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The role of non-government organizations in supporting and integrating interventions to improve child health

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SUMMARY

In Papua New Guinea there are many organizations providing sparsely spread and fragmented health services. Government health facilities are often relatively well functioning in urban and periurban areas, but sporadic or nonexistent in rural areas. In some remote areas churches are the major health service providers. Increasingly other community groups are providing village-based health services. Much financial support is now pledged by major international donors for community-based health services, but few people working at a district or community level have the management skills to access the funds or plan programs effectively, and few of the major donors have any significant presence in rural areas. Such a management skill gap also exists at the level of many provincial health offices and this seriously limits the effectiveness of all major donor projects. There is need for integration of health services to avoid replication and to extend services to areas where no effective services are currently provided. There is also a great need to train people at a community and district level in program planning and management. Non-government organizations (NGOs) working at a district or community level have the potential to bridge this skill gap and to help integrate community-based services with government institutions. This paper reports, as an example, the activities of Save the Children, an international NGO in Papua New Guinea. Essential for the success of community-based health projects is the development of local management skills, reliable funding, integration with established health institutions, objective evaluation and community support. Skilled NGOs working at a community, district or provincial level can have important roles in assisting local people to run effective and sustainable health programs.

Introduction

Conditions for children in Papua New Guinea (PNG) continue to be difficult. Improvements in child health will only occur by a multi-faceted approach; this will involve an integration of the services provided by government, community groups, churches and non-government organizations (NGOs) (1). This paper is a summary of the activities of Save the Children (SC) New Zealand and Save the Children Australia, international non-government agencies working together in a joint program towards child and maternal health reforms in PNG.

SC focuses on building self-reliance in communities. This involves developing existing and new partnerships with agencies that demonstrate a clear commitment to the organization's mission statement for PNG and that have the potential to deliver services that positively affect the lives of women and children. SC aims to involve government participation in the development, implementation and evaluation of projects, and develop all of its health-related projects in line with the Papua New Guinea National Health Plan (Save the Children, Papua New Guinea Country Strategy Paper 1996-2000, unpublished report).

SC has agreed that the broad focus of their program in PNG will be on health. The program operates in 4 sectors:

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1 Policy and advocacy

2 Health

3 Community-based education

4 Community development.

The situation for children and women in PNG

PNG signed and ratified the United Nations Convention on the Rights of the Child in 1992. By this the government committed itself to the global effort to make the world safer for children in the near future (2).

Table 1 compares some major health and social indicators in PNG with those of three of its closest neighbours - Indonesia, Solomon Islands and Vanuatu. Although the fairness of comparison and the accuracy of available statistics may be challenged, there are indicators that PNG has poorer child health outcomes and less effective vaccine delivery services than do other developing Pacific countries, despite comparable or better economic conditions (3). Literacy rates are low in most Pacific Island nations.

Child mortality in PNG remains high at 114 per 1000 livebirths. Preventable or easily treatable diseases such as pneumonia, malaria, diarrhoeal disease, neonatal tetanus and whooping cough still occur at unacceptably high rates (6). In the East Sepik Province perinatal conditions, malaria and pneumonia account for 60% of deaths in infants. Many of these deaths are preventable or treatable through the implementation of low-cost health programs (Save the Children New Zealand, Papua New Guinea Country Programme Reports 1997-1999, unpublished reports).

Information collected during the 1991-1995 Child Survival Support Program indicated that immunization coverage had fallen from 70-80% in the late 1980s to 30-40% in the 1990s (7). Economic difficulties at government level and a related decline in provision of rural health services during this period are considered as the major causes of this deterioration in public health status (8).

TABLE 1

COMPARATIVE HEALTH AND SOCIAL INDICATORS IN PAPUA NEW GUINEA AND THREE OTHER ASIA-PACIFIC NATIONS

Indicator (References)	PNG	Indonesia	Solomon Islands	Vanuatu
Percentage of total government spending on health (3,4)	8.8	3.0	11.8	9.1
Population per doctor (3,5)	5382	8333	7292	10811
Population per nurse (3,5)	998	1492	848	463
Infant mortality per 1000 livebirths	77	40	38	45
Maternal mortality per 100,000 livebirths (3,4)	370-930	650	550	68-280
Under-5 years mortality per 1000 livebirths	114	53-63	49	53
Percentage of babies born with weight <2.5 kg (5)	23	14	20	7
Percentage of 1 year olds who have received third dose of DPT vaccine (4)	55	91	72	67
Percentage of births attended by trained staff (3)	33	32	87	79
Percentage of adult population who are literate: male/female (3)	35/29	88/75	39/20	37/30
Gross National Product per person in US$	930	1110	870	1230

DPT=Diphtheria-Pertussis-Tetanus

Up to 1000 women die in childbirth every year. Women in PNG continue to shoulder too many physical burdens during pregnancy, and typically they only gain half the weight considered necessary for safe delivery. With a very low rate of family planning acceptance, women get pregnant too young, too old and too often. In many areas health workers do not provide antenatal services and deliveries are done in cold unhygienic conditions by unskilled attendants (9,10). Mother and child health (MCH) clinics have never reached all areas and over the last 10-15 years this outreach service has reduced or ceased in many provinces.

In 1999, the United Nations Development Programme's Pacific Human Development Report provides this snapshot of health in PNG (3):

Government expenditure on health	8.8% of total annual expenditure
Population with access to health services	95% of total population
Population with access to safe water	24% of total population
Percentage of births attended by health personnel	33% of total births
Population per doctor	5382
Population per nurse	998

These estimates raise several questions: first, if 95% of the population have access to health services, why are only about one-third of deliveries attended, and why are less than half the children fully immunized (7)? The answers are complex, but relate to relative accessibility, quality of service and the extent of essential health services provided in remote regions. Although most of the population are geographically close to where there was once an aid post, in many regions the aid post will be closed, the community health worker retrenched or missing; furthermore, aid posts have not traditionally conducted routine vaccination services. Antenatal care may not have been provided either, or when provided may not have been taken up by village women because the attendant was a male. Such figures represent nationwide averages: many urban areas are relatively far better serviced, while most remote communities have very limited services, no doctors and no specialist maternal or child health nurses.

The role of Save the Children

The joint Save the Children New Zealand and Save the Children Australia program in PNG focuses on the following to enhance women's and children's health (Save the Children, Papua New Guinea Country Strategy Paper 1996-2000, unpublished report):

- To promote, develop and support community-based health initiatives which aim to bridge the gap between government services and rural communities.

- To promote education about reproductive health and rights through community-based education services and health programs, and to increase access to knowledge of family planning services and options.

- To support, develop and expand disability work and its integration into mainstream health and education services.

SC aims to support and expand existing community-based initiatives, and to integrate them, through partnerships. Current partners in health initiatives include East Sepik Church Health Services and Provincial Division of Health, Young Women's Christian Association (YWCA) of Goroka, Callan Services for the Disabled, Simbu Women's Counselling Centre, Eastern Highlands Family Voice, ATProjects, Faith Mission, Eastern Highlands Provincial Health Office, Goroka Hospital, Morobe Special Education and Baua Baua Theatre and Popular Education Troupe.

Activities include:

1 Training of community-based health workers

2 Increasing participation of communities in

government and community-based health activities, especially women's groups

3 Linking and involving communities with maternal and child health, primary health care and community-based rehabilitation programs

4 Developing appropriate and popular education materials for use in community-based health education programs and the popular media.

The use of non-formal community-based education is important to health improvement. Indigenous non-government and church organizations have trained people to provide appropriate information and services at community level (1). This also shows that volunteers can be effective. Partner agencies provide support and supervision for the implementation of these programs, and attempt to integrate them into formal institutional structures such as District or Provincial Health Services.

It is important to recognize the potential of semi-volunteers in areas where health services are sparse, and to develop systems of recognition, status and incentives that may not necessarily rely on cash payment (10,11). It is also essential to formally evaluate the effect of training volunteers, as there are considerable constraints to sustained functioning of volunteers at a village level. The joint Save the Children - YWCA of Goroka - Goroka Base Hospital Village Child Health (VCHW) Program is an example of where non-cash incentives have worked so far. In this program women are chosen from remote villages for training in child care. They have all previously completed the Goroka YWCA Literacy Program, and must have approval and support from their villages for the work they are to be trained to do. After a one-month course learning 10 basic lessons of child care (Table 2) the VCHWs are given a set of infant weighing scales (Teaching Aids at Low Cost, London). They are encouraged to refer sick, malnourished or low-birthweight children directly to the Children's Ward at Goroka Hospital. This is designed to provide the VCHWs with enhanced status within their communities, most of which are remote and have no formal health services. For areas where referral is possible it also provides an incentive for the community to consult the VCHW, as a direct referral eliminates waiting time and inconvenience in the hospital outpatients department (Save the Children New Zealand, Papua New Guinea Country Programme Reports 1997-1999, unpublished reports).

The VCHW program is integrated into a twelve-month postgraduate course in child health nursing, run at the Base Hospital. This postgraduate training is strongly supported by another NGO: the Royal Children's Hospital International, based in Melbourne. The course focuses on rural child health needs and aims to provide rural child health specialists for health centres. Child health nursing students teach

TABLE 2

10 BASIC LESSONS IN CHILD CARE TAUGHT TO VILLAGE CHILD HEALTH WORKERS

1	How to recognize a sick baby
2	How to recognize a sick child
3	How to check a child's immunization record
4	When and where to take babies for immunization
5	How to weigh an infant
6	How to plot a growth chart
7	How to recognize malnutrition, and when and how to refer
8	That babies should be breastfed by the biological mother for 12 months
9	That babies should start solid feeds at 4-6 months
10	What solid foods to give a baby from 4-6 months of age

the VCHWs; in this way the nurses learn to be teachers. So far 30 VCHWs and 25 child health nurses have been trained in this fledgling project.

A formal assessment of the knowledge retention and function of 10 VCHWs 6-15 months after the training showed that 9 had been weighing babies and seeing sick children in their villages, and all had a working knowledge of the 10 basic lessons in child care. This demonstrates the value of a link between non-government and government sectors in training and in the provision of essential services, and the need for programs that integrate curative health services in urban and remote rural settings, with simple community-based child health interventions. It also demonstrates the need for critical assessment of all community-based initiatives. It is arguable that true volunteer services are not sustainable in the long term and such services may require the provision of some cash payment. It is unrealistic to expect people to work for no monetary gain, when their work for the community takes them away from their gardens and other essential personal tasks. This program may have its maximal impact on infant mortality if the VCHWs in very remote areas can be taught to give antibiotics and vaccines; but such a level of training is considerably above what is currently done and would require much greater supervision.

In East Sepik Province, Save the Children's own East Sepik Women's and Children's Health Project is entering its fifth year of operation. There are 360 trained village volunteers, working in 5 districts where formal health services are mostly absent. This project is based on three types of village volunteers: *marasin meri* (medicine women), village birth attendants (VBAs) and community-based distributors (CBDs) of family planning information, advice and supplies. Registered nurses visit and supervise each village volunteer 4 times a year. Save the Children New Zealand works with local communities, local-level government, district and provincial health, church health services and other local NGOs to support and manage this program. This project must now adapt to new challenges of community and government participation and the need for increased coverage and long-term sustainability (Save the Children New Zealand, Papua New Guinea Country Programme Reports 1997-1999, unpublished reports). Difficulties arise when such programs have little or no government health services with which to integrate; for example, referral by VBAs of high-risk mothers is often impossible. Village-based volunteers need frequent supervision, possibly more than is currently being provided. This again reinforces the need for ongoing and objective evaluation of all such programs, and emphasizes that community-based volunteer services will not be effective without linking to networks of government or other institutional health services (12).

Development of disability services in provincial centres is a high priority. The Christian Brothers' Callan Services for the Disabled, based in Wewak, has a Certificate in Instructing and Community-Based Services, which is endorsed by the National Department of Education and supported by SC. Since 1998, 20 students have graduated with knowledge and skills that include early childhood development and community-based rehabilitation. This is one of several courses run through St Benedict's Teachers College in Wewak. Another, the Associate Certificate in Rehabilitation, granted through the College but taught within the Physiotherapy Unit at Boram Hospital in Wewak, demonstrates the value of linking NGOs and government institutions in training. In its first year of operation in 1999, the course produced 9 graduates: 2 have been offered places for Diploma studies at the School of Physiotherapy in Suva, Fiji; 1 of these students provided 21 months of voluntary service in the Physiotherapy Unit at Boram Hospital. The Christian Brothers have incorporated their work in disability with their teaching activity at St Benedict's College to provide an officially endorsed community-based response to disability. These services are provided at no cost to the consumers.

Access to safe and clean water is fundamental to health, and the absence of this is a cause of much diarrhoeal disease and typhoid fever throughout the country. Since 1997 SC Australia and other donors have been

supporting an appropriate technology initiative of ATProjects, an Eastern Highlands NGO, to bring water to community schools in EHP. This project commenced in response to the 1997 drought and was planned with local-level governments and school communities. The national government policy is that each school child should have 3 litres of water available for drinking each day and 4 litres to wash their hands (Papua New Guinea Basic Education Infrastructure and Curriculum Materials, School Infrastructure Management Manuals, AusAID, Canberra, unpublished report, 2000). At present, this is unattainable. The Water for Schools Program provides 0.5-1 litre of drinking water for each child. 68 tanks have been installed and all community schools in the Daulo District have been allocated a water supply; work has now commenced in adjoining districts.

The increasing risk of violence in many communities is of great concern to SC, as it has major consequences for the welfare of families. Addressing this issue will be an enormous task. SC supports Eastern Highlands Family Voice and Simbu Women's Counselling Centre in their work against gender and community violence, the sexual abuse of children and other abuses that infringe upon their rights.

With firm commitments from government, church organizations, non-government organizations and the communities themselves there is scope for innovative programming and for change. By careful planning, sustainable management practices, capacity enhancement and institutionalized links, local NGOs can continue to make substantial contributions to the health and welfare of children.

REFERENCES

1 **Bopp M.** From Rhetoric to Reality. National Research Institute Discussion Paper No 82. Port Moresby: National Research Institute, 1994.

2 **United Nations Children's Fund.** Children, Women and Families in Papua New Guinea – a Situation Analysis. Port Moresby: United Nations Children's Fund and Government of Papua New Guinea, 1996.

3 **United Nations Development Programme.** Pacific Human Development Report 1999 – Creating Opportunities. New York: UNDP, 1999.

4 **United Nations Children's Fund.** The State of the World's Children. New York: UNICEF, 1998.

5 **United Nations Children's Fund.** Human Development Report. New York: UNICEF, 1998.

6 **Papua New Guinea Department of Health.** Standard Treatment for Common Illnesses of Children in Papua New Guinea. Port Moresby: Department of Health, 1993.

7 **Papua New Guinea Department of Health, United Nations Children's Fund and World Health Organization.** Child Survival Crash Programme 1994–1995, for Achievement of the Global Mid-Decade Goals for Children. Project Documentation. Port Moresby: Department of Health, UNICEF and WHO, 1994.

8 **Edwards KN.** Rural health service crisis in Papua New Guinea: causes, implications and possible solutions. *PNG Med J* 1994;37:145-151.

9 **Papua New Guinea Department of Health.** Report on the Evaluation of Papua New Guinea Department of Health Programs in Maternal and Child Health, Family Planning and Immunisations. Port Moresby: Department of Health, 1992.

10 **Gillett JE.** The Health of Women in Papua New Guinea. Papua New Guinea Institute of Medical Research Monograph No 9. Goroka: Papua New Guinea Institute of Medical Research, 1990:180p.

11 **Naylor R, Dewdney R, Mylius R.** The health system. In: The Papua New Guinea Economy, Prospects for Sectoral Development and Broad-Based Growth. International Development Issues No 30. Canberra: AIDAB, 1993.

12 **World Health Organization, United Nations Population Fund, United Nations Children's Fund, World Bank.** Reduction of Maternal Mortality. Geneva: World Health Organization, 1999.