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The Kadavu health promotion model, Fiji

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SUMMARY

The Kadavu Rural Health Project in Fiji focused on improving the community capacity for health development in each of the nine districts and in the Province of Kadavu. The essential activity was to provide information on village health issues to people who were endorsed to make decisions within existing local government and traditional structures. The Ottawa Charter for Health Promotion was adapted by commencing with 'community learning' based on an adult education cycle of experience review, information seeking, policy development and community action planning. Village, district and provincial councils were able to formulate public policies, mobilise community action and create healthier village environments. A 'bottom-up' development approach, from village to district and provincial councils, clarified roles and responsibilities, identified resources and developed processes that, as extensions of normal community practices, are likely to be sustainable. Kadavu provides a health promotion model that is generated and legitimated by local communities, rather than by government ministries or external agencies.

Key words: adult learning; community development; health promotion

INTRODUCTION

The Kadavu Rural Health Project (1994–1997), an Australian Agency for International Development project of which the author was the Team Leader, was designed as a potential model for rural health projects in Fiji and the Pacific. Initiated in 1991 as a request by Fiji to Australia to replace the 100-year-old hospital on Kadavu (pronounced 'Kandavu') Island, the project was extended to a primary health care approach, where the design included objectives in community development and community training. These were proposed on the principles of participation and integration in order to extend the reach of limited services into the community, so that health development activities, training programs and the Ministry of Health clinical systems could be integrated with the Fijian council system that regulates normal village, district and provincial processes.

Kadavu is the fourth largest island in Fiji, being ~60 km long and divided into three large land masses joined by two narrow sections. At one of these, the Vunisea Government Station, hospital and airport are located. Kadavu lies 80 km to the south of Suva on the main island of Viti Levu and is volcanic in origin, having many small bays and sandy beaches interspersed with rocky headlands. The population of approximately 11 000 live in 74 villages located on the foreshores of the bays around the island. Another 18 000 people from Kadavu live elsewhere, many maintaining strong links to their villages and supporting a largely remittance economy, not uncommon in the Pacific.

The hereditary 'chiefly' system of Kadavu structures social authority and roles by birthright and by election. Village (*koro*) and district (*tikina*) chiefs are elected by the community from the men and women of eligible families, while village head-men, who perform formal

144-97kA-14973

roles in district administration, and village health workers (VHWs), may be elected from the general population.

The nine district councils of Kadavu are based on the chiefly system and are at the core of local government. Village representatives meet quarterly to discuss issues of common interest and to conduct public administration. Representatives of these district councils are elected to the Kadavu Provincial Council, which meets twice a year to coordinate development activities on the island and to formally liaise with departments of the Government of Fiji.

The Ministry of Health services in Kadavu are coordinated by the Sub-Divisional Medical Officer and the Sub-Divisional Health Sister. Community nursing services are provided through six nursing stations located around the island (increased from five in 1996). Basic medical services are provided through two health centres, one at each end of the island. In Vunisea, the 30-bed hospital (reduced to 22 beds in 1996) provides a basic secondary level medical service and refers patients to Suva for further investigation or treatment. The Sub-Divisional Health Inspector is responsible for ensuring that villages comply with the public health regulations stated in the Kadavu Provincial By-Laws. The Vunisea Hospital and the two health centres are governed by Boards of Visitors. These community-based boards and the Kadavu Rural Local Authority, whose role is to oversee public health conditions in villages and settlements, are appointed by the Minister of Health. In addition, until 1996 the Kadavu Provincial Council's Health Committee had been inactive for some time. No structural arrangements existed whereby these various groups were required to relate to each other or to coordinate their efforts. In a confused structure, responsibility for most community health issues had been deferred to the staff of the Ministry of Health.

The project's components can be broadly summarised as follows.

(1) Community development: to strengthen community participation in health related activities.
(2) Human resource development: to provide training for Ministry of Health staff and community training for village health and environment workers.
(3) Infrastructure: to construct a new 22-bed hospital and supply equipment, upgrade nursing stations and health centres, and provide boats and a four-wheel-drive (4WD) vehicle.
(4) Management: to establish participative project management systems.

It became evident to the implementation team that components (1), (2) and (4) were all centred on developing local government capacity to deal effectively with health related issues, and that by informing and strengthening public policy and planning processes, several of the project's objectives would be achieved simultaneously.

The project team's model of community participation in health commenced as an adaptation of the Ottawa Charter for Health Promotion (WHO, 1986) combined with the principles of adult education. Where the Ottawa Charter lists strategies of building public policy, creating supportive environments, strengthening community action, developing personal skills and reorientating health services, this framework was modified in application to Kadavu's local government system during the many community training activities. In order to create an easily understandable process, the strategies were placed in a logical sequence of activities by:

- extending 'developing personal skills' to a concept of 'community learning';
- making 'healthy environments' a goal;
- extending 'reorientation of health services' to include a reorientation of community priorities.

Early in the project the Kadavu Provincial Council recommended the coordination of the project's village level activities through the district level of local government. Accordingly, district level health committees were formed with the original aims of overseeing and coordinating project activities. As these committees broadened their roles, their aims were modified to providing district level monitoring of conditions in villages, advocating for health development and enabling access to district and provincial level funding for village health projects. Over a 2-year period, the project made small seeding funds available to assist district councils to make improvements in villages (Table 1). These projects included improving water supplies, sanitation, animal control, drainage and the construction of village dispensaries to provide working bases for VHWs. Apart from the improvements themselves, these projects provided positive early experiences for the district committees and villagers, while they clarified

methods of making health improvements, some of which required accessing Government of Fiji funding.

Community development and training could only have been achieved if they were wanted, endorsed and implemented by the community. The main tactics for the project team, therefore, became providing information to assist individuals and communities to make sensible decisions to protect their own health, and facilitating the emergence of effective processes for making improvements in village conditions. This non-prescriptive 'emergent' approach was adopted as a guiding principle. The achievement of the project's objectives became dependent on informed communities making decisions within their own contexts.

COMMUNITY LEARNING CYCLE

The concept of community learning arose from a combination of adult learning theory (Knowles, 1980) and the concept of learning organisations (Argyris and Schon, 1978; Senge, 1990). The essential propositions adopted were that adults learn best by reflecting on their experience, and that the integration of learning with organisational development is likely to produce sustainable change. Project and Ministry of Health staff were taught the use of a basic experiential learning method (Fry and Kolb, 1979) which was modified for the community context. Courses commenced with the review of each community's experience of selected topics and proceeded by adult learning to a cycle of health promotion activities (Figure 1).

Course dates, locations and the selection of participants were negotiated with district councils. Participants were endorsed by their communities to investigate issues and to present policy and planning proposals to their respective councils. Concurrently, the various health committees and authorities were linked to the provincial and district council system, mainly through a reconstituted and representative Provincial Health Committee. The Provincial By-Laws, under which village head-men have defined public health responsibilities, legitimated these developments and provided a basis for training. This marriage of information with decision-making was essential in achieving a wider development outcome than the provision of education alone (Rotem *et al.*, 1994).

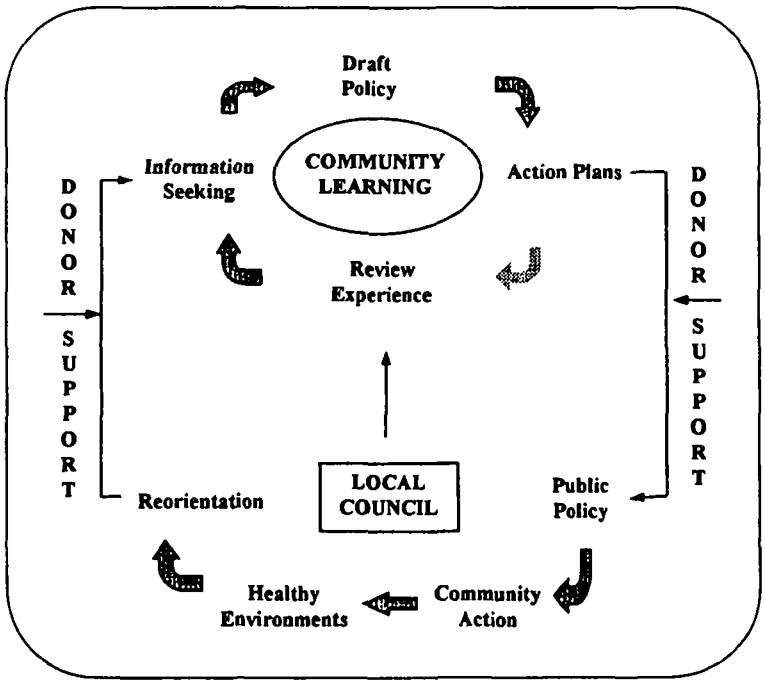

Fig. 1: The Kadavu health promotion model.

Experience review

The first series of open meetings provided opportunities to investigate community concerns, to negotiate the project's approach and to organise the activities that would follow. Team members attended district council meetings where public health issues were discussed in the context of local government and community capacity to identify and resolve public health problems. The Ottawa Charter health promotion strategy was discussed and the experiential educational approach introduced with group exercises on problem solving, co-operation versus competition, prioritising needs and preparing development proposals. These open community meetings in districts were held periodically throughout the project, as they provided the opportunities to assess progress in community development, to be responsive to comments or conditions raised by the communities and to develop further the project's approach.

Information seeking

This broad discussion of local health issues and the identification of important village health projects led to agreement that villagers needed basic biological and technical information if they were effectively to manage their own health and village environments.

To address these needs, the project conducted two courses in each of the nine districts.

Course One: primary health care for VHWs

Village health worker (VHW) training programs had previously been conducted in Kadavu on a clinical nursing model. While also providing a basic clinical training, the project's course was based on health promotion and disease prevention, and was structured on an experiential model of education. Active participation in group learning, peer support, and the endorsement of village and district councils involved VHWs in issues well beyond the provision of basic care and treatment.

All nominated VHWs were female, due to the traditional nurturing role of women in Kadavu villages and, partly, to sensitivities concerning women's health issues. While gender stereotyping in health education is not ideal, the community initially made it clear that women were their preferred candidates. As the courses progressed, village head-men were invited to attend as observers. Interestingly, their attendance increased to the extent of the final courses being attended by most village head-men and some village and district chiefs. This allowed the VHWs to address directly problems of role delineation that had existed between VHWs and village head-men, and to gain support for their proposals.

During the 3-week practical component of the 6-week course, VHWs prepared profiles of their villages, including detailed population counts of 'at-risk' groups and mapped environmental and food supply issues. As a course requirement, they brought issues to their village meetings for discussion and decision. Active participation reinforced their existing knowledge and highlighted areas where more information was needed and for misconceptions to be corrected during the period of supervised work experience.

Course Two: environmental health

The environment health course followed the VHW course. Course content was based on the role requirements of the village head-man as stated in the Kadavu Provincial By-Laws. The course was presented by a team of Fiji's senior health inspectors, and covered issues of sanitation, water supply, animal and vector control, food and building hygiene, accident and disaster management, and development control. It therefore provided the basic biological and technical information on each of the key areas within village council responsibility.

By design, the course was attended by the three key groups of people in village development: the village and district chiefs, village head-men and VHWs. The selection of these people for conjoint training was reportedly the first time that this had occurred in Fiji. The benefits were immediately seen as this inclusion allowed the formation of policy during courses, stimulated wide discussion on methods of strengthening community action and provided the authority to implement agreed strategies.

Mid-way into the 3-week course, villages were inspected by the participants with a health inspector, who assisted in identifying vectors and their breeding sites, assessing waste disposal and sanitation options, and in testing water. Environmental health conditions were mapped and the findings discussed in village meetings. During the final week, participants' presented summaries of findings in their villages and outlined the plans they had devised to address their environmental health problems.

Draft policy

The course structures required the production of village and district level policies and plans that reflected an understanding of the information presented. This process was facilitated by project and Ministry of Health training staff, who assisted by guiding discussions towards concise policy statements and, in many cases, by supporting participants in their presentations to village meetings. On returning from village meetings, participants reviewed their difficulties and successes, and sought the advice and further support of peers and trainers. Creating broad district level policy allowed for consistent approaches to particular problems. From these, specific village operational policies were developed according to their particular circumstances. The support of district councils for the creation of district standards further legitimised course participants' efforts to improve their village conditions.

Action plans

Cooperative activity to improve village health conditions could only be organised through the village and district council system. In council meetings, health committee members were able to provide clear development objectives supported by course information and technical advice, and proposals for community action to obtain a common benefit.

While a strong tradition of communal action exists in Fijian villages, systems for mobilising it have partly broken down with the introduction of Western values centred on improving the lot of the individual. Obligations for communal action create certain tensions in villages, as competing demands can drain family resources. However, it was soon widely accepted that village health projects, such as improving water supplies, sanitation, drainage or animal control, entailed benefits that remained with the household. The plans developed from policy statements during the community learning cycle identified the actions and resources needed for achieving specific communal benefits. When presented to councils, they facilitated discussion, informed decision making and assisted in mobilising the community.

LOCAL COUNCIL POLICY CYCLE

Public policy

Where possible, planning proposals were submitted to village and district councils during the courses, and issues were decided with training staff in attendance. The course process, whereby participants collected information and presented it to the learning group, provided opportunities to practice their approach, to seek clarification of course content and to obtain feedback and tactical advice from their peers in similar village positions.

Facilitating the process of taking a proposal through the local government system is the second major point of donor intervention in the Kadavu model. Certain administrative processes required discussion and clarification, as did the roles and functions of the officers of both the central and provincial governments. This process assisted the committee members to gain an understanding of the political processes of development and the need to have well-structured arguments and proposals in the face of competition for scarce resources. This function of assisting local governments to create informed policy objectives and to mobilise community action in health could be assumed by the Ministry of Health. It presents a sound strategy for encouraging communities to take responsibility for their own health and for decreasing passive dependency on government services.

Community action

All policy and planning proposals were widely discussed in village council meetings, which provided opportunities to raise concerns or make contributions. Once communal action was endorsed by village councils, every effort was expended in achieving the objective. The projects' seeding funds for village projects (average $1500 per village) facilitated this process, although this should in no way be considered a necessary condition for community action, as villagers more than matched the project's contribution. The ability to mobilise community action was evidenced by 127 village health projects conducted during 1995–1997 (Table 1) including 39 village water supply projects that attracted over $F500 000 of Government of Fiji resources.

Healthy environments

The creation of healthy environments by focused community action is the outcome in the Kadavu model. The process of investigating specific health problems and working for their resolution resulted in healthier biological, personal and village environments. Importantly, the

Table 1: Small-scale village projects

Project type	Number of villages	Type of improvements
Sanitation	40	Water-seal toilet moulds provided to each district; 576 toilets constructed in villages and schools
Water supply	39	Improved catchments, storage tanks and piped delivery to houses
Dispensaries	36	Communal primary health care facilities in villages; basic equipment and medications; working base for VHWs
Animal control	8	Reduction in pigs, cattle and their associated pollution, and insects within village and school boundaries
Drainage	3	Reduced pooling of water and mosquito breeding in low-lying coastal villages
Kitchens	1	Model kitchens constructed to illustrate basic building hygiene standards
Others	All 74 villages conducted small unfunded projects	Village clean-up days and vector control efforts to reduce opportunities for the transmission of dengue and other disease agents

perceived success in resolving long-standing problems engendered a positive reorientation of community priorities towards improving living conditions.

Reorientation

With the resolution of prior health problems, new issues took on greater importance. Demand for health service assistance, information and advice was redirected to seeking information on new priorities. The Kadavu model depends on the Ministry of Health and other services developing an orientation towards responding to the community's information needs by sharing essential information with them in a way it can be used.

The most fundamental reorientation occurred in local council and village development priorities. In 1995 health did not occur on the list of the 12 development funds in Tavuki, the main district of Kadavu and the location of the Provincial Council. By 1996, the district budget listed the health development fund as a high priority, second only to maintaining the scholarship fund. This reorientation of priorities was brought about through community learning, the resolution of problems and by the advocacy of village and district health committee members. The final stages of the project were focused on consolidating this reorientation through the Provincial Health Committee, with working groups developing standards and processes for district health committees, and clarifying the Provincial Council's role in overseeing and assisting the processes of health development.

LOCAL GOVERNMENT, MINISTRY OF HEALTH AND DONOR 'DOMAINS'

All of the project's community learning activities were conducted in the local government domain, as the project reached beyond district level ministry staff to engage the community through its formal authority structures. As implementation commenced, the project team considered that the community development objectives would be best achieved if the project was vested in local government rather than in the Ministry of Health. This change in orientation was symbolically reflected by dropping the word 'sub-division' from the original project title.

The consequently limited Ministry of Health domain in the Kadavu model reflects the transfer of policy and planning responsibility to the community and the potential for the Ministry to assume all of the functions of the donor's domain. It commences with a reorientation to expressed community needs by providing information on village health and environmental issues through community learning programs, and by integrating clinical services and preventative activities with the local government sector.

The donor's domain in the Kadavu model is limited to the facilitation of community learning, to strengthening the institutional capacity of local government for processing health development proposals and to providing seeding funding for village, district and provincial level projects. This role is conceivably temporary, as a reorientated health service would engage in the same activities: education and health promotion with the support of local government resources.

The transfer of these 'donor' functions to the Ministry of Health was assisted in Kadavu by the

production of trainers' manuals and village reference materials for each of the courses and for each component of the model. With such materials, skilled development facilitators and limited community resources, the Kadavu model could feasibly be applied without donor assistance.

DISCUSSION

Community development is not something that can be prescribed, as it is essentially an emergent phenomenon contingent upon internal factors. There is a growing awareness in the Pacific that development projects often override existing community arrangements and impose structures and processes that have little relevance to the systems that affect daily life. In traditional Fijian communities such as Kadavu, development best proceeds through the well-known and understood local government structures. In this respect, the Kadavu Rural Health Project differed from projects overseen by intersectoral groups or government ministries. Its focus on processes rather than outcomes required the development of existing systems, not the creation of new.

In facilitating community learning, it became evident to the project team that aid projects or government ministries that fail to provide appropriate community level information were viewed as external professional services to which the community had deferred responsibility. Where community education had occurred previously, it had been provided didactically, had been heavily ritualised with respect for the teacher and had served to reinforce professional domains and generate community dependence on outside expertise. In contrast, information was treated as something to be available to those who need it, in a way it can be used. The willingness and capacity to share information are central both to the reorientation of health services and to building the capacity of local government.

In adapting the Ottawa Charter strategies to a cyclical process of community learning and policy development, some of the original definitions were modified for this context and will be debated. The model emerged through the applications of adult learning principles to communities, and is perhaps only relevant where community structures can facilitate these processes. However, by applying the model, the project team were able concurrently to transfer information, address structural issues, develop processes and foster the adoption of community responsibility.

The potential to extend the Kadavu experience to other parts of Fiji or the Pacific is attractive on a number of counts:

- it is consistent with WHO, regional and national objectives to increase community participation in health;
- it formalises responsibility for health development within local government structures;
- it re-involves the community in issues that had become removed to the domains of experts and advisers;
- it suggests a method to achieve a reorientation of the health system towards prevention through greater integration with local government systems.

Because this model has focused on processes rather than outcomes, evaluation should initially be concerned with judging the worth of the processes, rather than the health outcomes achieved. At this early stage, the best indicators of the project's worth can be derived from the detailed monitoring and documentation that occurred from the project's inception, and from evidence that village, district and provincial councils are addressing health problems more effectively than prior to the project.

Limitations of the potential for this model to be replicated elsewhere will probably be more dependent on the political, economic, cultural and social factors in the setting, rather than on the model *per se*. The critical factor in application is close alliance with the legitimate decision-making system within a community. When this is achieved, the Kadavu model provides a method for conducting health development from an impetus generated and legitimated by informed communities, rather than by government ministries or external agencies.

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