresh food supply of families living in the area.

Methods

A number of representatives from different outstations raised the possibility of developing food gardens with the dietitian, and in fact some community members started their own gardens using seeds saved from food purchased at the local community store. Seeing the interest in gardens and the significant need for easier access to fresh fruit and vegetables, funding for a 3 year project was secured through the Department of Health and Aging Preventative Health Initiative scheme. A key component of this project was that all gardens were developed in partnership with community members, with whom the dietitian had a pre-existing relationship. While evidence was carefully sought and considered regarding the successes and challenges of other remote food gardens projects, all gardens were individually tailored to meet the needs of individual communities in terms of their location, size, irrigation, and the balance of fruit and vegetable growing in the garden. Therefore all gardens were developed in a way that was unique to their particular outstation and the priorities of the community members living there.

The Dietitian and 2 project workers, each with permaculture and adult education qualifications, were the primary support staff in the development of the gardens. Community members were not paid for their involvement in the gardens, although it did often involve heavy construction work and a number of hours working at a stretch. Involvement was voluntary and on the basis of building something for their community. The same community members were then responsible for tending to gardens when support staff were not in the community (which was the majority of the time). Therefore community members needed to feel a sense of ownership in the gardens from the beginning of the garden development. This formed the basis of the underlying philosophical approach which guided the gardens from the beginning of the project.

Over the first 2 years of the project period, new gardens were developed in twelve outstations. All gardens included capacity for seasonal vegetable production, irrigated fruit orchards, and adequate fencing to protect gardens from horses and dogs. Of the outstations that did not receive a garden, they either elected not to have a garden (mostly due to concerns over water supply), or there was no-one living in the outstation at that time.

During the final year of the project, resources were spent on assisting gardeners to manage their gardens, through developing skills such as harvesting food, clearing beds, and planting new seasons crops, or troubleshooting issues in the garden such as problems with irrigation systems. A locally developed planting calendar using pictorial seasonal cues and information about vegetable planting times were erected in all gardens. Resources were also developed to support the gardens and allow their story to be broadly told, such as short films made in local language, covering topics such as raising seeds, planting seedlings, harvesting and cooking produce, healthy food, irrigation, and when to plant.
Relevance
Poor access to healthy food is one of the key determinants of poor health outcomes in remote indigenous communities. In the Urapuntja region, the fresh produce available in the community store would not be adequate to meet the dietary requirements of the community, should they eat according to the “Australian Guide to Healthy Eating” recommendations. Food is expensive, and for some people the community store is 40 km away. Therefore, establishing an additional source of fresh produce in community outstations has the potential to improve people’s health and the management of chronic diseases such as diabetes. There was also a great deal of pride around the progress of the gardens, which contributes broadly to social and emotional wellbeing.

There were also changes noted in physical health parameters through the involvement of community members in the garden. While this data was not routinely collected as it was beyond the scope of the project, in some instances blood sugar levels were taken with community members known to have diabetes, both prior to starting working in the garden, and after work was completed. In all cases this resulted in a decrease in blood sugar levels, in one case from a starting reading of 33mmol/L, to a final reading of 6mmol/L. Therefore the gardens provide a meaningful focus for physical activity, which was completed even in climatic extremes, and had flow on effects for people’s physical health parameters.

Results
Twelve gardens have now been established in the outstations of Urapuntja using a community development approach. A number of factors have impacted on the success of the gardens over a 3 year period. These include the levels of sustained interest in the garden among community members, sorry business or bad weather which may influence people to move away from a garden site, success or failure in food production which influences ongoing engagement, and the level of support available to troubleshoot any issues that arise in the management of the garden. Of the 12 gardens that have been established, the level of impact and success has been rated as follows:

- 2 gardens were highly successful
- 7 gardens were moderately successful
- 3 gardens had minimal impact on the functioning of the outstation.

The various levels of success can be defined as follows:

- Highly successful gardens are thriving, even after an extremely harsh central Australian summer, during which many gardens in Alice Springs perished. Gardens are well tended to, and there have been new additions to the garden based entirely on the initiative of the community members involved.
- Moderately successful gardens are tended to, and community members remain engaged, with ideas about how to develop their garden from here and a willingness to do further work in the garden. However, these gardens require ongoing outside support, and there were some plant losses during the harsh summer heat.
- In the gardens with minimal impact, community members appear to have lost engagement with the gardens in the absence of outside support over the hot summer period.

All 12 gardens have been built with the intention of developing strong, reliable infrastructure, that can be utilised by community members now or in the future in the production of their own food. Irrigated fruit orchards will provide a source of fruit in the future even with minimal tending. The short films in local language covering many aspects of food production will be shown at the clinic and also distributed to outstations, and will provide ongoing instruction and inspiration for community members around gardening concepts after the conclusion of the project. Therefore many resources will be left for the community if they wish to develop their gardens further in the future.
Conclusions
The poor availability of fresh fruit and vegetables in remote indigenous communities and the associated heavy burden of disease will be ongoing issues unless the problem is specifically addressed in a systematic way. Food gardens can be considered one worthwhile strategy amongst many potential strategies to address this issue. Many factors effect whether a garden will be successful in terms of ongoing fresh food production, and food gardens are unlikely to be a solution to the low availability of fresh food as a standalone strategy, but rather should be considered as one strategy in a multi-strategy approach to address nutrition and physical activity as determinants of chronic disease.

The establishment of all gardens in this project provided an opportunity for meaningful physical activity, and did lead to measurable changes in health parameters such as blood sugar levels. Involvement with gardens generated a large amount of discussion about healthy food and how it can be included alongside bush and store foods, and community members reported that the increased availability of fresh produce from the gardens did lead to increased inclusion of fruit and vegetables in family meals. The pride that community members developed in their gardens became a positive focus for outstations, which also appears to have impacted on social and emotional wellbeing for some community members.

The successes of this project have been almost entirely attributable to approaching the project from a community development perspective, and fostering community ownership of the gardens from the very first stages of their development. Trusting and respectful relationships formed over a long period between project workers and community members were also an important factor in the successes of this project. Certainly the absence of long term support staff to develop relationships and work from a community development perspective would be a barrier to replicating a project such as this in other areas.

Recommendations
1. Food gardens can be considered a worthwhile strategy to address the poor availability of fresh fruit and vegetables in remote communities, however, a community development approach should be considered in order to maximise community engagement with gardens and support their sustainability.

2. It is also important to address other factors effecting remote food supply, such as the cost of freight leading to high prices for fresh produce in community stores, and whether this could be subsidised to create a level playing field for people in remote communities trying to make healthy choices in order to manage their chronic diseases (to name just one example). Many remote health professionals talk about these issues; perhaps we could consider advocating for this to be investigated in a more systematic way to support policy change at a state, territory, or federal level.