

Nutrition Communication in the Pacific

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Abstract

This paper summarises the findings of a scoping study to analyse and guide nutrition communication in some countries in the Pacific region. Nutrition is fundamental to achieving good health and preventing the rising prevalence of non-communicable disease. Dietary patterns are influenced by many factors and complex interactions, such as income, food prices, individual preference and beliefs, cultural traditions, as well as geographical, environmental and social factors. These interactions, the quantitative and qualitative changes in the diet, and the accompanying lifestyle changes seen in recent years, make a collaborative approach to behaviour change essential. This study suggests that by supporting nutritionists to promote nutrition, improve public awareness and by addressing key areas influencing nutrition communication, gains towards improving public health can be made at a regional level.

Background

A nutrition scoping study to identify the current food environment, programs, resources and communication practices in some Pacific Island countries was requested by the Pacific Senior Health Officials Network (the Network). The scoping study was undertaken between October 2005 and February 2006 and funded under the Pacific Governance Support Program (PGSP) by the Australian Agency for International Development (AusAID). The results were presented during a meeting of the Network in March 2006 and compiled in a report¹. Participating countries included Papua New Guinea (PNG), Republic of the Fiji Islands (Fiji), Republic of Kiribati, Samoa, Republic of Nauru, Solomon Islands, Kingdom of Tonga, Tuvalu, Republic of Vanuatu, Australia and New Zealand.

This work was initiated in recognition of the importance of good nutrition in preventing non-communicable diseases, an increasing problem in the Pacific region. The project made progress against both the *Global Strategy on Diet, Physical Activity and Health*² and the *Tonga Commitment to Promote Healthy Lifestyles and Supportive Environments*³ by generating discussion and raising awareness on nutrition issues across relevant sectors in participating Pacific Island Countries (PICs).

Objective

The aim of the nutrition project was to work in collaboration with Pacific Ministries of Health to:

- Examine options for health eating promotion through:
 - assessing the feasibility of a regional healthy eating communication strategy based on the needs and culture of member countries and existing activities,
 - study of regional resources for promoting healthy eating and potential for common communication messages, and
 - researching the role of local nutritionists in health promotion activities.

- Establish collaborative relationships at project officer level to improve implementation of public health nutrition interventions in the Pacific.

Methods

Information from PICs on nutrition promotion activities was collected through:

- In depth interviews with key informants during visits to three Pacific Island countries selected by the Network; PNG, Fiji and Kiribati,
- A paper questionnaire completed by participating Pacific Island nutritionists which covered nutrition policy, promotion activities, food supply and behaviours and regional assistance required, and
- A review of relevant key documents and literature.

Results

A broad range of health issues are of concern in the region and it is evident that many PICs face the double burden of diseases. There is a need to address over-nutrition, obesity and associated chronic diseases as well as under-nutrition in women and protein energy malnutrition (PEM) in children. Micronutrients deficiencies (e.g. anaemia, iodine deficiency disorders) were also identified as major problems.

1. Public Health Nutrition Policies and Collaboration

All Network member countries have either a national nutrition policy or national plan of action for nutrition⁴. In addition, many countries have other policies in place that incorporate nutrition (e.g. non-communicable diseases, food security and health promotion).

To date there has been considerable effort to tackle both under-nutrition and over-nutrition across the region. The need for effective collaborative relationships between government ministries, levels of government, non-government organizations (NGOs) and across the region were apparent. Each nutrition policy document lists a significant number of cross-sectoral stakeholders such as relevant Ministries (i.e.

Health, Agriculture, Education, Social Welfare/Community Development, Women, Information and Communication, Youth and Employment), private sector groups (i.e. Chamber of Commerce, food industry, academic institutions) and NGOs (i.e. Island Development Trust, Red Cross, Council of Churches and Consumer Society).

Inter-sectoral collaboration is not easy and many countries experience difficulties in implementing nutrition policies. This occurs for example, when policies to address food supply issues are not consistent with health promotion policy.

2. Health Promoting Activities and Public Awareness

Health promotion is an integral part of nutrition projects. Nutrition focus areas are as wide ranging as the problems identified. PICs reported nutrition promotion activities for: maternal nutrition; nutrition for children; fruit and vegetable promotion; local foods; traditional foods; processed foods; infants and young children; basic hygiene and sanitation and non-communicable disease (NCD) prevention. This list is not exhaustive.

Target groups for nutrition promotion vary depending on the priorities of PICs. Emphasis depends on the project focus and can be on the general population, school children, mothers, children under-5-years, people living with HIV and AIDS, to name some examples.

Health/community workers, NGOs, women's fellowship and church groups use a variety of methods to promote healthy lifestyles and raise public awareness of health issues. PICs have a strong history of oral communication relying on the spoken word which is preferred to written literature. Radio is an important tool especially for reaching people in outer islands who often are very isolated. Many small islands throughout the Pacific have no other way of communicating with the outside world or the main island. Television and Internet are only accessible in the main centres and the costs involved prohibit its widespread use as a health promotion medium at this point in time. The preferences of the target groups are taken into consideration when nutrition promotion programs are designed. Young people for instance like to listen to the radio. Radio is also a good medium for mass campaigns. One-to-one counseling is chosen when more individual advice is sought on risk factors for NCDs and necessary lifestyle adjustments. Mothers, who want to learn about complementary feeding, are keen on practical and cooking demonstrations.

Community Action and Participation (CAP) builds upon this tradition of story telling and reaching a consensus. The general population is not aware of the link between good nutrition and health. Through the CAP approach, communities can learn to understand this link, thereby becoming empowered and motivated to adopt healthy lifestyle and food choices. PNG and the Fiji Islands both use this approach within the Healthy Islands framework where individuals, families and communities are empowered to take responsibility for their own health. Each Healthy Island setting (e.g. health-

promoting schools, villages, market places) develops specific objectives and implements a plan of action⁵.

3. Public health nutrition and food monitoring and surveillance activities

Sufficient data to develop and implement evidence-based policies and interventions in nutrition is not always available. In many PICs clinical records and health service facilities provide data on low birth weight, childhood underweight or stunted growth, diabetes, heart disease, cancers and stroke, to name but a few. These are, however, not always collected on a routine basis, nor are they complete.

Several countries are in the process of conducting WHO STEPS surveys and other national surveys. WHO STEPS is a tool to help low and middle income countries to collect (baseline) information and set-up surveillance systems for NCD risk factors. This is a complex and expensive exercise, and PICs need technical support to produce the final reports. More and more cost-benefit analyses are being

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carried out to show the impact of micronutrient deficiencies, under- and over-nutrition, and NCDs on national economies. The impact can be considerable, hampering national development. Families can suffer long-term

impacts such as the need to purchase medicine to manage diabetes for the rest of the affected family member's life. Building stronger evidence by identifying research gaps in the economic justification for action on improved diet and physical activity is needed in the Pacific, particularly in the context of NCDs and burden of disease data.

4. Resources to deliver services

Capacity to deliver nutrition services is limited in most PICs. This applies to staffing levels and resources for communication. Most countries employ one or two nutritionists responsible for coordination of service delivery and intra-sectoral collaboration. Very often, nutrition is not seen as a priority but as a support service. The Nutrition Centres established after the World Nutrition Conference in 1992 depend very much on the enthusiasm of a few dedicated individuals in the different sectors to be successful. Training is not appropriate and options to gain higher qualifications are limited as Fiji School of Medicine is the primary institution in the Pacific to offer degrees in dietetics and nutrition. Many nutrition programs struggle with un-reliable communication within and between countries.

Discussion

1. Public Health Nutrition Policy and Collaboration

There is a need to ensure that public health nutrition policies are well integrated to help make healthy choices easy choices. Policies developed by different sectors (such as, education, women's welfare, agriculture, commerce and trade) have an impact on nutrition and consistent public health goals within these sectors are necessary to achieve positive changes. Policies of different sectors are sometimes contradictory because of competing interests and priorities.

For instance, the PNG Rice Development Policy is aimed at lowering the considerable import bill by increasing local rice production. At the same time the PNG Health Department is actively promoting the use of traditional staple foods and discouraging the consumption of rice in an effort to improve general health and lower the impact of NCDs.

Another example relates to the sale of street food. A street vendor tries to earn an income but this is sometimes at the cost of public health, as street food is often unsafe to eat because of unhygienic preparation. Often it is also a less healthy option with street stalls selling foods such as fatty meats, fried bananas and flour balls. This example highlights the need for collaboration between health inspectors and social welfare departments and public health policy makers.

Approaches to reduce costs of healthier imported food and increase relative costs of less healthy imports, combined with food labeling are important food importation policy issues. Such policies complemented by increased public awareness could lead to behaviour change and improved nutrition. Yach and colleagues remarked that initial tobacco control interventions were not evidence-based but represented sound judgment at the time⁶. They continue, that actions such as restrictions on advertising, pricing interventions, and broad community projects can be effective at changing behaviour and could be used to improve diet and physical activity. To be successful, effective collaborative relationships are required between levels of government, between ministries and agencies, and between government and NGOs.

2. Nutrition Promotion Activities and Public Awareness

The availability of dietary guidelines, promotion and consumption of local foods and the use of schools to promote nutrition are the three prominent issues relevant to public awareness and behaviour change. Encouraging consumption of local food is important in Network member countries and several countries focus on it with their health promotion material. The Secretariat of the Pacific Community (SPC) has incorporated local foods into the generic dietary guidelines, developed for use in PICs. The reasons for the declining consumption of local food are complex and varied. One key reason is that people, if they have the money, want to add variety to their diet through store-bought food. A longitudinal study of the Wopkaimin people (the landowners of the Ok Tedi mine in Western Province, PNG) revealed that villagers living closer to the mine bought up to 50% of their food intake-by-weight from the store. They tended not to make as many food gardens as people living further away from a mine.⁷ This has led to changes in the dietary habits of the local people, increasing within a few years the prevalence of chronic lifestyle-related diseases such as obesity, hypertension and coronary heart disease⁸.

Pacific Island societies rely on imported foods for food security and few countries can produce enough food to sustain their growing populations. Therefore nutrition education should focus on how to best combine local foods

and healthy imported food items to attain the best possible health outcomes for Pacific Island communities. Dietary guidelines could be of help by including information on meal portion sizes. Pacific people can consume large quantities; a daily intake of 3 kg root crops is not exceptional. There is evidence that intake of large quantities of food continues with adoption of modern diet, although rice is more energy dense and physical activity levels are usually lower.⁹

Schools provide a sustainable avenue for improving awareness on a range of issues relevant to nutrition such as agriculture, marine environment, water conservation, food, physical activity and health. Canteen guidelines can actively promote healthy diets in schoolchildren. Gatherings of Parents and Teachers Associations can be used to promote healthy diets. The more mothers know about food and nutrition the better the quality of their children's diets¹⁰. Expanding and promoting existing regional nutrition guidelines while increasing the focus on local foods could contribute as the foundation materials for nutrition education in the region. These could then be utilised by nutritionists/educators/health workers in both school and broader community settings to improve awareness of food choices, preparation and serve sizes.

The CAP approach is used in PNG and Fiji as a starting point for Healthy Islands initiatives. The CAP approach builds on the tradition of oral communication and empowers communities to take action through better understanding of health and nutrition issues affecting their communities. Committees and support groups are set up to guide initiatives. Family Support Groups, Village Health Volunteers and Healthy Islands Committees provide information, counseling and where appropriate refer onward for medical treatment. Members of these groups can reinforce public health messages through face-to-face counseling. The link between nutritionists, health workers and community groups should be strengthened to increase the capacity to give information, encourage informed discussion, and support community actions. Community reinforcement is particularly important as activities which provide varied avenues for health promotion (individual- and community-based), stand the best chance of success⁹.

Diversity between countries means any strategy would need to be sufficiently flexible for use in all islands but precise enough to produce action. A concern was raised that if nutrition communication were part of an NCD strategy the focus of specific nutrition issues (e.g. anaemia, iodine deficiencies disorders) may be lost as part of a more general agenda. One-way to overcome this would be to promote optimal diets, which could incorporate all nutrition and NCD risk factor issues. Strengthening support through a network for nutritionists could be a key starting point to a collaborative approach.

3. Monitoring and Evaluation

Ongoing monitoring and evaluation of population nutrition status and relevant programs is necessary to measure progress

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against targets or define new ones. Evaluation of nutrition interventions is equally important. Many nutritionists and relevant policy makers would benefit from evaluation results and lessons learned from successful and/or unsuccessful activities to improve nutrition. A central collection point for this information would be of use across the region as a formal mechanism for shared experiences and learning. In general these activities are not part of a long-term monitoring and surveillance program, but remain necessary for planning and policy development.

Information collected through Health Information Systems from hospitals and health centres is not truly indicative of the health and nutrition status of the general population, as sick people use the services more often and people in remote areas or too far away from the health facilities do not use them as often. Hence, there is a need for population based surveys to provide information on which to base comprehensive policies and guidelines to improve public health. Examples include National Micronutrient Surveys, WHO STEPS Survey, Household Food Consumption Survey, and Demographic & Health Surveys. The information obtained depends on the design and complexity of the survey (anthropometry, questionnaires, biochemistry samples, food samples), resources available (human, financial, laboratory) and survey logistics. The costs of these surveys are considerable as transport costs are high in the Pacific. However, population based surveys are necessary to get the "true" picture.

In view of the technical and financial limitations on food supply monitoring in PICs, Network members could also consider pooling resources to examine how, as a Pacific community, efficiencies can be gained. As an example, Food and Agriculture Organization member countries produce regular food balance sheets (useful for trends indicating decline of root crops and increase in cereals) which could be used as a basis for beginning to collaborate on regional monitoring and surveillance.

4. Human Resources

Workforce capacity was one of the most frequently raised challenges preventing the successful implementation of nutrition activities, in terms of both staffing levels and resources (such as access to current texts, reliable computers, communication tools – telephone, facsimile, email and internet). An in-depth analysis of nutrition workforce capacity and training needs is recommended, where duty statements are matched with available training. Lessons from the control of tobacco support call for a commitment to nutritional objectives, including assigning specific resources to nutritional programs and a willingness of government and other sectors to accept flexible administrative structures for tackling malnutrition.

Table 1 summarizes recommended activities arising from the findings of this study for strengthening nutrition workforce capacities across the Pacific.

Table 1. Recommended Activities to Improve Nutrition Communication Workforce capacity in the Pacific

Proposed Action Areas	Potential Activities
Improving capacity of nutritionists to communicate with colleagues across the region.	<ul style="list-style-type: none"> • Upgrading access to reliable telephone, facsimile, email and Internet services. • Where necessary allow access to Internet services on a roster system to minimise costs.
Supporting a network of Pacific Island country nutritionists to collaborate on public health nutrition issues.	<ul style="list-style-type: none"> • Facilitating information sharing through group teleconferences or existing email groups. • Engaging relevant partners when necessary to increase participation and interest (eg invite agriculture colleagues to join for particular discussions). • Sharing information suitable for common use (eg program evaluations, food composition data).
Working with the Secretariat of the Pacific Community to improve support available to Pacific Island countries for nutrition promotion activities.	<ul style="list-style-type: none"> • Building on the existing SPC healthy eating guidelines. • Increasing regional focus on local food promotion. • Furthering work to improve portion size education.
Advocating for continued support for regional positions relevant to nutrition.	<ul style="list-style-type: none"> • Raising the profile of regional nutrition positions to better support Pacific Island countries and integrate planned activities.
Building on and expanding existing activities relevant to regional nutrition.	<ul style="list-style-type: none"> • Enhancing collaborative action through the planned workshop on Implementing the Global Strategy on Diet, Physical Activity and Health, WHO Western Pacific Regional Office. • Utilising the experience and sharing implementation of the recommendations from the Role of Information and Communication Tools in Food and Nutrition Security in the Pacific, workshop held in 2005 by Institute for Research, Extension and Training in Agriculture – Technical Centre for Agriculture and Rural Cooperation.
Considering future activity relevant to nutrition communication in the region.	<ul style="list-style-type: none"> • Developing a proposal for a regional communications strategy to complement existing work and build on the above activities.

Conclusion

Nutrition communication in the Pacific is challenging as regards both the opportunities nutritionists have to work collaboratively as a profession and also to improve public awareness of choices and behaviours that will lead to better nutrition and ultimately long-term health. Income, food prices, individual preference and beliefs, cultural traditions, as well as geographical, environmental and social factors all interact in a complex manner to shape dietary consumption patterns. These interactions and the accompanying lifestyle changes seen in recent years, make a collaborative approach to behaviour change essential. To progress collaborative efforts in the region a communications strategy should be developed which would be flexible enough to allow for differences across the region and solid enough to guide change in eating habits and improve consumption and composition of locally produced foods. Any strategy should be supported by activities, which improve the capacity of nutritionists to communicate with colleagues across the region, enhance existing activities relevant to regional nutrition and improve support available to PICs for nutrition promotion activities.

As there are extremely varied environmental settings and related difficulties within countries and across the Pacific (highlands, coastal, rural, urban, atolls etc) and problems range from malnutrition and micronutrient deficiencies to an increasing risk of non-communicable diseases, collaboration between countries could have additional benefits in minimizing duplicated efforts and through information sharing. Any regional communication strategy, which seeks to raise public awareness of nutrition, should include food security and food supply issues in addition to food behaviour issues. This is important given the many factors that influence food choices.

There is a common direction particularly at project officer level to improve nutrition outcomes for Pacific Island populations and a recognizable enthusiasm to ensure small gains continue to be made in often challenging situations. Communication activities to promote health and wellbeing are effective and appropriate in improving nutrition, especially if a mix of methods is used.

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