

Primary Health Care

Paul C. Y. Chen

Health care in Sarawak's jungles

A primary health care system is being developed in Baram District, Sarawak, Malaysia, for the benefit of the Penans, who, until recently, were largely nomadic. Many of them are now attempting to adopt a settled mode of existence, and this in itself creates special health problems because the people lack the skills needed for living in one place. Substantial progress has already been achieved in mother and child care and in immunization coverage.

One of the largest and most sparsely populated districts of Malaysia is that of Baram in Sarawak. It is drained principally by the Baram River, and much of the area consists of jungle. The population density averages two persons per square kilometre, there being some 50 000 inhabitants in all.

People

The main ethnic groups are the Kayan, Kenyah and Ibans, who live in large communal longhouses, each of which holds from 30 to over 1000 people comprising between five and over 100 households.

These people have a long history of involvement in shifting cultivation, the staple crops of rice, maize and tapioca being supplemented by small quantities of vegetables, wild shoots and game. The farmlands of these settled tribes are scattered on low hills near the district's rivers. Beyond lie vast jungles frequented by the Penans, who, until recently, lived as small nomadic bands of hunters and gatherers. Each group consisted of about three to ten families who stayed for varying periods in raised lean-tos made of sticks and leaves, from which hunting and gathering parties set forth. The men hunted for game with poisoned darts and spear-tipped blow-pipes, while the women and children gathered edible shoots, fruits and small animals. However, some Penans have acquired shotguns, thereby increasing their ability to hunt wild boar and larger animals. Unfortunately, extensive logging is reducing the Penans' traditional sources of food and producing widespread suffering.

At the time of writing this article the author was with the Department of Social and Preventive Medicine, Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia. He is now Regional Adviser in Health Manpower Development, WHO Regional Office for South-East Asia, World Health House, Indraprastha Estate, Ring Road, New Delhi-110002, India.

Consequently, there is a need for skills suited to a settled mode of life. The Penans have begun to settle in communities of up to 200 or more. It is estimated that, by 1987, more than 80% of the 5000 Penans had settled in communal longhouses and villages. In view of the many social, cultural, physical and health problems faced by the Penans in particular, an action-orientated primary health care project was launched with the financial support of Canada's International Development Research Centre.

Problems

Anthropological studies and cross-sectional surveys of eight Penan communities in the Lio Matu area of Baram have permitted identification of many of the problems confronting these people. The social organization and resources of the communities have also been studied.

The Penans suffer enormous hardships as they struggle with the changes demanded by life in permanent settlements. Their longhouses are poorly built and the immediate surroundings are usually heavily fouled with both human and dog excrement.

Lacking basic agricultural skills, the Penans continue to lead a semi-nomadic life so as to find sufficient food. In many settlements, agricultural produce supports families for no more than two months of the year. Semi-nomadic Penans remain largely dependent on wild sago as a source of carbohydrates and on hunting and gathering for the bulk of their food. In one group it was observed that only 14% of children were nutritionally normal and that 42% of the people had at least a palpable goitre (1).

As a result of living in remote and undeveloped terrain with no roads and inadequate facilities, Penans have little access to health care. On average they have to walk for two or more days in order to reach the nearest clinic (*klinik desa*). Because of the lack of trained midwives, the vast majority of Penan women have traditionally been delivered by their husbands, and consequently the infant mortality rate has been high. In 1977 it was estimated to be about 180 per 1000 live births (2). Our survey in 1982 indicated an improvement: 55% of women were delivered by trained midwives and the infant mortality rate was 98 per 1000 live births. By 1988 a rate of 20 per 1000 had been achieved.

Primary health care

The aim of the project in respect of the Penans was to develop a primary health care system tailored to local problems, resources and needs. Sixteen communities with a population of 2100 were socially prepared for participation. After several discussions with the elders, it was agreed that each longhouse would select a man and a woman to be trained as village health promoters. In several instances the villages

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selected husband-and-wife teams. Village health committees, chaired by the headmen, were drawn from the elders, and the village health promoters were coopted. The committees were responsible not only for

the promotion of health in the settlements but also for overseeing related matters, such as environmental cleanliness, water supplies, toilets, agriculture, food production, child immunization, and

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support for the village health promoters, all of whom were volunteers. Some committees have collected funds and built aid posts, which serve as clinics and as bases for the village health promoters.

On the basis of the kinds of problems faced by the communities a curriculum and training manuals on primary care were produced in the local language for the village health promoters. Emphasis was placed on the essential elements, including health promotion through education, prevention through immunization, food production, proper nutrition, environmental sanitation, care of mothers and children, control of endemic diseases, and treatment of common ailments.

The village health promoters are visited once a month by nurses and medical assistants from the community clinics, since supervision and in-service training are considered vital in maintaining both the quality of work and the enthusiasm of the population.

Since Penan villages and longhouses are fairly small, it was felt that if locally

resident women were trained as midwives they would probably not receive enough practice to remain sufficiently skilled. Consequently, pregnant women referred by the village health promoters to visiting health staff are advised to move to the nearest *klinik desa* about a month before childbirth is due, so that delivery can be conducted safely by competent midwives. The expectant women stay in nearby rest houses built by the people. This simple procedure has dramatically altered the proportion of women delivered by trained midwives from 55% in 1982 to 76% in 1988.

A key function of the village health promoters is to identify children who have not been immunized. A simple record of all children living in the villages is maintained with the help of visiting clinic staff. In this way immunization coverage with BCG and triple antigen (diphtheria, tetanus, whooping cough) was improved from 22% and 17% respectively in 1982 to 98% and 96% in 1988. □

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