EXECUTIVE SUMMARY

There are over 300 million indigenous people in the world. They live on every continent and represent thousands of different cultures. Indigenous people are overrepresented among the poor, and their living conditions and health status are invariably below those of the general population of each country. Their health status is severely affected by low income levels, and by low availability of safe water, food, sanitation and access to health services. One of the main threats, not only to their health but to their very survival, is the destruction of their habitat, which provides spiritual and material sustenance. Acculturation and the loss of cultural cohesion also have a deleterious impact on their health.

1. Health indicators

In the majority of countries, there is no systematic collection of epidemiological data disaggregated by ethnicity. Available mortality and morbidity data, however, provide sound scientific evidence of significant disparities in health status. These include the following:

- Life expectancy at birth is 10 to 20 years less for indigenous people than for the overall population in a country.

- Infant mortality rates are 1.5 to 3 times greater than the national average.

- Malnutrition and communicable diseases such as malaria, yellow fever, dengue, cholera and tuberculosis continue to affect a large proportion of indigenous people around the world.

- In some instances, higher suicide rates are indicative of the deterioration in conditions that affect mental health.

- Smoking, alcohol and substance abuse are significant health and social problems.

- Cardiovascular diseases, diabetes, cancer, unintentional injuries and domestic violence are significant health problems among some indigenous peoples, and many of these illnesses are associated with lifestyle changes resulting from acculturation.

- Land displacement and contamination affect the food supply of indigenous people, increasing the likelihood of malnutrition and starvation. The same holds true for indigenous communities in the vicinity of extractive industries that are liable to damage the environment.

There are nevertheless some agreeable surprises. The infant mortality rate among some indigenous peoples (e.g. Native Americans in the USA or the Meitei in India) is similar to the national average. Also, where traditional ways of life and diet have not been significantly disrupted, a lower prevalence of noncommunicable diseases is found. Studies among immigrants (e.g. Tokelauans in New Zealand) suggest that culture maintenance may be associated with lower prevalence of risk factors such as smoking. Just as inequalities in health and living conditions among indigenous peoples can be documented throughout the world, marked differences in disease patterns occur among different indigenous communities, even within countries. Cancer rates, for example, vary widely among native peoples (e.g. differences in age-adjusted cancer rates among US Native Americans in different Indian Health Service areas). Disease distribution and the effect of risk factors vary between genders as well. Lifestyle

changes and acculturation may be associated with a greater risk of developing disease among indigenous women than among men. For example, there is a greater increase over time in age-standardized rates of diabetes among Tokelauan migrant women in New Zealand than among Tokelauan migrant men.

2. Access to health care

Access to health services and health promotion and prevention programmes for indigenous people is limited and inadequate. In general, services and programmes are culturally inappropriate.

Barriers to health care include:

- *Structural and economic factors*: distance and location of health care facilities; isolation of indigenous communities; lack of health insurance or economic capacity to pay for services; the relative value of losing a day of productive activity.

- *Lack of cultural sensitivity and appropriateness of health care systems*: on the one unacceptability of traditional healing practices on the one hand and of Western medicine on the other; language barriers; uncomfortable and impersonal environment of hospitals and clinics; attitude problems among health professionals.

A review of experiences indicates that programmes are more effective when they ensure indigenous ownership and leadership, as well as incorporating culturally specific approaches. The training of indigenous people in the health professions, and providing training in cultural sensitivity to all health professionals, are urgent tasks that hold out promise for the future. The principles of WHO=s Health for All strategy and primary health care approach are compatible with the development of appropriate health systems for indigenous people, and can form the basis for such systems.

3. Articulation of traditional and medical health systems

The interaction of the Western medical establishment with traditional practitioners has been characterized by ethnocentric preconceptions and poor performance in terms of cultural sensitivity. The emphasis on top-down training rather than mutual learning approaches is a barrier in promoting intercultural relations. It is possible to achieve articulation and collaboration between traditional practitioners and medical professionals within the social and physical community environment, without the need to institutionalize joint practices in a medical setting.

Indigenous healing systems

Indigenous healing systems are based on a holistic approach to health. Well-being is perceived as the harmony of individuals, families, and communities with the universe that surrounds them. These practices respond to the internal logic of each community of indigenous people and are a product of their unique relationship with the elements and the spiritual world in which they live.

Medicinal Use of Plants

Community-based projects led by indigenous people, focusing on the systematization of knowledge of medicinal plants and practices, have generally yielded positive results. This knowledge can then be articulated as part of the provision of community health care. Overt interest in the curative properties of plants has, however, troubled indigenous peoples and their organizations. The focus of pharmaceutical research on developing potentially profitable products rather than an interest in improving the health condition of indigenous peoples is perceived as an instance of the blatant disregard that a dominant society displays toward their cultural heritage.

4. International organizations and health initiatives for indigenous peoples

The prevailing international climate, at the midpoint of the United Nations International Decade of the World=s Indigenous People (1994-2003), was seen as an opportunity to capitalize, in favour of health, on such initiatives as the establishment of a permanent forum in the United Nations for indigenous peoples and the adoption of a universal declaration.

WHO's objective is the attainment by all peoples of the highest possible level of health. WHO targets vulnerable groups and countries as an integral part of its activities, including those characterized by acute instability and apparently stalled development.

The goal of WHO=s programme on Sustainable Development and Healthy Environments is to protect health as a cornerstone of sustainable development. Emphasis is placed on breaking the vicious circle of poverty, food insecurity, malnutrition, environmental degradation and contamination, factors of vulnerability, disasters, and loss of lives and assets.

Clearly, by adjusting the role of the health sector and partners from other areas, such as education and agriculture, to meeting the needs of indigenous people in a given national context, it will be possible to move ahead. By including indigenous people as social actors in dialogue between governmental and nongovernmental sectors, public policy secures the chance to reflect their interests and concerns. At the international level, dialogue is required to focus the goals of the United Nations and its specialized agencies, such as WHO, on the health of indigenous people. Factors that facilitate the implementation of international initiatives on indigenous peoples include the existence of favourable local sociopolitical environments, the establishment of reciprocal relations with indigenous peoples, and the availability of specifically targeted funds.

I. INTRODUCTION

This document was drafted at the request of WHO to serve as a basis for discussion during the Third Healing our Spirits Conference, held from 1 to 6 February 1998 in New Zealand. The conference provided an opportunity for networking among indigenous peoples in the health professions. One of the items on the agenda of the conference was the mandate recently established by WHO=s governing bodies to develop a global programme of action on the health of indigenous peoples.

The original draft was then edited in January 2001. This process also involved a review of the literature and assessment of current health data on indigenous peoples. The evidence gathered revealed that the health status and trends showed no improvement from the time the manuscript was originally issued. Furthermore, given the slow response to the health needs of indigenous peoples at the global level, there is no evidence that the situation will vary significantly in the next decade. Much of the information included constitutes a foundation for understanding indigenous health issues from an indigenous perspective. Thus it has long term relevance and significance. It is expected that this document will be followed by periodic updates on health status, research findings, policy and programme developments, and focused examination of current health issues related to indigenous peoples.

This document was designed, first, to promote an understanding of indigenous perspectives on health and healing, what it means to be indigenous, the indigenous ways of understanding the world, and how these are related to health and well-being (Chapter II). The aim was to develop a common language and understanding for working together in a world where diversity of cultures is one of the most precious assets. To a large extent, the information and recommendations are based on the ideas produced in meetings, conferences and workshops where indigenous people have expressed themselves on issues that affect their lives.

Chapter III provides information on the socioeconomic and health conditions of indigenous peoples around the world. The data offer evidence of ethnic-based disparities and inequities in morbidity and mortality patterns. Information is presented in relation to issues such as environmental degradation, rapid cultural change, conflicts and global economic systems. This is intended to clarify the association between sociopolitical and economic policies and the ill-health of indigenous peoples. Data are also presented on the health-promoting elements of traditional ways of life and on the importance of indigenous cultures in the maintenance of the physical, mental and spiritual well-being of individuals and communities.

Chapter IV discusses traditional and Western healing systems and the ways in which they interact. It outlines examples of indigenous initiatives in health care, and current trends such as managerial transfer and indigenous ownership. Concise information on international initiatives that affect indigenous peoples, such as bioprospecting, is also included.

Chapter V presents information on health-related international initiatives. It includes selected illustrations of current WHO activities, including PAHO=s Health of Indigenous Peoples initiative.[1] The lessons learned from this initiative, as well as its accomplishments and limitations, are discussed.

[1] The Pan American Health Organization (PAHO) serves as WHO's Regional Office for the Americas

II. INDIGENOUS PEOPLES OF THE WORLD: TODAY'S CONTEXT

In recent decades, issues concerning indigenous peoples have been incorporated into the agendas of multilateral agencies, and definitions of the term Aindigenous@ have been drafted. The World Bank (1991), in its operational directive on indigenous peoples, refers to Aindigenous peoples, tribal groups, and scheduled tribes@ as those Asocial groups with a social and cultural identity distinct from the dominant society where they live, who have close attachment to their ancestral lands, and who are susceptible to being disadvantaged in the development process@. Similarly, International Labour Organization (ILO) Convention 169 concerning Indigenous and Tribal Peoples in Independent Countries (1989) recognizes as indigenous that distinct section of the national community which is understood to consist of:

> "Peoples in independent countries who are regarded as indigenous on account of their descent from the populations which inhabited the country, or a geographical region to which the country belongs, at the time of conquest or colonization or the establishment of present state boundaries and who, irrespective of their legal status, retain some or all of their own social, economic, cultural and political institutions".

1. Conceptual and historical framework

Indigenous societies represent cohesive systems of life, imbued with a shared world-view. Every aspect of indigenous life is governed by sets of rules and values, and sustained by a sound knowledge base. Indigenous peoples have achieved harmonious integration with the environment and have sustained this relationship over the centuries.

Historically, indigenous peoples have suffered the impact of colonization and assimilationist policies as well as of Western development models. These communities now show varying degrees of disarticulation. Few, if any, indigenous communities lack contact with the Western world and for the majority daily life takes place in two worlds, the modern and the traditional. Many have close contact with urban environments or reside permanently in cities. Internal and international migrants, the urban Indians, the indigenous diaspora have not received sufficient attention because the image of the "savage living without contact with Western civilization" still prevails in non-indigenous societies. Cultural contact in some cases results in identity conflicts and acculturative stress, with a variety of detrimental consequences for the individual and communities. On the other hand, when indigenous people acquire intercultural skills while maintaining their own cultural identity, social and cultural negotiations with dominant societies become possible. Colonialism establishes a set of social relations based on ethnic status that do not disappear when formal colonial relations have ceased to exist. Discrimination is therefore part of the daily life of society in most countries. But discrimination is seldom recognized as a problem by the dominant society. PAHO (1995) has shown that:

> "Discrimination in many countries is part of the life of the society. The scale of artificial social prestige relegates the indigenous population to the lowest position...thus giving rise to negative stereotypes, and a derogatory attitude to everything associated with the indigenous culture".

Western development, cultural and economic globalization, environmental degradation, and armed conflicts and violence have a serious impact on indigenous communities around the world. In recent decades, indigenous peoples have received increasing attention within the global agenda. This is reflected in a series of resolutions, operational directives, covenants and initiatives adopted by ILO or the United Nations. However, there is often a considerable gap between the statement of good intentions and action. Indigenous peoples experience serious problems but even after over 15 years of deliberations no consensus has been reached on the draft United Nations Declaration on the Rights of Indigenous Peoples. The dynamics of large-scale capital movements and multinational corporations also complicate conflict resolution, particularly where the problems of indigenous peoples are concerned. The traditional territories of indigenous peoples have commonly had high economic value. Activities such as mining, oil exploitation, logging, dam building, and the establishment of national parks represent an enormous threat to the well-being of indigenous peoples (The International Working Group for Indigenous Affairs, 1996). Furthermore, indigenous peoples are highly dependent on the land and the natural environment for their survival. They are also overrepresented among the world=s poor (Psacharopoulos & Patrinos, 1994), and seldom have the opportunity of participating in the decision-making processes within countries. These circumstances make indigenous peoples highly vulnerable to macroeconomic and Western development policies.

The increased vulnerability of indigenous peoples, compared with other poor or marginalized populations, stems from several factors:

- **Attachment to the land**, which is the basis for both spiritual and material sustenance. Indigenous people have developed complex and diverse systems of adaptation, and their subsistence is based on elements offered by **the natural environment**. Thus, environmental degradation has devastating consequences.

- Profound differences exist between the world-view and cultural norms of indigenous peoples and those of Western societies (Table 1). A holistic conception of the world entails, among other factors, unity between the material and spiritual realm, and a collective orientation. This differs from the more materialistic and individualistic orientation of Western societies. Cultural interactions, although necessary, impose **enormous psychological stress**. These stressful processes may lead to individual and community disintegration.

- Many policies, programmes, and actions designed by non-indigenous individuals or institutions have been inappropriate. Differences in world-views, and even in the notion of Adevelopment@, often result in inefficient and possibly harmful approaches. Furthermore, the colonial experience, assimilative policies and discriminatory attitudes place indigenous peoples in a condition of greater social and political marginality than other poor populations. Thus, there is a need for indigenous decision-making and **self-determination.**

Relatively little information is available on the health of indigenous peoples. It is apparent that more is known about their habitat than about indigenous peoples themselves. Studies and assessments conducted by environmental organizations and institutions have produced data that point to the relationship between environmental degradation and the health of indigenous peoples. Nevertheless, little is known about the physical, mental, social and spiritual impact of Western development on indigenous communities. For example, after

decades of nuclear testing in the Pacific, an international cooperative effort to address its health consequences for the local population was launched only recently. Even though it is tempting to blame others, the poor response to the health needs of indigenous peoples reflects the weakness of the health sector, and of indigenous health professionals, in presenting a sound and convincing argument for promoting a more sensible, sensitive, sustainable, healthy and caring human way of life on this planet.

WHAT DO YOU MEAN INDIGENOUS?

"Indigenous" has been defined by the World Council of Indigenous Peoples as:
1. The original inhabitants of an area; 2. The descendants of the original inhabitants of an area who are colonized; 3. Those who live in an indigenous way and who are accepted by the indigenous community. The Sami include those whose grandparents spoke the Sami language in this definition. When asked what it means to be "Sami", they often answer, "It's just a way of life we have".

The Indigenous way of life HARMONY WITH NATURE	Western "progress" DOMINATION OF NATURE
Everything has spiritual value The spiritual and the physical are united	Everything has monetary value The spiritual and the physical are divided
The laws of nature are emphasized Nature reflects the Creator	The laws of man are emphasized The Creator is man's image
Feelings are important	Feelings must be rationalized
Society is based on cultural pluralism And the extended family Roots are remembered	Society is based on the melting pot and the nuclear family Roots are forgotten
Cosmology is spatial, timeless	Cosmology is lineal, time oriented
Education is experiential Teachings are from nature And traditional elders	Education is from the mass media and salaried professionals
Community spiritual life is based on cultural renewal	Community spiritual life is based on personal atonement
Technology serves at peoples and Nature	People and nature serve technology
Material wealth is shared and Given away	Material wealth is hoarded and consumed
Behaviour is coopèrative	Behaviour is competitive

Justice and equality are achieved by cultural forms	Justice and equality are achieved by legislation
Society is egalitarian	Society is patriarchal
Women and men have equal freedom and power	Women are subservient to men
Leaders put the people above themselves	Leaders put themselves above the people

Source: Faith Fjeld, 1986

2. Legal framework

The ILO Indigenous and Tribal Peoples' Convention, 1989, which is legally binding on countries once ratified by their governments, is the most comprehensive and up-to-date international instrument on the conditions of life of indigenous and tribal peoples. Provisions for social security and health in this convention include the following:

- The coverage of social security schemes, which are applicable to all citizens, shall be graduallyextended to encompass indigenous and tribal peoples.

- Governments are required to provide indigenous and tribal peoples with adequate community-based health services, drawing upon their traditional preventive and healing practices and medicines. This constitutes a recognition of the value of traditional medicine and of the need to preserve and further develop it.

- Indigenous and tribal peoples shall participate in the planning and execution of these services, or design and deliver health services under their own responsibility and control. In both cases, it is the state=s responsibility to supply the needed resources. Local community health workers should be given training and employment on a preferential basis.

Within the United Nations, indigenous peoples have been the subject of active concern since the formation of the United Nations Working Group on Indigenous Populations (WGIP) in 1982. The Working Group is composed of independent human rights experts. In 1996, it focused on health, and at that time the Committee on Indigenous Health was established. Health has been identified as a priority in the draft Declaration on the Rights of Indigenous Peoples. It is expected that the United Nations General Assembly will adopt the declaration during the International Decade of the World=s Indigenous People (1995-2004). The draft declaration aims to set minimum standards for the survival, dignity and well-being of the indigenous peoples of the world. Health considerations in the draft text include: "the right to special measures for the immediate ...improvement of social conditions...including health" (Article 22); "the right to determine and develop priorities and strategies...for health programmes affecting them"(Article 23); and "the right to their traditional medicines and health practices" (Article 24).

The Committee on Indigenous Health was established by participants of the United Nations Working Group on Indigenous Populations to ensure that health remains a priority on this body's agenda.

The World Bank operational directive on indigenous peoples mentioned above originally focused on the protection of land rights and the provision of health services, particularly for forest-dwelling peoples in lowland South America. A revised policy issued in 1991 (OD 4.20) extended the definition of indigenous peoples to include a much wider array of peoples who maintain social and cultural identities distinct from their national societies. Particular reference has been made to the right of indigenous peoples to choose the manner and level of participation in development projects. More recently, the World Bank has begun a process of building an indigenous factor into all its programmes.

PAHO's Health of Indigenous Peoples initiative was approved in 1993 by the PAHO Directing Council (see Appendix I). It was developed within the framework of achieving health for all by the 21st century, and deals with inequalities in health status and access to appropriate health care for indigenous peoples. It is based on the principles of self-determination of indigenous peoples, a holistic approach to health, and reciprocity in relations. PAHO's initiative is discussed in more detail in Chapter V.

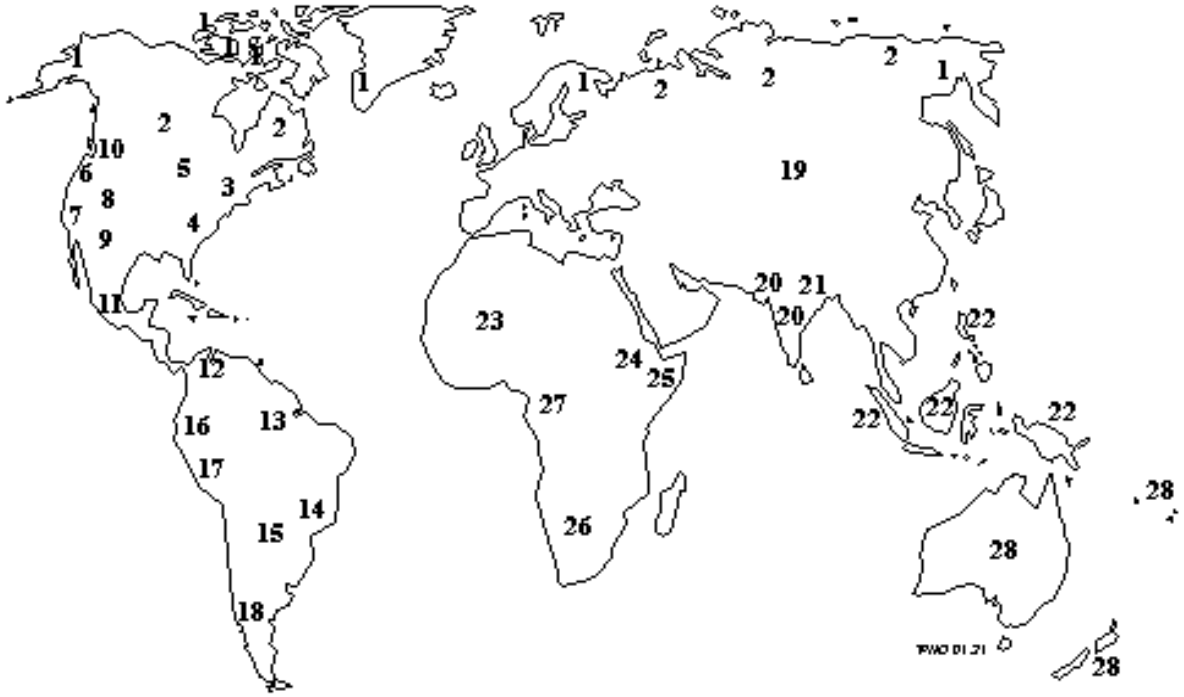
III. DEMOGRAPHIC, SOCIOECONOMIC, AND HEALTH CONDITIONS

There are over 300 million indigenous people in the world today. They live on every continent and represent thousands of different cultures **(**see Map 1 and Table # 2**)**. There are more than 6000 languages in the world (Mackey, 1991; Dwyer & Drakakis-Smith, 1996), and native languages make up the bulk of this linguistic diversity. Unfortunately, only about 60 of these languages have more than half a million speakers, and hundreds of languages lack adolescent speakers (Mackey, 1991; Williams, 1995).

The ratio of indigenous people to total population varies among regions. The largest number of indigenous people is found in Asia with over 150 million, followed by Central and South America with over 40 million. Despite cultural diversity and differences in local conditions of life, indigenous peoples share common factors. These factors include philosophical principles, as well as practical aspects of everyday life. Living in harmony with nature and the universe, and sharing a collective orientation, are among these principles.

Indigenous people are overrepresented among the world's poor (Psacharopoulos & Patrinos, 1994). Their health status is severely affected by their living conditions, income levels, employment, access to safe water, sanitation and health services, and food availability. One of the main threats, not only to their health, but to their very survival, is the destruction of their habitat, which provides both spiritual and material sustenance. Acculturation, with the subsequent undermining of traditional practices that are protective of their health, also has a detrimental effect. Data on the socioeconomic and health conditions of indigenous peoples are presented below by region. The information demonstrates that there are inequalities in living conditions, as well as in morbidity and mortality patterns, between indigenous peoples and non-indigenous populations. Where possible, an assessment is made of the association between sociocultural and environmental factors and health.

WHERE INDIGENOUS PEOPLE LIVE



1. Arctic
2. Sub-Arctic
3. Eastern Woodlands
4. Southeast
5. Great Plains
6. Northwest-Plateau
7. California
8. Great Basin
9. Southwest
10. Pacific NW Coast
11. Central America
12. Circum-Caribbean
13. Amazonia
14. Mato Grosso
15. Gran Chaco
16. West Andean Highlands
17. Andean Highlands
18. Patagonia-Pampas
19. North and Central Asia
20. South Asia
21. Chittagong Hill Tract Peoples
22. South East Asia
23. Sahara and Sahel
24. Southern Sudan
25. The Horn and East Africa
26. Kalahari Desert
27. Ituri Forest
28. Australia and the Pacific

WHERE INDIGENOUS PEOPLES LIVE

The following list of Indigenous Peoples is not comprehensive, nor exclusive, but instead representative of peoples living world-wide.

MAP KEY

1. **Arctic**
   - Aleut
   - Chipewyan
   - Inuit
   - Saami

2. **Sub_arctic**
   - Cree
   - Dene
   - Naskapi
   - Ojibwa

North America

3. **Eastern Woodlands**
   - Algonquin
   - Haudenosaunee (Six Nations)
   - Huron
   - Micmac
   - Potawatomi
   - Shawnee

4. **Southwest**
   - Cherokee
   - Chicksaw
   - Creek
   - Seminole

5. **Great Plains**
   - Arapaho

8. **Great Plateau**
   - Shoshone
   - Ute

9 **Southwest**
   - Apache
   - Dine (Hopi)
   - Navajo
   - Zuni

10. **Pacific NW Coast**
   - Bella Coola
   - Chinook
   - Haida
   - Kwakiutl
   - Salish
   - Tingit

11. **Central America**
   - Bribri
   - Cachiquel
   - Chol
   - Chuj
   - Cora
   - Guaymi
   - Hichol
   - Ixil
   - Kechi
   - Kuna
   - Lacandon

12**. Circum Caribbean**
   - Akawaio
   - Bari
   - Choqie
   - Guajiro
   - Karina
   - Kogi
   - Otomac
   - Paez
   - Yarawato
   - Yupka

South America

13. Amazonia
   - Aguaruna
   - Amarakaeri
   - Amuesha
   - Arara
   - Arawak
   - Ashaninka
   - Asurini
   - Gaviao
   - Kayapo
   - Kreen-Akarore
   - Masigenka
   - Mudurucu
   - Nambikwara
   - parakana
   - Quichua (Oriental)
   - Sanema
   - Secoya

14. **Mato Grosso**
   - Borbora
   - Botocudo
   - Ge (Central)
   - Guato
   - Kaduveo
   - Kaingang
   - Karaja
   - Kayapo
   - Tupi

15. **Gran Chaco**
   - **Ache**
   - Ayoreo
   - Chamacoco
   - Chiriguano
   - Guana
   - Mataco
   - Mbya
   - Toba-Maskoy

16**. W. Andean**
   - Lowlands
   - Cayapas
   - Colorados

17. **Andean Highlands**
   - Aymara
   - Huancas
   - Kolla

Asia

19. **North and Central Asia**
   - Ainu
   - Hui
   - Manchu
   - Miao
   - Mongolian
   - Taiwam Abor.
   - Tibetan
   - Uighur
   - Yi
   - Zhuang

20. **South Asia**
   - Bhils
   - Chenchus
   - Dalflas
   - Dandami
   - Gadabas
   - Garos
   - Gond
   - Hos
   - Irula Kurumbas
   - Juangs
   - Kadras
   - Kameng
   - Khassis
   - Khonds
   - Kolis

21. **Chitagong Hill Tract Peoples**
   - Chakma
   - Marma
   - Tripura

22. **South East Asia**
   - Chin
   - Hmong
   - Kachin
   - Karen
   - Kedang
   - **Lisu**
   - Lisu
   - Semai
   - Shan

Africa

23. **Sahara, Shael**
   - Fulani
   - Tuareg

24. **S.Sudan**
   - Dinka
   - Hamar
   - Kawahla
   - Lotuko
   - Mondari
   - Nuba
   - Nuer

26. **Kalahari Dessert**
   - San

27. **Ituri Forest**
   - Efe
   - lese
   - Mbuti

28. **Australia and the Pacific**
   - Aboriginals
   - Arapesh
   - Asmat
   - Bangsa
   - Bontoc
   - Chamorro
   - Dani
   - Dayak
   - Hanunoo
   - Hawaiian
   - Iban
   - Ifugao
   - Kalinga
   - Kanak
   - Kayan
   - Kedang
   - Mae-Enga
   - Maori
   - Mundugumur
   - Penan
   - Rapa Nui

Cheyenne
Pawnee
Sioux

5. **Nortwest Plateau**
Nez Perce
Wasco
Yakima

6. **California**
Cahuilia
Pomo
Lenca
Maya
Miskito
Nahua
Pipile
Quiche
Rama
Seri
Sumu
Tarahumara
Yaqui
Yucatec
Shipibo
Shuar
Tukano
Ufaina
Waimiri-Auroari
Wayana
Xavante
Yagua
Yanomami

18. **Patagonia-Pampas**
Araucanian
Mapuche
Ranquel
Tehuelche
Calchaqui
Mojo
Quechua
Otavalo
Salasaca
Uros

Lohit
Mundas
Naga
Oraons
Pathan
Santal
Savaras
Sholegas
Toda Kotas
Vedda

Rasaida
Shiluk
Zande

25. **The Horn and East Africa**
Barabaig
Eritrean
Massai
Oromo
Somali
Tigrayan

Tahitian
Torres Strait Islanders
Tsembaga

1. The Arctic[2] c \l2 "The Arctic
2. Source: Arctic Monitoring and Assessment Program (1997).

The lives of the indigenous peoples of the Arctic are closely linked to local resources, particularly wildlife harvesting. This dependence forms a basis for indigenous societies, cultures, economies and spirituality. Their diet is based on traditional foods with high nutritional benefits. Environmental assessments show, however, that certain Arctic populations are among the most exposed in the world to environmental contaminants. Some of these contaminants are carried to the Arctic and accumulate in animals used as traditional foods. Some significant contaminants also arise within the Arctic itself. The Arctic Monitoring and Assessment Programme (AMAP), established in 1991 under the Arctic Environmental Protection Strategy (AEPS), was given the responsibility to monitor the levels and assess the effects of selected anthropogenic pollutants in the Arctic.

Conclusions stated in its first report are as follows:

- Radioactive contamination has arisen from three primary sources: atmospheric nuclear weapons testing (1950-1980); releases from European nuclear reprocessing plants (e.g. Sellafield, United Kingdom, in the 1970s); and fallout from the Chernobyl accident in Ukraine in 1986.

- Of the heavy metal contamination in the Arctic, industrial sources in Europe and North America account for up to one-third of the deposits.

- Sulfur and nitrogen compounds from sources associated with industries, energy production and transport in areas remote from the Arctic result in low but widespread levels of these contaminants throughout the Arctic.

- Two- thirds of airborne heavy metals in the High Arctic originate from industrial activities on the Kola Peninsula, the Norilsk industrial complex, the Urals, and the Pechora Basin.

Russia

Common occupations of indigenous peoples in Russia are reindeer herding, hunting, fishing, and producing reindeer fur for handicrafts. The primary indigenous people in the Murmansk Oblast region are the Sami. Others are the Nenets, who live in the tundra, and the Khanty, Selkup, Dolgan, Nganasan, Evenki, Yakut, Yukagir, Chukchi, Yupik (or Eskimo), Even, Chuvan, and Koryak.

Statistics on mortality and the incidence of various diseases bear witness to a dismal health situation. The incidence of disease as well as traumas has increased several hundred per cent since 1970. The risk of disease among indigenous peoples of the Arctic reflects lifestyle patterns. A study in the Nenets Autonomous Okrug showed that the rates of disease were 50% higher in the settled population than in those living in the tundra. Psychological disorders were 2.5 times higher among the settled population. In the north, the mortality rate in 1989 for indigenous peoples was 10.4 per 1000, compared to 6.6 per 1000 for other residents of the area. At the end of the 1980s, life expectancy was 54 years for men and 65 years for women, which is 10 to 20 years lower than the respective Russian averages. Trauma, infectious diseases (especially tuberculosis), cardiovascular diseases, parasites and respiratory diseases are common causes of death. Many health problems are related to alcoholism. The

[2] Source: Arctic Monitoring and Assessment Programme (1997).

infant mortality rate is as high as 53 per 1000 among the Koryak, and 48 per 1000 among the Eskimos. Certain diseases are particularly common. One is "northern lung", a form of respiratory disease widespread among indigenous peoples. Chronic ear infections are also common. The incidence of tuberculosis is 2.5 to 3 times higher than among newcomers to the region. Dietary changes, including an increase in carbohydrate intake compared with traditional foods, may be in part responsible for the high incidence of gastrointestinal disorders. Up to 95% of the population suffers from vitamin deficiencies. The future of the indigenous peoples of the Russian Arctic is uncertain and although the Russian Federation has passed some laws to protect minority interests, implementing the new legislation will take time, energy and resources.

Alaska

The native peoples of Alaska are the Aleut, Alutiiq, Athabascan, Central Yupik, Eyak, and Inupiat. Several problems contribute to high rates of disease and early death among these native communities. Many of the problems, such as poor housing, poor sewage disposal, and lack of safe drinking-water, result from the loss of traditional ways of life. Alaska natives smoke more than the population at large, and alcohol abuse is also prevalent. Moreover, health care facilities are not adequate to meet people's needs. In 1993, the legislature of Alaska concluded that "by all measures, the health status of Alaska Natives is significantly lower than other Alaskans. The health needs of Alaska Natives outstrips the resources available. Many villages do not have basic water and sanitation services". Among some groups of native peoples in Alaska, pneumonia is up to 60 times more prevalent than in the United States population as a whole. In certain areas, botulism reaches its highest incidence worldwide. The age-adjusted mortality from some types of cancer is higher than for the United States population, even though the incidence of cancer is comparable. Many cancer deaths are tobacco-related. The overall leading cause of death in Alaska is cancer, followed by heart disease, unintentional injury, and suicide. Diabetes, breast cancer, suicide, chronic obstructive pulmonary disease, lung cancer and other neoplasms are increasing among Alaska native peoples.

Despite this worrying picture, there are some positive developments. The overall death rate has been declining in recent decades, and life expectancy for indigenous neonates increased from 46.8 years in 1950 to 66.6 years in 1980-1984.

Canada

Peoples of the Arctic region of Canada include the Inuit, Dene and Metis. They total about 93 000 people. Hunting, fishing and gathering are important activities in the economy of indigenous societies, but native peoples also participate in the wage economy. Health conditions for Canadian natives have improved dramatically in the past half century, but mortality rates are still higher in the north than for Canada as a whole.

Much of the improvement in health has come about through better health care, such as the nursing stations that have now been established in many communities. Hospitals are centralized in major cities, but mobile clinics provide some speciality care that would otherwise not be locally available. Life expectancy at birth among Inuit doubled between the early 1940s and the 1980s, when it reached 66 years. Life expectancy has continued to improve but it is still four to five years lower than the Canadian average. In the Northwest Territories, infant mortality was 28 per 1000 in 1981-1985, compared to 144 per 1000 two decades earlier. Infant mortality is, however, still three times higher than for the Canadian population as a whole. Major problems include poor water and sewage disposal systems. A threat to the health of native peoples in Canada is the extremely high percentage

of smokers. By the age of 19 years, 63% of Indians and Inuit smoke, compared with 43% for non-natives. Smoking is the most likely explanation for the recent increase in lung cancer among Inuit in the Northwest Territories.

The heavy reliance on natural food seems to reduce the risk for certain health problems. Indigenous peoples in the Canadian Arctic have among the lowest age-standardized prevalence of diabetes in the country. The most common foods are caribou, other wild mammals, fish, and berries. Diabetes is one of the most prominent health risks associated with change to a more Western diet.

Greenland

Kalaallit is the collective name for the indigenous peoples of Greenland: the Kitaamiut in the west, Tunumiut in the east, and Inughuit in the north. In 1994, the population of Greenland was 55 419, of which 87% was indigenous. The introduction of home rule in 1979 and the improvement in Greenland's educational system have reduced the number of non-indigenous people working and living in Greenland. Some of the population live in towns and the remainder reside in smaller villages. Commercial fishing and the fishing industry are the most important activities, and 10% of the population depends on hunting. Among hunters and fishermen, 44% eat their own products daily. In the villages, 31% of residents eat Inuit food, compared with 26% in towns. Disease patterns include high mortality from natural causes and relatively low mortality from heart disease. The incidence of unintentional injuries and suicides is, however, high. The average life expectancy at birth is 68.4 years for women and 60.7 years for men. Smoking is very common among all age groups; 84% of Inuit men and 78% of Inuit women are current smokers.

Samiland

The Sami homeland extends across four different countries: Russia, Sweden, Finland, and Norway. There are no reliable estimates of the number of Sami because ethnicity is not included in the national census data. Adjusted older data put the figure at about 85 000 people. Of these, approximately 50 000 live in the Arctic, where they make up about 2.5% of the population. In 1751, the civil rights of the Sami were recognized in the Sami Codicil. This is a supplement to a broader treaty between Norway and Sweden and was written to solve problems of double taxation for the Sami, whose traditional migration routes had little to do with administrative boundaries. Currently, the Sami parliaments in Norway and Sweden are exploring a common platform across national borders.

2. The Pacific[3]

The region of the Pacific covers about one-third of the area of the globe. The Kanaka Maoli - indigenous Hawaiians - constitute 20% of the total population of 1.1 million in Hawaii; Maori represent 15% of the total populationof 3.2 million in Aotearoa (New Zealand); and the Aborigines make up 2% of the total population of 17.9 million (1996) in Australia.

Some of the indigenous peoples of the Pacific have been recognized as such by the international community. These are the Chamoru, the American Samoans, the Kanaka Maoli of Hawaii, the Maori of Aotearoa, the Aborigines and Torres Strait Islanders of Australia, the Kanaks of

[3] Source: International Working Group for Indigenous Affairs (1996, 1997).

Kanaky (New Caledonia), the East Timorese, and the Tokelauans. These peoples are included in the United Nations list of non-self-governing territories with a right to decolonization through a process actively supported by the United Nations Special Committee on the Situation with regard to the Implementation of the Declaration on the Granting of Independence to Colonial Countries and Peoples.

Other indigenous peoples of the Pacific include those of the new Melanesian States, such as the peoples of Santo and Tanna in Vanuatu, and the Bouganvilleans of the North Solomon Province of Papua New Guinea. In Micronesia and Polynesia, some of the small independent island States encompass several indigenous peoples. These States, however, are still highly dependent on the former colonial powers, international corporations, multinational banks or development agencies. The first peoples, although nominally in control of their own lives, continue to suffer social and cultural disintegration, including large-scale emigration, resource exploitation and environmental destruction.

The environmental challenges to the Pacific are enormous. They include hazardous dumping of waste, chemical burn-off (Kalama, Johnston Atoll), nuclear shipments, nuclear testing, deforestation, mining, agroforestry and logging, building of dams and establishment of grazing areas. Another significant threat is pressure on the environment from tourism, shopping malls, golf courses, and overexploitation of the ocean from fisheries and sea bed mining.

Some development schemes are so big that they will completely alter the local social and political structure. This is happening in Belau, where 600 not-yet-built houses have been sold to buyers from one Asian country. This will change the population composition of the 16 000 Belauans. Leasing of prime public lands for the planned construction of a mall in the Northern Marianas has been halted by civil action. The Northern Marianas receives 600 000 visitors per year, or 30 tourists per indigenous person, almost the same ratio as for the Kanaka Maoli of Hawaii.

Since the 1950s, more than 180 nuclear tests have been carried out on Fangataufa and Moruroa in the overseas French territories of Polynesia. The testing has now stopped, but the contamination and the dumping of nuclear waste continue. Radioactive contamination precludes the cultivation of locally grown food; thus the island of Bikini in the Marshall Islands depends on foreign food aid. At the same time, seven new types of cancer have been added to the list of conditions eligible for compensation. A collaborative study involving national, nongovernmental, religious and solidarity organizations was conducted to address the views and needs of test-site workers. The report from this study is a sociological enquiry into the consequences of nuclear testing on the lives of French Polynesians. It centres on the experiences of former workers on the test sites (Moruroa and Fangataufa), and inhabitants of islands within a radius of 500 km of these sites, who had been exposed to the risks of nuclear testing. The lack of basic information about the consequences of the nuclear tests has caused feelings of anguish, fear and powerlessness among the exposed population. Numerous workers and inhabitants of outlying islands have fears about their health situation and attribute ailments such as cancer and miscarriages to nuclear testing (de Vires & Seur, 1997).

A collaborative study is under way, involving a Tahitian nongovernmental organization, Hiti Tau, the World Council of Churches in Geneva, and the University of Wageningen in the Netherlands, among others. The project seeks to obtain data on the environmental and health situation of the Polynesians who worked at the test sites and of the inhabitants of the islands around the sites.

Cheap labour is available in some Pacific nations, often because of immigration from other countries. Filipinos comprise the largest ethnic group today in Saipan in the Northern Marianas, where

many garment factories are currently located. They produce clothing for famous and expensive brands such as Gap, LA Gear and Levi Strauss. Immigration has shaped the Pacific nations, but emigration is an important factor as well. More than two-thirds of the population of American Samoa now live in Hawaii and on the West Coast of the United States. About a third of the Kanaka Maoli live outside Hawaii, more than one-third of the Tongans have left their country, and more than half of the population of the former and present New Zealand territories of Tokelau, Niue and Cook Islands live abroad.

Table 3 shows gradients of association between high blood pressure and levels of acculturation among indigenous peoples in the Solomon Islands (Melanesia) and in Polynesia (Page, Damon & Moellering, 1974; Harburg, Gleiberberman & Harburg, 1982; Podlendank, 1989). In Puka-Puka, an isolated island with a more traditional culture, there was no association between age and blood pressure. Maupiti, near Tahiti, where blood pressure levels are lower, has undergone rapid cultural and economic change since the 1970s, but the population is still less westernized and urbanized than Samoans, Rarotongans or the Maori, who have higher blood pressure levels. In the Solomon Islands, data from the 1966-1972 survey of blood pressure also showed that the less acculturated groups tended to exhibit little or no increase in blood pressure with age and had a lower proportion of males with higher blood pressures. In the 1978-1980 follow-up survey of the same persons, the least acculturated, including the Aita and the Kwaio, showed little increase in average pressures (especially diastolic pressure) with age. The Nagovisi are becoming more acculturated, especially in their diet, and increases in blood pressure were noted longitudinally between 1966-1972 and 1978-1980. The pattern of change in blood pressure over time was, however, complex. For example, in Hawaii, Samoans in urban areas had significantly lower blood pressures than those in rural areas, suggesting either selective migration or sociocultural differences (Baker, Hanna & Baker, 1986).

TABLE 3
Relationship between degree of acculturation and blood pressure in various studies

	Solomon Islands groups					
	Nasioi	Nagovisi	Lau	Baegu	Aita	Kwaio
Degree of acculturation	+++	+++	++	+	+	0
Correlation: Age by systolic blood pressure (females)	0.36	0.30	0.36	NS	NS	NS
Percentage of males with pressure 140/90 or higher	3.4	2.7	7.8	0.8	0	0.8

	Polynesian groups (males)				
	Rarotonga	Samoa	Maori	Maupiti	Puka-Puka
Degree of acculturation (approx.)	Highest	Intermed.		Lower	Lowest
Association between age and blood pressure	Strong	Intermed.		Lower	None

Redrawn from data in Page et al. (1974) and Harburg et al. (1982). Approximate relative degree of acculturation is rated from 0 (lowest) to +++ (highest) on the basis of eight criteria including diet (Western versus traditional), economy (cash versus other), education, and medical care.

Solomon Islanders are Melanesians (see Chapter 3)

See references in Harburg et al. (1982) and Baker et al. (1986) for details on studies in Polynesians, The Solomon Islands data have been updated by Freidlander et al. (1987) and the Kwaio remain the least acculturated or most traditional group.

Aotearoa (New Zealand)

In 1840, the Maori outnumbered the European settlers by 1 000 to 1. Maoris owned 66 million acres of land and were engaged in a flourishing export trade across the Tasman Sea. Within the space of 50 years, the Maori were outnumbered by the new settlers by 10 to 1 and their land holdings had shrunk to 11 million acres. In 1894, the Maori population reached such a low level that they were thought soon to become extinct. They had been devastated by a series of epidemics of diseases, such as influenza, measles, whooping cough and typhoid fever. With public health interventions after the 1940s, the population grew, reaching a total of 511 278 by 1991. After the Second World War, rapid urbanization of the Maori took place and, by 1968, over 80% lived in cities. Maori unemployment rates reached about 25%. The Maori nation is now in the process of promoting its cultural, economic and political revitalization.

By almost every indicator, Maori health compares unfavourably with the total New Zealand population (Hunn, 1961; Rose, 1961; Pomare & De Boer, 1988). Life expectancy of indigenous people in New Zealand (male 63.8, female 68.5) is lower than that of non-indigenous people (male 70.8, female 77.0) (Kunitz, 1994). The infant mortality rate for Maoris was 15.1 per 1000 for the period between 1989 and 1993, while the non-Maori rate was 7.4 per 1000.

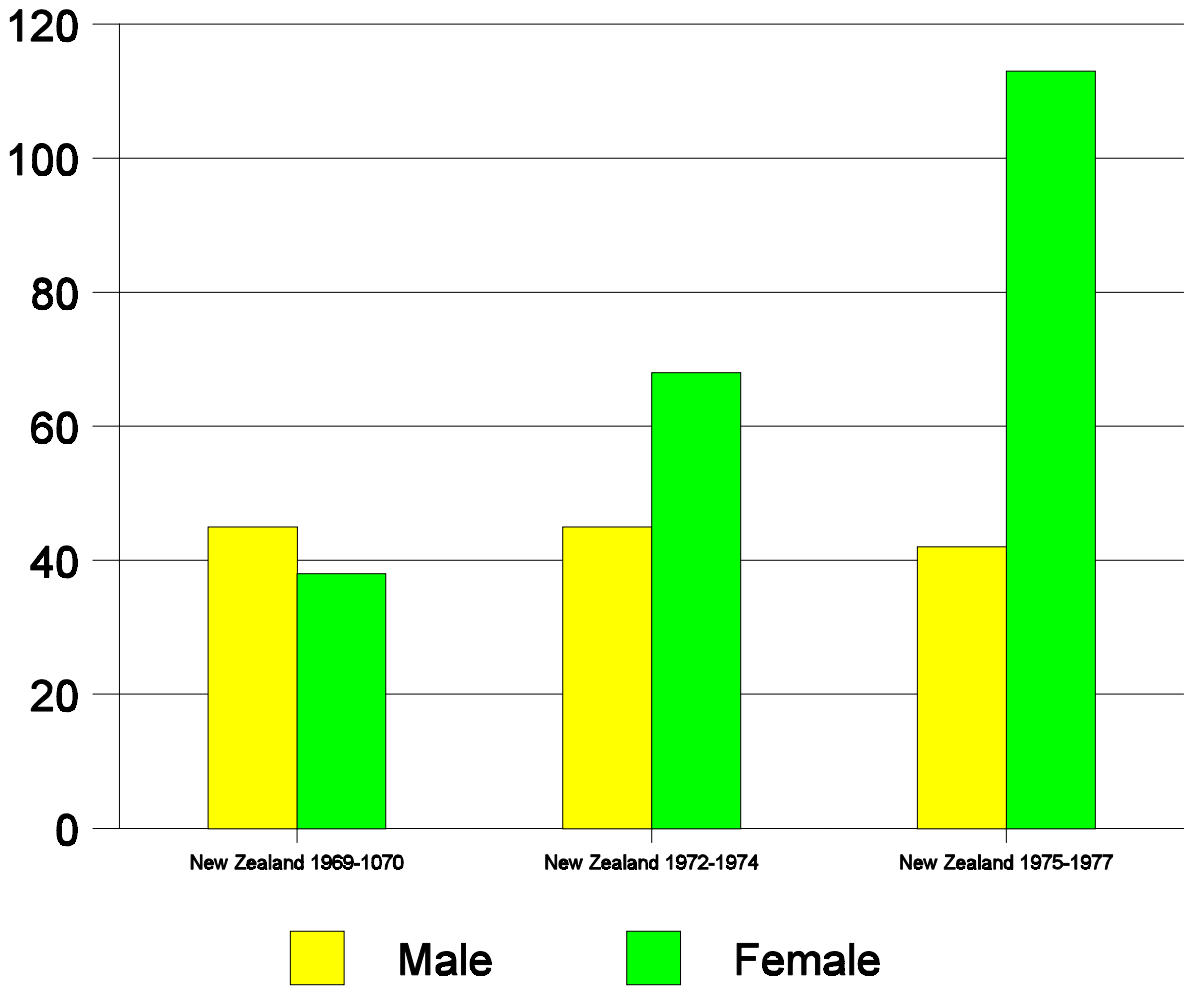
Maori male mortality from road accidents is almost twice the non-Maori male accident rate. Young Maoris between 15 and 24 years of age have the highest psychiatric first admission rate, and

this rate is two to three times higher than for non-Maoris. Alcohol and drug-related illnesses are the most common causes of first admission (Te Puni Kokiri, 1993a). In 1992, 85% of all Maori hospitalizations were to public hospitals. Unintentional injury is the main cause of hospitalization for men between 35 and 44 years of age. For Maori women in this age group, childbirth and its associated risks are the main causes of morbidity (Te Puni Kokiri, 1993b). Maori hospitalization rates for kidney and urinary tract disorders are high - 68 per 10 000 - compared with 38 per 10 000 for the non-Maori population. Diabetes results in hospitalization rates over four times higher, and mortality rates four to six times higher, among Maoris than among the general population. Maoris have high age-standardized rates of cancer of the lung, the rate for females being three times higher than for non-Maori females. Maoris also have higher death rates for cancers of the stomach, uterus and cervix. The Maori death rate for cancer of the stomach is at least two times higher, and that for cancer of the cervix is three times higher, than for non-Maoris. Non-Maoris, in turn, have higher rates for cancers of the large bowel, breast and brain.

Mental health is the area of greatest concern for Maoris in the 15- to 24-year age group. This age group has the highest psychiatric admission rate from all causes, the Maori rate being two to three times higher than that for non-Maoris. A community sample of 3000 women in Otago found that approximately 40% of women aged under 65 years had suffered sexual abuse as either children or adults, and a further 2% had suffered physical abuse. Those women with a history of abuse were more likely to advocate preventive than punitive measures to reduce the impact of violence in the community (Martin, O-Shea & Romans, 1993).

The Pacific Islands population living in New Zealand was about 167 000 in 1991. It comprises Samoans, Tongans, Cook Islanders, Tokelauans, Niueans, Fijians, Tuvaluans, and people from the Melanesian countries of Papua New Guinea, Vanuatu and the Solomon Islands (Public Health Commission, 1994). Like the Maoris, they have high rates of unemployment, reaching 21.5% for males and 20.0% for females in 1991. A quality of life survey showed that nearly 53% of the Pacific Islands people described their situation as being bad, compared with 16% of non-native respondents (Manukau City, 1993).

A survey of the Tokelau atolls in 1963 showed the persistence of the traditional diet based on taro, breadfruit, coconuts and fish. Pork, chicken and fruit are eaten at feasts (Davidson, 1975). There were few cases of hypertension, and blood pressure did not increase significantly with age (Prior et al., 1977). The longitudinal follow-up (1972-1982) of the Tokelau Migrant Study showed the occurrence of major dietary changes among migrants to New Zealand and in the atolls, following increased shipping contacts. The study also showed that the incidence of diabetes was higher among Tokelauans who had immigrated to New Zealand (male 4.4, female 10.8 per 1000) than among non-migrants (male 2.3, female 6.1 per 1000). While the prevalence of diabetes remained stable among immigrant men through the period 1969-1977, the prevalence increased over twofold among immigrant women **(**Fig. 1**)**. The prevalence of gout and hypertension also increased among immigrants. Ostbye, Welby and Prior (1989) listed dietary change as one of the factors most likely to contribute to the increasing rate of diabetes upon migration. These are a high energy, protein and alcohol diet causing a greater weight gain, plus a decreased level of physical activity. It is likely that a genetic predisposition for diabetes occurs in Pacific Islands populations, responding to factors present in an urbanized environment and lifestyle.



Age-standardized prevalence rates per thousand of definite and known diabetes in Tokelaun migrants to New Zealand over time.

Diabetes prevalence per 1000 people

Source: Prior and Stanhope, 1980

Figure 1

Scragg et al. (1993) showed that, compared with non-natives, Pacific Islands people living in New Zealand had higher mean blood pressure levels when controlled for age, blood pressure treatment, and body mass index. Of the hypertensive subjects, Pacific Islands people were least likely to be receiving treatment, and were therefore considered to be at higher risk. In some islands, there were marked differences in blood pressure levels between the rural populations living in a traditional lifestyle and the urban modernized populations. Blood pressure levels tended to rise with age more readily in the latter environment (Prior et al., 1968; Baker, Hanna & Baker, 1986). This was attributed to a number of factors including increased sodium intake (Prior et al., 1968), body fat (McGravey & Baker, 1979), blood lipid levels (Tuomilehto et al., 1989), stress levels (Beaglehole, 1992), decreased glucose tolerance (Tuomilehto et al., 1989), and decreased physical activity (Prior & Stanhope, 1980). All these factors are associated with moving from a traditional to a modern lifestyle. The rise in blood pressure appears to express itself earlier and is most noticeable in women (Beaglehole, 1992).

Pacific Islands males in New Zealand in 1981 had higher rates of smoking than all males, but among females Pacific Islanders had lower smoking rates. Among Pacific Islands males, smoking was most common in the 45- to 64-year age group (45%). Among Pacific Islands women, the highest smoking rates were among those aged 15-24 (26%). The rates of cigarette smoking among immigrant Tokelauans increased significantly between 1972 and 1982. In young people aged 15-19 years, the rates increased from 30% to 56% in males, and from 17% to 46% in females (Wessen, 1992). Among alcohol drinkers, 50% were "moderate" drinkers (New Zealand Ministry of Health, 1993). Pacific Islands women and children represented 10.6% of all those admitted to a collective refuge for victims of domestic violence in New Zealand. Domestic violence is attributed to lack of employment, insufficient money, overcrowding, alcohol abuse, and the lack of understanding between parents and children.

Differences in health status and risk factors are also found across native populations. A 1992-1993 household health survey revealed that 53% of Pacific Islanders over 15 years of age and living in New Zealand never used alcohol, compared with 27% of Maori. The Plunket National Child Health Survey 1990-1991 showed that 12% of Pacific Islands mothers interviewed consumed alcohol during pregnancy, compared with 44% of Maori mothers. The relatively high level of abstention among Pacific Islands mothers was attributed to cultural factors, since it was culturally inappropriate in Pacific Islands society for women to drink alcohol (Counsell, Smale & Geddis, 1994).

Hawaii

In 1993, Kanaka Maoli (indigenous Hawaiians) in the Islands were estimated to number 240 000 (Blaisdell, 1993). They constitute 21% of the population. Two-thirds are concentrated in the metropolitan island of O-ahu, and one-third in the less populated and more rural islands. The population living in the continental United States is equivalent to about one third of the number of people living in the islands (Barringer, 1989). Skeletal remains show that before contact with the Europeans, the Kanaka Maoli had metabolic diseases such as gout and arthritis, and non-infectious inflammatory illnesses such as rheumatoid arthritis, as well as a low frequency of dental caries and bone abcesses. They did not, however, have to contend with the epidemics that plagued other continents. They consumed a healthy traditional diet and did not consume substances such as alcohol, tobacco and drugs in a harmful manner. At the present time, the Kanaka Maoli have the highest percentage (14.0%) of families living under the poverty line, compared to 6% for the state of Hawaii (US Bureau of Census, 1993). Their life expectancy at birth (74.0 years) is lower than the state

average (78.0) (Hawaii State Department of Health, 1996). Their infant mortality rate was 14.1 per 1000 live births in 1980-1986, compared to 9.3 per 1000 for all races (Bell, Nordyke & O'Hagan, 1989). Their overall age-adjusted mortality rate was 34% higher than for all races in the United States (779 per 100 000, as against 541 per 100 000) (Miike, 1987). Adjusted mortality from heart disease was 44% greater among the Kanaka Maoli (344.5 per 100 000 for men and 244.1 for women) than for the general United States population (212.2 per 100 000 for men and 109.3 for women) (Johnson, 1989). Similarly, cause specific standardized mortality rates for heart disease show a gradient, with 340.8 per 100 000 for full Hawaiians, 125.8 per 100 000 for part Hawaiians, and 89.3 per 100 000 for non-Hawaiians (Braun et al., 1996). Kanaka Maoli also have the highest overall cancer mortality rate (319.6 per 100 000 compared to 132 for all races). The highest death rates were for tumours of the respiratory, digestive and breast tissues. A 1989 report shows that mortality from diabetes was 32.5 per 100 000 for the Kanaka Maoli, compared to 12.7 for all races (Johnson, 1989). In 1990 cause specific standardized diabetes mortality rates were 44.4 per 100 000 for full Hawaiians, 15.2 for part Hawaiians, and 4.9 for non-Hawaiians (Braun et al., 1996). Prevalence of high blood pressure was 85 per 1000 for Kanaka Maoli, as against 62 per 1000 for all races. In 1985, the Moloka'i island cardiovascular risk study showed that 42% of Kanaka Maoli men and 34% of the women were current cigarette smokers. After 1958, the Kanaka Maoli suicide rate increased, reaching 29.2 per 100 000 in 1978-1982, compared to 18.5 per 100 000 for Whites. Native Hawaiians have asthma rates (81.7 per 1000) almost double those of the total population in the islands (47.3 per 1000) (Blaisdell, 1993).

Australia

Aboriginal people are the original inhabitants of the continent of Australia. They constitute some 2% of the population of Australia as a whole, and 22% of the population in the Northern Territory. According to the 1986 Australian Census of Population and Housing, the Aboriginal population was 227 645. Of these, 206 104 were Australian Aborigines and 21 541 Torres Strait Islanders. By 1996 the Aboriginal population had increased to 353 000 people, of whom 36% lived in capital cities and other major urban areas (compared with 71% of non-indigenous people), and 29% lived in remote areas, compared with 3% of non-indigenous people. The estimated annual growth rate for the Aboriginal population in Australia is 2%, compared with 1% for the total population (Australian Bureau of Statistics, 1997). Before colonization, Aboriginals were nomadic, lived off the land, and used their own traditional healing systems. They were free from many of the health problems that beset them today. Diseases unknown in traditional communities are now common.

In Australia, Aboriginal life expectancy (male 54.0 years, female 61.6) is around 20 years less than for non-Aboriginal Australians (male 72.8, female 79.1). The life expectancy of Aboriginal people is considerably lower than that of indigenous peoples in the United States (male 67.1, female 75.1), and Canada (male 64.0, female 72.8). Age-standardized death rates for Aboriginal males are 2.8 times those for non-Aboriginal males, while age-standardized death rates for Aboriginal females are 3.3 times those for non-Aboriginal females. Over the past 40 years, the Aboriginal infant mortality rate has declined, but it is still over three times the national average. Over the same period, adult mortality in the Aboriginal population has increased. Aboriginal women in the Northern Territory have cervical cancer rates more than five times those of other women. Currently, the main causes of death among Aboriginal people are the so-called lifestyle diseases - such as diabetes, kidney disease and heart disease - and the diseases of anger and despair - alcohol-related ill health and violence (Khan, 1986). Among Aboriginal men in the Northern Territory, the most important causes of premature death, measured in excess deaths and in years of potential life lost before age 65 (YPLL65), were motor vehicle accidents (11% of excess deaths and 17% of YPLL65), ischaemic heart disease (10% of excess deaths and 10% of YPLL65), and pneumonia and influenza (8% of excess deaths and 6% of YPLL65).

For Aboriginal women, the most important causes of death included homicide (7% of excess deaths and 11% of YPLL65), chronic obstructive pulmonary disease (10% of excess deaths and 5% of YPLL65), and rheumatic heart disease (7% of excess deaths and 8% of YPLL65) (Cunningham & Condon, 1996). Between 1979 and 1991, compared to the total Australian population, remote Aboriginal areas in North Australia had higher rates for a range of diseases, such as infectious and parasitic diseases (up to 22 times higher), cancer of the cervix (almost 12 times higher), diabetes (17 times higher for females), respiratory diseases (12 times higher for females), diseases of the genitourinary system (up to 17 times higher), and homicide (15 times higher for males) (Mathers, 1995). The incidence of hepatitis B at the top end of the Northern Territory was estimated from notification data and hospital data to be 42 per 100 000 among Aborigines, and 4 per 1000 among non-Aborigines, with an odds ratio of 9.7. Among Aborigines, 60% of cases of acute hepatitis B occurred in children under 10 years of age, whereas non-Aboriginal cases occurred in adults aged 20 - 29, most with behavioural risk factors (Wan et al., 1993).

3. Asia

Information about indigenous peoples in Asia is scarce, so only a few individual cases are discussed. Examples of other indigenous peoples not covered in the report include the Kazakh, Uyghur and Kyrgyz in China.

To respond to the needs of aborigines in ***Taiwan, China,*** in 1996 the Government created several aboriginal committees on various administrative levels. The first, established in March 1996, was the Taipei Municipal Government Aboriginal Committee. This was the first time that the term AAboriginal Committee" was used since the beginning of the aboriginal movement. Negotiations are in progress for the recognition of the Ainu as indigenous peoples by the ***Japanese*** Government. Many of the health problems of the Ainu stem from identity conflicts. Alcoholism, domestic violence and abuse are some of the ailments of the Ainu people. Caring for the old, who often live alone, is also a preoccupation. The Ainu are seeking to recover and revitalize their culture as a way to heal their ailments.

The indigenous peoples in ***South -East Asia*** includee the Kachin, Wa, Palaung, Lahu, Pao, and Karens in ***Myanmar***. The Arakan coastal region, in western Myanmar, is the homeland of the Rakhaing people. This was once a flourishing land and a core area of the world's rice bowl. Today its population lives in abject poverty. Thousands of young people emigrate in search of a livelihood in foreign countries, often to be exploited in mining areas.

The tribal peoples of ***Thailand*** have traditionally lived in the highlands of the north and west, along the waterways where they practice rotational agriculture. They have different farming systems for each season, and ceremonies for asking forgiveness for disturbing the land and for giving thanks. They manage natural resources and wildlife, while local leaders maintain peace and good relations within the communities. They have traditionally lived together peacefully with the land, water, forests and animals under the principle of Ause and maintain". Decades of uncontrolled logging and extensive deforestation have, however, reduced the country's forest cover to 26%. The massive flooding and landslides of 1988 also had disastrous consequences. The Government subsequently declared a logging ban, but the situation of indigenous peoples has not improved since then and they are now facing new problems, such as relocation from their lands.

Recent demographic data show that indigenous peoples in ***Viet Nam*** increased from 13.1% to 13.5% of the population between 1989 and 1995. Indigenous peoples in Viet Nam are mostly subsistence farmers. The densest concentrations of indigenous population are in the Northern Mountain, and Central Highland Region, where 59% and 50% of the population, respectively, live below the poverty line. Health problems remain severe. Studies undertaken in the northern mountain zone report a high prevalence of malaria, dysentery, malnutrition and acute respiratory infections as the most common ailments. Other problems include iodine deficiency, bubonic plague and leprosy. The health services infrastructure differs greatly across provincial boundaries, with better capacity in the central highlands. Conflict over land tenure remains the main threat to the survival of indigenous peoples in Viet Nam. The form of cultivation practised requires that patches of land remain uncultivated for prolonged periods of time. Such land is often classified as barren or idle, and its use by indigenous peoples is restricted by the Government.

In the Malaysian state of ***Sabah*** (northern Borneo Island), there are 39 different ethnic groups (among others, the Rungus, Dusun, Murut, and Lun Dayeh), which made up 50% of the total population of 2.6 million in 1997. In ***Sarawak***, 10 000 Penans are threatened by logging. Because their traditional nomadic hunter-gatherer way of life is intricately connected to the forests, only 400 still live in this way, while most are semi-settled. The area affected by the Baku includes 700 square kilometres, affecting 9 500 people from 16 indigenous communities (Kenyah, Kayan, Penan, and Ukit). In ***Peninsular Malaysia***, the Orang Asli remain the poorest and most marginalized sector of Malaysian society. According to official statistics from the Department of Orang Asli Affairs, 80% of this population lives below poverty level. Their death rate from tuberculosis is twice as high as the national average, while the infant mortality rate is more than three times the national average. Malnutrition is common in many Orang Asli localities. According to a 1995 study, Orang Asli women are the most malnourished adult group in West Malaysia, 35% of them suffering from protein-energy malnutrition. Between 23% and 68% of Orang Asli children are underweight, while 41% to 80% are stunted in their growth. Distressingly, 60% of all mothers who die in childbirth are Orang Asli.

There are 14 000 Amungume, which means the first people; they are one of the hundreds of indigenous peoples in ***Irian Jaya*** and the land for them has a unifying and deep meaning. However, 2.6 million hectares of the territory of the Amungume, Comoro and Dani peoples have been lost to a mining area that yields 100 000 dry metric tons of mineral per day.

Dayak is a collective name for the 3 million indigenous peoples of ***Kalimantan,*** with their 450 different languages and cultures. Development ventures in Kalimantan since 1970 have resulted in degradation of the world's oldest rainforest. Some positive developments in the country have been an increase in public awareness, especially through the efforts of nongovernmental organizations and local scientists, of the problems faced by indigenous peoples. In addition, on the part of the international public, there is a growing respect for, and recognition of the outstanding contribution of indigenous peoples in ***Indonesia*** in conservation and sustainable natural resource management. This was evidenced by the 1997 Goldman Award to the leader of the Nentian Dayak of East Kalimantan, L.B. Dingit. The award was presented for his struggle to preserve the rattan stands in their customary forest from invasion by an industrial timber company. Local institutions and organizations, based in indigenous communities in various localities in Indonesia, are gaining strength as their capacity to accommodate and channel the aspirations and interests of the people grows. These institutions and organizations conduct many critical educational activities, which form the basis for sustaining their culture.

Indigenous peoples comprise about 14% of the population in the ***Philippines***, with more than 140 different languages. General assumptions about indigenous peoples are that "they are primitive, continue to observe traditional beliefs and practices, wear colourful clothing with matching beads and adornments, and are either fierce head hunters, or timid and afraid of strangers@ (International Working Group for Indigenous Affairs, 1996, 1997). Colonization and proselytization created a cultural divide between the diverse Philippine populations: the Christianized lowlanders, the Islamicized Bangsamoro, and the "pagan hill people". The Christians became the cultural majority, part of which became the native political masters and economic elites. The latter two resisted or retreated into the interior, opposing various schemes to integrate them into the mainstream culture. They were able to preserve their ways of life, while the lowlanders assimilated the colonial culture and lifestyle. Recent political developments have brought some of these indigenous peoples together, transcending cultural barriers and differences. In the forefront are the various Cordillera peoples, who are now referred to as Igorot. In Mindanao, the non-Islamic and non-Christian groups are known by the term Lumad (native), while in Mindoro, the groups on the island are the Mangyan. There are also indigenous peoples that are grouped together on the basis of their areas of concentration, such as the Negros-Panay or Bisayans (Panay, Bukindon, Negros, Bukindon, and Ati), the Sierra Madre Region (Bugkalot, Kalinga, Alta, Agta, and Remontado), and Palawan (Tagnanua, Pala'wan, Batak, and Molbog). The Ayta people, who are distributed over Luzon, Palawan, Visayas, and Mindanao, have organized locally. Others have formed regional groups, such as the Mamanua. A large number of their settlements are located in marginal areas, where they practice diversified subsistence strategies or a mixed economy of agriculture, hunting and gathering, trading forest products, salaried labour and, in many areas very recently, permanent agriculture. The issues affecting the indigenous peoples in the Philippines can be summed up in terms of recognition of their ancestral domain, aggressive development schemes, and environmental destruction.

India, in ***South Asia***, is a multicultural State so vast and diverse that it is often referred to as a subcontinent. Each state is a mosaic of indigenous populations recognized as Scheduled Tribes by the Government. About 200 distinct cultures total over 33 million people (Debabrata Roy, 1997). In order to support their buffalo milk production, the Van Gujjar pastoralists inhabit the forests or the plains during the winter months and the highland Himalayan pastures during the summer. A kinship exists between them and the animals of the wild because they perceive both to be derived from the same forest womb. They thus consider the killing of wild animals to be a sin leading to public condemnation and social ostracism. To them the forest is a benign and nurturing place. Their understanding is that prosperity comes to those who honour nature's way, just as poverty will automatically strike those who scorn her laws. With international support, they have developed an alternative to a Government-proposed state park that would have evicted them from their land. Thus, the creation of the Community Forest Management Protected Areas Plan granted the Van Gujjar the management of the first people's park in India.

The Kolta are the original inhabitants of the hill region of Jaunsar Bhabar in India. The landlords from the plains subjugated the 19 000 Kolta people and forced them into bondage. The bondage included wives and children. The Abolition of Bonded Labour Act was passed in 1976; however, to this day, the Kolta remain destitute. Furthermore, instead of being granted the status of a Scheduled Tribe, they were deemed to be a Scheduled Caste. In India, under the 73rd Constitutional Amendment pertaining to local government, a number of Jaunsari women and men have taken their place in governance. The Government of India recently passed the Provisions of the Panchayats (Extension to the Scheduled Areas) Act, 1996. The population of the scheduled areas is almost entirely tribal and indigenous, and all the seats as chairperson in these territories are reserved for tribal and indigenous people.

In the Indian state of Maharashtra, the tribal people number over 7 million, according to the 1991 census. There are 47 tribes, among them the Bhils, Gamits, Mahadeo, Kolis, Warlis, and Koknas. In Maharashtra, extremes coexist. While it boasts of being the most advanced industrialized state in the country, the poverty of tribal peoples is abysmal, with thousands of deaths each year from starvation and malnutrition. Tribal people have lost their habitat and survival resources. According to government statistics, a total of 3 821 Korku children below the age of six died between 1993 and 1996 from malnutrition and starvation. The Korku inhabit the forests of the Melghat region in central India. Most of the reported deaths have occurred in a cluster of 22 villages located within the Melghat Tiger River Reserve in Maharashtra where approximately 21 000 Korku families live. The root of the problem is the restrictions and denial of access to traditional sources of subsistence in the forests. In 1857, the British forced settlement of the Korku people and used them as captive labour for timber logging. In 1973, the area was declared a tiger reserve and the inhabitants of the 22 villages were asked to vacate their homes without receiving adequate compensation from the Government. The Adivasi people of the Kalahandi-Bolangir region in western Orissa state and Palamu have also reported food shortages and deaths from starvation in the past three years. According to the Central Planning Committee of the Government of India, the populations of the 41 districts with significant Adivasi populations are at risk of death by starvation.

In Manipur in northern India, the Meiteis represent half of the total population of 1.8 million (Debabrata Roy, 1997). Other indigenous peoples in this state are the Nagas and the Kuki Chin. There has been armed insurgency over the past four decades. In addition, the region has received a large influx of refugees and displaced people from neighbouring countries with a history of political instability. Manipur has remained isolated from the overall social and economic development of India, but continues to be the major source of raw materials for industries in other parts of the country. Agriculture and forestry are still the major means of livelihood. Most of the inhabitants of the region have access to their own, or to community- owned, land and resources. They are aware that their standard of living may not be satisfactory, compared to other regions of the country, but they do not perceive themselves as poor. Rather, they perceive their situation in terms of relative deprivation.

In 1977-1978, 29% of the rural and 27% of the urban population in Manipur were living below the poverty line. By 1991, the proportion of rural families living in poverty (67%) had more than doubled. Infant mortality rates derived from the 1991 Census of India and the 1993 National Family Health Survey are around 21per 1000 for urban and 23 per 1000 for rural areas, compared with 94 per 1000 for the whole country for 1988 (UNICEF, 1990). This indicates that, even within economic constraints, a relatively low infant mortality rate can be attained. However, in 1993, only 29% of young children were fully vaccinated, and 32% had received no vaccination at all. During the two weeks preceding the National Family Health Survey in 1993, 15% of children under 4 years of age had symptoms of acute respiratory infection, 25% were sick with fever and 12% had diarrhoea. For each of these medical conditions, only about one-third of the children had been able to reach a health facility or health care provider. The prevalence of malaria ranges from 16 to 47 per 1000 among stable residents in households. In 1995, 63% of the villages in the state were declared malaria-affected. Over 35% of all pregnant women suffer from nutritional anaemia, and 12% of children suffer from severe malnutrition. Alcohol and heroin addiction are very common. According to the Health Department of Manipur, there were an estimated 20 000 to 30 000 heroin users in 1994-1995. The illicit traffic routes to Myanmar and the "Golden Triangle" pass through this state. In 1991, about 2% of women attending prenatal clinics were infected with HIV, and in 1995, 3.3% of tuberculosis clinic patients had HIV co-infection (Debabrata Roy, 1997). The effects of conflict-related stress are still largely unassessed, even though people's livelihood is seriously disrupted by a social atmosphere of aggression and fear.

4. Africa

The nomadic Kwe originate from the Kalahari Desert. They have lived in balance and harmony with the desert environment for over 40 000 years. This demonstrates their skills in conservation, and knowledge of natural resource management. The ovaHimas are semi-nomadic pastoralists who have lived in the northern part of the Kunene region, in north-west ***Namibia,*** since the 16th century. This region is often called Africa's last wilderness, because of the remoteness of the region and the traditional way of life of the ovaHima nomads. Similarly, the Konkombas live a hidden life, scattered in the bush in northern ***Ghana***.

The Wodaabe are indigenous people who live off extensive pastoralism, migrating great distances every year in search of pasture and water for their animals. They inhabit the open semi-desert landscape in the Saharan zone in West Africa and the northern savanna. There are around 125 000 Wodaabe, of whom 65 000 live in the ***Niger***. Others live in northern ***Nigeria***, the south-western part of ***Chad***, northern ***Cameroon*** and the ***Central African Republic***. A few Wodaabe extended families migrate into ***Burkina Faso*** and even northern ***Ghana***. The situation of the Wodaabe in West Africa is similar to that of the Masai of East Africa. Both Masai and Wodaabe are pastoralists and have a culture very distinct from the settled farmers of the same countries. The Wodaabe continue their north-south migration every year. In the rainy season they migrate north within the Niger, and in parts of the dry season they are forced to cross the national boundaries into northern Nigeria, Cameroon, or other countries south of the Sahara to search for pasture, simply to survive. In years of drought they are forced to migrate even farther, to save their animals (Bovin, 1984). They have recurrently suffered severely from drought, hunger and death, especially between 1969 and 1984. Nowadays, the Wodaabe face the threat of desertification as well as pressure from agricultural colonization by Hausa and Kanuri farmers in southern Niger and northern Nigeria. The situation of the Wodaabe is complicated by the fact that uranium, gold, diamonds and oil are found in the sub-Saharan zone. This means that pastoral nomads will not be allowed to migrate freely as they do now in the areas near Lake Chad. The Wodaabe refuse to attend schools, since these are for settled children. The Wodaabe believe that it is better to keep their children in the bush. They fear that children will be thrown out of school and become, like many youngsters, unemployed and smoking cigarettes on street corners in towns. The Wodaabe are stigmatized, and called "primitive bush people wearing pagan clothing" by settled farmers in villages and by urban West Africans.

The ***Equatorial African*** region contains the largest contiguous area of moist tropical forest in Africa, representing 12% of the world's remaining moist tropical forest (Sayer, Harcourt & Collins, 1992). It is home to several hundred related cultures numbering 12 million people, as well as about 300 000 hunter-gatherers (Colchester, 1994). Forest-dwelling peoples in Central Africa have suffered severe social disruption and exploitation over the past few centuries (Colchester, 1994). They have, however, retained much of their customary systems of land rights and have clear concepts of land ownership and control.

The issue of indigenous peoples is very important at present in ***South Africa***. This springs from the new Constitution which provides for the right of all to participate in their own culture. A section on traditional affairs has been established within the Department of Constitutional Development. Some of the indigenous peoples in South Africa are the Girau, Outeniqua, Khomani, !Xu, and Khwe. The !Xu and Khwe Trust is continuing its efforts in community empowerment and development. A

cultural mediation programme was introduced with the aid of international funding to provide training to teachers, pupils, community leaders and governmental authorities.

5. North America

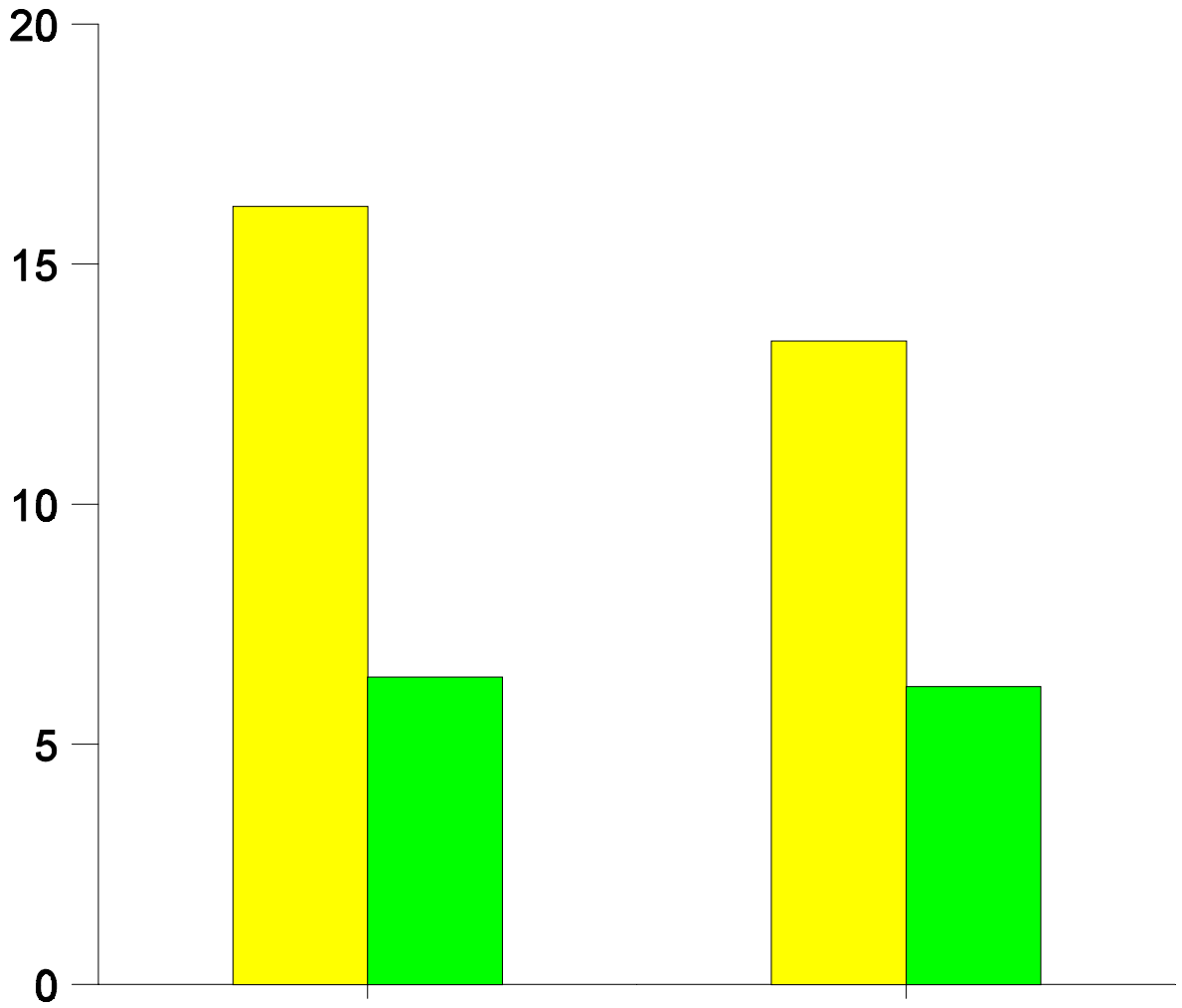
In ***Canada*** there are an estimated 750 000 registered native people, comprising about 3.6% of the total population. The native population is heterogeneous, with 10 major languages. The three main categories by which indigenous people in Canada identify themselves are First Nations (Indians), Metis, and Inuit. Approximately 60% of Indians and Inuit live in the 642 reservations. The overall health condition of the indigenous communities is poor and indicators suggest that they are at a greater risk of tuberculosis, diabetes, suicide, violent death, and alcohol-related illness and injury than the general population. Infant mortality rates are also higher among natives. Even with an improved health outlook over the past five years, the situation is far from optimal. Other social and economic problems facing indigenous peoples in Canada include high unemployment, incarceration, poorer educational attainment, decreased life expectancy and poor housing conditions. Substance abuse is one of the major social and health issues. Even though the First Nations have the political autonomy of a separate government in Canada, native peoples continue to occupy a very marginal position relative to the overall political, economic, social and cultural institutions of the country. In 1968, life expectancy at birth among native men and women in Canada was 63.7 years and 71.0 years respectively. The infant mortality rate among native people decreased from 80 per 1000 in 1960 to 10.1 per 1000 in 1990, but it is still higher than the rate for the general population (6.8 per 1000).

The Medical Services Branch collects data on native peoples living in reserves throughout Canada, highlighting the main problems in these communities. Data from 1991 (Indian Health Information Library, 1996) showed that 45% of native people in Canada smoked tobacco, 60% of whom smoked 11 to 25 cigarettes per day. A total of 41% of adults said that violence was a problem in their communities. Among the youth, 22% were chronic solvent users. With regard to immunization, 31% of native children living in non-isolated areas and 49.7% of those living in isolated communities were up to date for all immunizations by 2 years of age. Among the native population, the age-adjusted mortality rate resulting from accidents and violence was 81 per 100 000 in 1990, compared with 46 per 100 000 among the general population. A high mortality rate in the 15- to 44-year age group was associated with motor vehicle accidents resulting from alcohol consumption. Suicide rates were higher among native people between 10 and 24 years of age, who had a rate twice the national average (22 per 100 000 as against 11 per 100 000).

In Canada as well as in the United States, alcohol and drug abuse are common problems among the native population. A number of studies show higher rates of alcohol and drug use among natives than among non-natives (Wingert & Marvin, 1985; Oetting & Beauvais, 1990; Young, 1992). Another consistent finding is the high suicide rate. In contrast with overall population suicide patterns, Indian suicide rates are higher among the youth (McIntosh, 1984; Berlin, 1987; Young, 1990). Suicide has been linked to failure to adhere to traditional ways of living, weak family structure, and conditions of severe disadvantage (Travis, 1983; Young & French, 1996).

The socioeconomic and health status of Native Americans in the ***United States*** is considerably lower than for the total population (Indian Health Service, 1996). In 1990, 16.2% of Indian males living in reservations were unemployed, compared with 6.4% for the US male population as a whole, and 31.6% lived under the poverty line, as against 13.1% for the US all-races male population (see Fig. 2**)**. Life expectancy at birth for Native Americans was 8 years less than the US all-races life

expectancy in 1972-1974. By 1991-1993, the gap had narrowed to 2.6 years, with life expectancies of 73.2 years for Native Americans and 75.8 years for US all races. The infant mortality rate for American Indians and Alaska Natives during 1991-1993 (8.8 per 1000) was similar to the US all-races rate for 1992 (8.5 per 1000), and somewhat higher than the rate for Caucasians (6.9 per 1000). It was also considerably lower than the Native American infant mortality rate for 1972-1974 (22.2 per 1000).



Employment and income status, American Indians and US all races, 1990 census.

Percentage

American Indians

16.2

Unemployed Males

6.4

US all races

American Indians

13.2

Unemployed Females

6.8

US all races

FIGURE 2

Although there have been significant gains, inequities in health status between Native Americans and the total US population persist. The American Indian and Alaska Native age-adjusted mortality rate for 1991-1993 (all causes 594.1 per 100 000) was above that of the 1992 US all-races rate (all causes 504.5 per 100 000). Higher rates were found among Native Americans for tuberculosis, chronic liver diseases and cirrhosis, accidents, diabetes mellitus, pneumonia and influenza, suicide, and homicide. The death rate for diabetes was 31.5 per 100 000 for Indians, compared to the overall US rate of 13.2 per 100 000. Prevalence of diabetes is also increasing. Using data from the Indian Health Service (HIS), a study found that age-adjusted prevalence of diagnosed diabetes was 8.0%, a 29% increase from the prevalence found in 1990 (Burrows et al., 2000). The age-adjusted death rate for tuberculosis was 2.1 per 100 000 for Indians, versus 0.4 per 100 000 for US all races. Indian rates were below the US all-races rates for HIV infection, chronic obstruction, malignant neoplasm, and diseases of the heart. However, an increasing incidence of coronary heart disease among American Indian men and women was found in the Strong Heart Study. This study was initiated to investigate cardiovascular disease and its risk factors in American Indians in 13 communities in Arizona, and followed up participants from 1989 to 1995(Howard et al., 1999).

For suicide, the highest rates for Indians were found among the 15- to 24-year age group. Rates for Native Americans in this age group were 51.7 per 100 000 for males and 10.9 per 100 000 for females, compared with US all-races rates of 21.9 per 100 000 for males and 3.7 per 100 000 for females. The age-specific accident death rate for Indians (83.4 per 100 000 in 1991-1993) was nearly three times that of the US all-races population (29.4 per 100 000 in 1992), and the age-adjusted Indian death rate resulting from alcoholism was 38.4 per 100 000, compared with 6.8 per 100 000 for US all races.

Examination of cancer mortality rates (1984-1988) among Native Americans is of interest, since it shows dramatic differences among tribes (Indian Health Service, 1997). Overall, cancer mortality rates for the South West Indian Health Service (IHS) areas (Albuquerque, Navajo, Phoenix, and Tucson), are well below the US all-races rates for both males and females. On the other hand, rates in the northern part of the country (Aberdeen, Alaska and Billings) are much higher than rates in the South West IHS areas, and are equal to or greater than the US all- races rates (Fig. 3). In the general US population, females have a lung cancer mortality rate approximately one-third that of males. The IHS data do not show the same male-female rates relationship. In the Alaska area, females have a lung cancer mortality rate 2.6 times the US female rate, and the Alaska IHS female rate is almost as high as that for Alaska IHS area males. In the Billings IHS area, females have a lung cancer mortality rate 2.5 times the US female rate, and equal to that for the Billing IHS area males. For cervical cancer, where there is an easy and inexpensive preventive intervention (Pap smear screening), data showed that all IHS areas had cervical cancer mortality rates higher than the US rate. In the Billings IHS area, cervical cancer mortality was over 5 times the US rate.

Age-adjusted breast cancer mortality rates for females
Calendar years 1991-1993

HIS Area	Rate
* Aberdeen	24.6
* Alaska	17.2
* Albuquerque	6.8
* Bemidji	11.5
* Billings	21.2
California	8.1
* Nashville	12.7
* Navajo	9.7
Oklahoma	12.6
* Phoenix	10.1
Portland	14.6
* Tucson	3.9

******* Please do horizontal bar graph with this data, HIS geographical areas on the y axis and rates at the tip of horizontal bars.******

At the bottom of the bar graph, along the x axis inlcude the phrase:

Rate per 100 000 female population

Further down include the following information:

HIS total areas= 12.3
HIS total 9 * areas=12.9
US all races= 22.4

*The 3 HIS areas that do not have an asterisk (California, Oklahoma and Portland) appear to have a problem with underreporting of Indian race on death certificates. Therefore a separate HIS rate was calculated excluding these 3 areas.

Source: Indian Health Service. Regional differences in Indian Health 1996. Rockville MD. US Department of Health and Human Services

FIGURE 3

The leading causes of hospitalization for US Indian males in 1994 were respiratory system diseases (16.6%), followed by injury and poisoning (15.1%) and diseases of the digestive system (13.6%). About 30% of US Indian female hospitalizations pertained to obstetric deliveries and complications during the puerperium and pregnancy. These were followed by respiratory system diseases (10.9%) and digestive system diseases (10.8%).

Indigenous people constitute a significant proportion of internal and international migrants in the United States. Since 1975, for example, over 50 000 Hmong refugees have settled in the United States. In the city of Minneapolis alone, there were 21 000 Hmong in the early 1900s (Osborn, 1992). In recent decades, a growing number of indigenous people from Mexico and Central and South America have joined this migratory path into the United States. Over 30 000 Mixtecos, Zapotecos, Triquis, and other Indians, mostly from the southern, more impoverished regions of Mexico, have joined the pool of farm workers on the west coast of the United States (Zabin, 1993). About 40 000 Zapotecos live in the city of Los Angeles in California. In the state of Florida, Mayas from Guatemala, displaced by armed conflicts, are also prominent among farm workers. The living conditions of indigenous migrants in the United States are precarious. Access to health services is minimal. Language is a constant barrier, since many migrants speak only their native language. Epidemiological studies on the mental health of Mexican Indian immigrants and agricultural migrant workers underscore the risk posed by cultural adjustment problems, and the potential for progressive deterioration of this population's emntal health with prolonged residence in the US (Alderete et al., 2000a, b).

6. South and Central America and Mexico[4]

Threats to the health and well-being of indigenous peoples in South and Central America and in Mexico, as in other regions, include environmental degradation and exploitation of natural resources (oil drilling, logging, the construction of dams, and water management mega-projects). Land encroachment and displacement, narcotics trafficking, and violence also affect indigenous peoples. Access to health services is inadequate, and particularly so in remote communities. In ***Peru***, while there were 2.77 physicians per 10 000 people in the capital city of Lima, the proportion of physicians in the Amazon department was 0.9 per 10 000 people (PAHO, 1997a).

In ***Honduras***, the areas with a majority of indigenous populations have limited access to health services, and the basic social services infrastructure is weak (PAHO, 1997b). According to a 1993 census 74% of the indigenous population of the Amazon rainforest lived in poverty, compared to the national average of 49.6% (PAHO, 1997a). In ***Ecuador***, in 1996, 80% of the rural children and adolescents in the Andes and the Amazon - where most indigenous people live - were living in poverty (PAHO, 1997c). In ***Nicaragua***, in 1995, unemployment reached 40% among indigenous communities of the Atlantic Coast, 70% in the Autonomous Region of the South Atlantic, and 90% in the Autonomous Region of the North Atlantic (Indera, 1995). In ***Argentina***, in the four provinces with the highest concentrations of indigenous people (Chaco, Formosa, Jujuy and Salta), the percentage of the population with unmet basic needs (35.2% to 38.3%) was about twice the national average (19.3%) (Ministerio de Salud y Acción Social de la Nación, 1996). The Indigenous Census of 1994 showed that, in ***Bolivia***, only 9% of the Guaraní people had access to safe drinking-water (PAHO, 1997d). Life

[4] Sources: PAHO Condiciones de Salud de las Americas 1997a-k, and the International Working Group for Indigenous Affairs (1997).

expectancy among indigenous people in the region is lower than for the general population. In ***Honduras***, life expectancy among the Pech is 39 years for men and 42 years for women. Among the Lencas, it is 47 for men and 57 for women. These figures are considerably lower than those for the total population (male 65.4, female 70.1) (PAHO, 1997b). Similarly in ***Brazil***, life expectancy among the Marubos del Valle de Jaravi in the Amazon was 42.6 years, versus 66.3 years for the general population (Cipola, 1996). In 1993, life expectancy for the Aymara and Mapuche in ***Chile*** was 63.3 and 67.5 years respectively, compared with the national figure of 72 years (PAHO, 1997g).

The 210 different indigenous cultures living in ***Brazil*** have increased in population, currently reaching 280 000 individuals distributed in over 400 villages and settlements. Among the indigenous peoples of Brazil are the Yanomami, Macuxi, Guajajara, Kirkati, Guaja, Kaiapo, Xucuru, Aikewar, and Ava-Guaraní. Within the context of the disarticulation of their traditional ways of life, they do not have adequate access to public social services, and decentralized federal resources rarely reach the villages. The Unified Health System is the system on which all health policy is based. There is a Coordinator for Indigenous Health in the National Health Foundation, an organization that could disappear as part of state reform. This entity works with some indigenous communities but does not have the scope to carry out a consistent nation wide policy. Although there is no systematic collection of data, there is strong evidence that the health situation of the majority of indigenous communities is worsening. There are frequent localized epidemics of malaria, tuberculosis, lung disease and sexually transmitted diseases. Among the Tiriyo, in the northern part of the state of Pará, on the border with Suriname, four cases of AIDS were detected when half of the population of 800 was examined. Health is one of the main causes for concern about the Yanomami. According to the Roraima Indigenous Council, statistics from the Yanomami district health officer of the National Health Foundation showed that the prevalence of onchocerciasis was alarming. Among 14 communities that participated in an intervention, 66.2% of the people were found to be carriers of river blindness. In 1991, a study conducted among the Yanomamis showed the prevalence of the most common diseases: malaria (357.9 per 1000), intestinal parasitosis (117.5 per 1000), and acute respiratory infections (104 per 1000).

The state of health of the Ayoeo, Enxet, Ava-Guaraní, Tomarahos, and other indigenous peoples in ***Paraguay*** is desperate. During 1996, hundreds of children died from diarrhoea, lung infections, and other illnesses that affected 80% of the indigenous population. The incidence of tuberculosis among indigenous people is 10 times greater than the national rate (PAHO. 1997e). Undernourishment, destruction of their habitat, and lack of health care aggravate the poor health of indigenous people in Paraguay. Faced with this, the Paraguayan Institute of Indigenous Affairs has budgeted a meagre one US dollar per person to provide care for indigenous people throughout one year.

Contamination of the Colorado River Basin and the water tables in the Paynemil with petroleum spillage has endangered the health of the Mapuche people of ***Argentina.*** Blood and urine sample analysis on indigenous people living in the area revealed high concentrations of lead and mercury. The oil company blames the mining companies upriver but neither is assuming responsibility for the health of the Mapuches. Other indigenous peoples in Argentina are the Wichi, Chorote, Kollas, Diaguita-Calchaquis, Guaraní, and Tobas. In Argentina as a whole, the experience of local programmes for the prevention and control of Chagas disease and cholera, and the maternal and child health programme, indicates that the health condition of the indigenous population has seriously deteriorated (PAHO, 1997f). For example, of the 188 cases of cholera reported in 1994-1995, all but three (98%) occurred in the provinces of Salta and Jujuy, where there are the highest concentrations of indigenous people (Ministerio de Salud y Acción Social de la Naci ón, 1996). Starvation is a continuous threat among the Tobas in the Chaco region and the Wichi in the province of Salta.

In ***Panama***, in the provinces with a majority of indigenous people, such as Bocas del Toro where the Ngobe Bugle, Bokotas, and Teribe people live, the mortality rate resulting from diarrhoea in 1995 (34.3 per 100 000) was five times the national rate (6.4 per 100 000). This province also reported the highest annual incidence of leishmaniasis in the country (776 per 100 000). The annual incidence of pneumonia in San Blas, the Kuna territory (1203 per 100 000), was six times greater than the national incidence (200 per 100 000) (PAHO, 1997h). Furthermore, in ***Honduras***, infectious diseases account for a very high infant mortality rate (PAHO, 1997b).

Infant mortality rates among indigenous children in the region are alarming. Of the indigenous children born alive in ***Bolivia,*** 20% die before they are one year of age. Of the surviving children, 14% die before reaching school age (Alba & Tarifa, 1993). The average infant mortality rate in ***Ecuador*** was 22 per 1000 in 1994, while in the indigenous communities of Colimbuela and Cumbas it reached 83 and 67 per 1000 respectively. Among indigenous children of the Amazon in ***Peru***, the Campa-Ashaninka had an infant mortality rate of 99 per 1000 and the Machiguenga an infant mortality rate of 100 per 1000. In ***Mexico***, 12% of indigenous children die before reaching school age, compared to 4.8% of children in the general population (PAHO, 1997i). The maternal mortality rate for indigenous women in ***Guatemala*** in 1994 was 83% higher than the country-s average. In ***Panama***, in 1994, the highest maternal mortality rate (44 per 1000) was reported in the Kuna community of San Blas (PAHO, 1997h).

Malnutrition is a common condition among indigenous peoples in the region. In ***Honduras***, in 1993, 95% of children under 14 years of age were undernourished (PAHO, 1997b). In ***Venezuela***, the percentage of undernourished children in states with a majority of indigenous population (Delta Amacuro, 21.3%; Apure, 17.5%; Amazonas, 16.9%) was higher than the national average (13.8%) (PAHO 1997j). In ***Bolivia,*** undernourishment is higher than the national average in the Aymara provinces of Inquisivi, Tamayo, and Omasuyos (PAHO, 1997d). In ***Belize***, a greater proportion of Maya children of school age have developmental retardation compared to children of other ethnic groups (Government of Belize, 1996).

The United Nations Centre for Social Development and Humanitarian Affairs has estimated the migrant worker population in Latin America at 3 million, and their family members at 1.5 million. A large proportion of these are indigenous people. The principal host countries are ***Argentina***, with 1.4 million workers, and ***Venezuela,*** with 755 000. Most migrant workers work in plantations (sugar cane, banana, tobacco, and others) or in other high-risk and low-pay jobs such as construction work. They suffer abuse because most lack legal documents. It is estimated that 40% of the economically active population of ***Bolivia***, a country with a majority indigenous population, migrates in search of jobs. The displacement of indigenous families has serious implications for health. Lack of protection against abuse, labour exploitation of minors, unsanitary living conditions, and lack of health care or health insurance put entire families at risk (PAHO, 1994). A study showed that in ***Guatemala***, 7% of indigenous migrant workers were sick when they left their home, and 34% had one to five episodes of illness in the plantations. Of those who fell sick 34% did not receive medical care (PAHO, 1997k).

7. Summary of findings

As shown above, the mortality and morbidity patterns among indigenous peoples around the world reflect tremendous inequalities and obstacles to achieving the right to health. Table 4 shows the relationship between indigenous and country infant mortality rates for a variety of countries. It is also

apparent that indigenous communities face constraints in their capacity to generate and manage health information. Health status data generated through participatory processes can strengthen the capacity of indigenous communities to assess their assets and problems, and design their own solutions. It is important to develop indicators that can capture not only indigenous peoples liabilities, but also their strengths. Poverty or unemployment categories, for example, are inadequate for quantifying the material assets and resources of rural or pastoral life, or barter-based economies. In these societies, a persons employment status or monetary affluence may be quite meaningless. Whereas the use of variables and indicators that allow comparisons across ethnic groups is necessary, it is also important to develop culture-specific health indicators.

TABLE 4

INFANT MORTALITY RATES (PER 1000 LIVE BIRHTS)

	INDIGENOUS IMR	COUNTRY IMR
USA[1]	8.8 (1991-93)	8.5
CANADA[2]	10.1 (1990)	6.8
HAWAII[3]	14.1 (1980-86)	9.3*
NEW ZEALAND[4] (MAORI)	15.1 (1989-93)	7.4
WESTERN AUSTRALIA[5] (ABORIGINES)	21.5 (1992)	5.2
ECUADOR[2] (CALABUELA)	83.0 (1994)	22.0
ARGENTINA SUSQUES	120.0	
BOLIVIA[2]	116.0 (1989)	99.0 (1984-89)

Sources:

1 Indian Health Services (1996) Regional differences in Indian health 1996. Washington DC. U.S Department of Health and Human Services.

2 PAHO Health Conditions in the Americas 1994 Volume I. Washington DC. Pan American Health Organization.

3 Blaisdell RK (1993) The health status of the Kanaka Maoli (Indigenous Hawaiians). Asian American and Pacific Islander Journal of Health 1(2):116-160.

4 Ministry of Maori Development. (1998) Progress towards closing social and economic gaps between Maori and non-Maori. A report to the Ministry of Maori Affairs. Wellington

5 Office of Aboriginal health. (1998) Information and Evaluation Branch. Aboriginal health in Western Australia. East Perth Health Department of Western Australia

Environmental degradation and land displacement

Data show that environmental degradation and contamination constitute serious threats to the health of indigenous peoples. Environmental assessment indicates that Arctic populations are among the most exposed to certain **environmental contaminants** (radioactive contamination, heavy metals). Contamination also affects the food supply, thus causing deterioration in one of the determinants of good health among indigenous peoples. Heavy reliance on natural foods decreases the risk of health problems (e.g. diabetes and hypertension). For example, the Inuit - who eat natural foods - have lower mortality from heart disease. Radioactive contamination has made the inhabitants of the Bikini Islands dependent on foreign food aid.

Large-scale tourism disrupts local social, cultural and political structures. The Northern Marianas, for example, receive 600 000 tourists per year or 30 tourists per indigenous person. In Belau, with 16 000 indigenous inhabitants, Taiwanese buyers have purchased 600 real estate properties.

Logging, mining, and the building of dams and agribusiness displace thousands of indigenous people from their land. Logging threatens the Penan people in Indonesia, because the Penans' nomadic hunter-gatherer way of life is intricately connected to the forest. A total of 3821 Korku children in India died in a four year period from malnutrition and starvation after their families were denied entry to the Melghat Tiger River Reserve. The projected Baku dam in Malaysia will flood 700 square kilometres and affect 9500 people from 16 indigenous communities (Kenyah, Kayan, Penan, and Ukit). In Africa, agricultural colonization, national boundaries, and the exploitation of natural resources restrict the migration paths of nomadic people. The arrival of development ventures

in Kalimantan since 1970 has resulted in degradation of the world's oldest rainforest and the disruption of the lives of 3 million Dayak people.

Health and maintenance of culture

Low socioeconomic status to a large extent determines the health conditions of native peoples. Poverty and marginalization are associated with diseases of the poor. Malnutrition and infectious diseases take their heaviest toll among infants and the elderly. In addition, changes in traditional lifestyles increase the susceptibility of native peoples to a variety of chronic diseases and addictions related to modern dietary and behavioural patterns. Amidst this double burden of disease, scientific evidence nevertheless indicates the existence of a variety of protective factors associated with traditional culture and lifestyles.

Studies have shown an association between maintenance of culture and decreased rates of infant mortality (Becerra et al., 1991), low birth weight (Guendelman et al., 1990), cancer (Elder et al., 1991), high blood pressure (Scragg , 1993; Prior et al., 1968), diabetes (Ostbye et al., 1989), body fat (McGravey & Baker, 1979), and blood lipid levels (Tuomilehto et al., 1989). Traditional lifestyle and maintenance of culture have also been shown to be associated with protective behavioural factors such as increased physical activity (Prior & Stanhope, 1980) and lower stress levels (Beaglehole, 1992), as well as with lower prevalence of cigarette smoking (Wessen, 1992) and drug use (Oetting & Goldstein, 1979; Bryde, 1970; Vega et al., 1993).

Tradition and culture provide a variety of health-promoting resources, such as networks of social support, self-sufficiency, and access to food and other material resources. By contrast, a variety of sociocultural factors associated with a Western lifestyle are conducive to deterioration of health among indigenous peoples, including severed social networks, perceived socioeconomic inequalities, stress resulting from discrimination, and disjunction between the material and spiritual world (Alderete, 1996).

The present-day conditions of ill-health and poverty among indigenous communities are not the result of indigenous culture or ways of life. On the contrary, these situations are the result of hundreds of years of colonialism, enslavement, land dispossession, and the systematic destruction of indigenous peoples' complex social, cultural, political, spiritual, economic, and environmental order. Indigenous people define and understand the circumstances surrounding their life in terms of multifactorial processes, rather than taking a problem-specific approach. This integral approach also applies to health issues. Thus the territory, family relations, social issues, environmental problems, food security, spiritual strength, and intercultural relations all form part of strategies to achieve health and well-being. Indigenous peoples do not claim the right to return to a primitive past, but instead, to be allowed to maintain as far as possible materially and spiritually prosperous communities. This is the thrust of indigenous paths to development and the renaissance of the universal cycle of life.

Findings can be summarized as follows:

- Indigenous people are overrepresented among the poor.
- In the majority of countries, epidemiological data are not collected and disaggregated by ethnicity.

- Information is particularly scarce for indigenous people living in urban areas or away from reservations or territories, who may be at a greater risk for diseases related to lifestyle and cultural change.

- Culture-specific indicators of health need to be developed.

- Malnutrition and communicable diseases in particular continue to affect indigenous peoples.

- Life expectancies at birth are 10 to 20 years less for indigenous people than for the general population of countries.

- Infant mortality rates among indigenous people are from 1.5 to 3 times higher than those of the general population.

- Higher suicide rates indicate the need to assess the origins of the mental health status of indigenous peoples.

- Smoking, alcohol and drug use are prevalent among many indigenous populations.

- Cardiovascular diseases, diabetes, cancer, unintentional injuries and domestic violence are a significant health problem among some indigenous peoples.

- Land displacement and contamination affect food supply, increasing the likelihood of malnutrition and starvation.

Health advantages among indigenous peoples

- Despite economic limitations, the infant mortality rates among some indigenous peoples are comparable to or lower than those of the general population (e.g. native Americans in the United States, with 8.8 per 1000 in 1991-1993 as against 8.5 per 1000 in the overall population in 1992; Meitei in Manipur, with 21 per 1000 in 1991 as against 94 per 1000 in the overall population in 1988). The Rapa Nui in Chile have a greater life expectancy at birth (72.7 years) than the general population (72 years).

- Indigenous peoples whose traditional ways of life and diet have not been significantly disrupted have low prevalence of diabetes, cardiovascular diseases, and hypertension.

- Studies among immigrants (e.g. Tokelauans in New Zealand) show a lower prevalence of health risk factors such as smoking among less acculturated individuals.

Differences in disease patterns across native populations

- Cancer rates vary widely among native peoples (e.g. differences in age-adjusted cancer rates among US Native Americans across Indian Health Service areas). Some differences in rates, such as those for lung cancer, may be explained by the higher prevalence of risk factors (e.g. smoking and air contaminants); others, such as those for breast cancer, have no identified cause.

Differences in disease patterns between genders

- In the United States, in the Alaska IHS area, females have a lung cancer mortality rate 2.6 times the US female rate, and the Alaska IHS female rate is almost as high as that for Alaska IHS area males. In the Billings IHS area females have a lung cancer mortality rate 2.5 times the US female rate, and equal to that for the Billing IHS area males.

- In 1981, among Pacific Islanders living in New Zealand, males had higher rates of smoking than all males, but among females, Pacific Islanders had lower smoking rates. Among Pacific Islands males, smoking was most common in the 45 - to 64-year age group (45%). Among Pacific Islands women, the highest smoking rates were among those aged 15-24 (26%).

-

Lifestyle changes and acculturation may be associated with a greater risk of developing disease among indigenous women than among indigenous men (e.g. there is a greater increase over time in age-standardized rates of diabetes among Tokelauan migrant women in New Zealand than among Tokelauan migrant men).

IV. HEALTH SYSTEMS

1. Indigenous health and well-being

There are as many interpretations or definitions of health as there are different cultures in the world, for each people develops a concept of well-being derived from its own internal logic and intimate theory of knowledge. There are, however, some common and unifying elements across indigenous cultures (Fig. 4). The Western biomedical paradigm treats body, mind and society as separate entities that can be comprehended in isolation from each other. Indigenous healing systems are based on a holistic approach to health, where well-being is perceived as the harmony that exists between individuals and communities and the universe that surrounds them. Human beings, nature, and the collective history of the ancestors are indivisible from each other. Since matter and spirit never exist independently, illness is a phenomenon of the soul as well as of the body. Furthermore, all elements of the universe possess spiritual qualities, which is why every natural element can either cause illness or cure. Bad air can bring illness, and a plant can restore health, because they have special spiritual powers. Since earth is the mother, the well-being of indigenous peoples is closely related to the well-being of the land. Health is also contingent on adherence to social norms and compliance with moral obligations. When these are transgressed, illness may occur. To restore harmony and hal, a retribution must be offered to compensate for the offence.

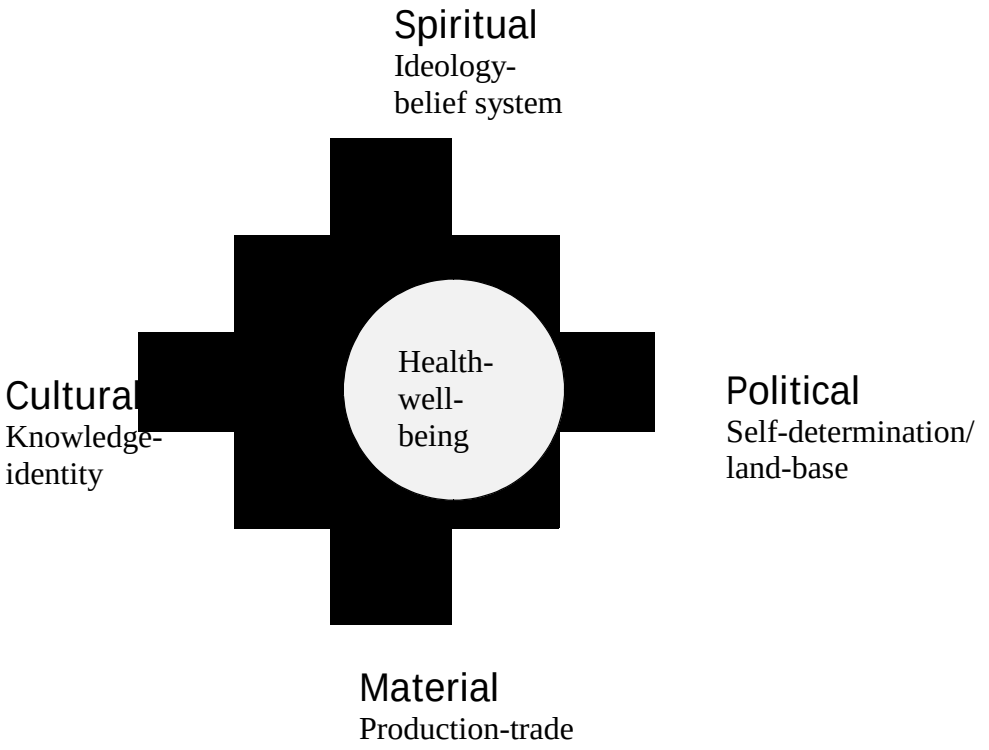


FIG. 4

As stated by a Maori woman, *"Health is the strength of the body, the pride of the youth...the dignity of age... Health is the true knowledge of Maori, the spirit of Maori. Health is our mana and our right...To know and to understand where I come from, where I am going, our history* .

Differences between the Western and indigenous concepts of health go beyond what words can convey. The indigenous concepts are based on different knowledge systems that can be only partially understood by those who have not had this conception of the world handed down through the centuries.

"In order to interpret a symbol we have to try to understand the universe that surrounds it... If we cannot understand Andean symbols...we will never be able to read the messages and knowledge...that are still left...in our ayllus (communities). We would have found merely the text of a myth that only an identification with the Andean spirit will allow us to interpret (Milla Villena, 1983).

2. Traditional healing systems

Healing systems are the knowledge-based practices used by indigenous peoples to maintain harmony of individuals with their communities and with the universe that surrounds them. These practices respond to the internal logic of each of the indigenous peoples and are a product of their unique vision of the universe (world-view). The knowledge of curative properties of plants that is

dispersed throughout the communities (e.g. home remedies) is different from the more complex healing practices of traditional healers. Healing practices involve a variety of elements other than the use of medicinal plants, such as communication with spiritual beings, dreams and the use of the healing power of water and minerals. These practices also carry a strong spiritual component, require special strength and powers, and are conducted only by selected members of the community, the healers.

Indigenous healers possess a broad knowledge base, the product of thousands of years of learning experiences. Furthermore, they possess special strength and wisdom, and have the responsibility for maintaining and transmitting the teachings of the ancestors. They are also political and social leaders of the communities.

"Our wisdom we have not learned in the school, for us there is no university. Our knowledge is not a recipe, but it is a constant walk in a historical process of our ancestors. With life experience one learns many things. On the path, there are so many stones, thrown there because our ancestors have taught us to look on the path, look ahead, look back...we continue to learn...life teaches us and that is why I say each thing has roots, each thing is sacred, each thing has its wisdom (*Adair* [healer] in the Andes).

Traditional healing systems are still vital parts of the healing strategies of most indigenous communities. In all regions of the world, Western medical care and traditional healing systems coexist. For most people, health-seeking strategies involve complex pathways that include choosing from and using a range of methods and providers that may be at their disposal, including both traditional and modern health systems. According to WHO estimates, at least 80% of the population of developing countries relies on traditional healing systems for its primary source of health care (Bodeker, 1997). There are as many indigenous healing systems as there are cultures in the world, for systems of healing are unique products of indigenous peoples history, cosmovision, and interaction with their natural environment. They constitute complex, centuries-old systems of knowledge. As such, traditional healing systems are appropriate and sustainable ways for the maintenance of a community's well-being. From the medical perspective, however, traditional healing systems are often viewed as backward cultural beliefs that impair acceptance of modern health care, or as a last and inadequate resource for populations that have no access to medical services. In some instances they are regarded as harmful. The denial of indigenous peoples cultural values, science and traditional medicine constitutes a barrier to the attainment of health (World Council of Churches, 1996). In practice, given present availability and access, the complementarity of traditional and Western medical healing systems occurs without the need for specific interventions. Besides lack of availability or access, negative social sanctions may preclude the use of traditional systems. On the other hand, lack of cultural sensitivity and appropriateness may preclude the use of medical care.

Institutionally, organizational relations between medical health services and traditional healing systems have been categorized as:

- Monopolistic: only certified medical doctors have the right to practice.
- Tolerant: traditional practitioners are not recognized but are free to practice.
- Parallel: medical doctors and traditional practitioners are officially recognized in equal but separate systems as, for example, in India.
- Integrated: medical doctors and traditional practitioners merge in medical education and practise jointly within a unique health service, as for example in Bhutan, China and Viet Nam (Bodeker, 1993).

Most countries with indigenous populations - particularly outside Asia, where parallel or integrated systems are common - have either a monopolistic or tolerant organization of health services that permits the coexistence of traditional and Western healing systems. This is conditional upon the recognition by a country of the existence of indigenous peoples as such.

3. Access to health care

The information on the health situation of the indigenous peoples around the world presented in Chapter III is indicative of inadequate access to health services and health prevention and promotion programmes, and/or of the cultural inappropriateness of these services and programmes:

- Compared to the total Canadian population, native peoples were less likely to use physician services, even though natives ranked their health similarly to the total Canadian population. Location was an important factor in physician use. Natives residing on reserves had lower levels of self-assessed health, but were less likely to have seen a physician (Newbold, 1997).

- In the United States, about 1 million Native Americans one-third of the total are not eligible for access to health care provided by the Indian Health Service (IHS). Given the overrepresentation within the poor and unemployed, these Native Americans are likely to have no health insurance or economic means to pay for private providers. Budget constraints raise issues of quality and comprehensiveness of care provided by the IHS. Although the population served by the IHS has increased during the past five years, its per capita budget (US$ 1100) is about a third of that for the general US population (US $3100).

- In Peru, while there were 2.77 physicians per 10 000 people in the capital city of Lima, the proportion of physicians in Amazonas department was 0.9 per 10 000 people (PAHO, 1997a). In Guatemala, in 1995, 16.4% of the indigenous mothers received prenatal care, compared with 47.5% of mothers in the general population. Furthermore, 11.7% of indigenous mothers were assisted by personnel trained in Western medical care, compared to 51.8% of non-indigenous mothers (Gomez, 1997).

- In Alaska, the age-adjusted mortality for some types of cancer is higher than for the United States population as a whole, even though the incidence of cancer is comparable.

- Poor access to screening and prevention programmes among indigenous peoples is indicated by higher cervical cancer death rates among Native American women. Many indigenous peoples also have higher rates of a wide range of avoidable risk factors and preventable health conditions (e.g. childhood illnesses, diabetes and other "lifestyle change" diseases, and smoking) than the general population in the countries.

- Compared with non-natives, Pacific Islands people living in New Zealand had higher mean blood pressure levels when controlled for age, blood pressure treatment, and body mass index. Of the hypertensive subjects, Pacific Islands people were least likely to receive treatment, and were therefore considered to be at higher risk (Scragg et al., 1993).

Barriers to health care access include:

- **Structural and economic factors**: distance and location of health care facilities; isolation of indigenous communities; lack of health insurance or economic capacity to pay for services; time factor - losing a day of pastoral, agricultural, or insecure wage production has a higher value for indigenous people than for individuals protected by social benefits packages.

- **Lack of cultural sensitivity and appropriateness of health care systems**: disregard and disdain of health personnel towards indigenous peoples or their culture; disrespect for traditional healing practices; language barriers; uncomfortable and impersonal environment of hospitals and clinics.

4. Primary health care, development and local health systems

The strict medical approach to health services delivery, in addition to failing to meet demand, is inadequate to deal with an epidemiological profile as complex and difficult as that found among indigenous peoples. Moreover, traditional healing practices, while efficient for the management of a variety of illnesses, fall short when it comes to articulating an effective response to some of the new profiles of diseases and health problems arising from current social contexts (e.g. HIV/AIDS). Many of the principles of health for all and primary health care are compatible with indigenous peoples health needs. Community ownership and participation, building partnerships, equity, an integral approach that goes beyond the provision of medical care, and emphasis on disease prevention are elements conducive to the well-being of indigenous communities. Health promotion and the development of local health systems (SILOS) are tools for "enabling people to increase control over, and improve their health" (PAHO, 1993b). The ethnic and cultural heterogeneity of indigenous peoples makes it difficult to adopt single programmes or universal health care models. Diversity means that each indigenous people must be considered individually and that the emphasis must shift towards strategies for sustainable health development, primary health care and local health systems. Within this context, the traditional wisdom of indigenous peoples can be strengthened and revitalized.

WHO has defined health systems as a complex of interrelated elements that contribute to health in homes, educational institutions, workplaces, public places and communities, as well as in the physical and psychosocial environment in the health and related sectors. The aim of a health system is health development - the process of continuous, progressive improvement of the health status of a population (WHO, 1997c). Similarly, local health systems are a set of processes that comprise all social activities in health at the local level, including but not restricted to health services delivery (PAHO, 1993a). The strategy of development of local health systems is a valid response to this health situation, particularly in areas with a diverse ethnic population or a significant proportion of indigenous inhabitants. Health development, primary health care, and local health systems, together with social advances, have contributed significantly to the declines in infant and child mortality and morbidity worldwide, and to the increases in life expectancy at birth seen over the past 20 years. The pace of improvement and the achievement of targets have not, however, been uniform. Inequities between and within countries in health status and health care access are greater now than two decades ago. Disparities in health status have increased among certain population groups within countries, with an impact on indigenous peoples in particular.

The Declaration of Alma-Ata, adopted in 1978 by the International Conference on Primary Health Care, which was jointly sponsored and organized by WHO and UNICEF, clearly stated that primary health care was the key to attaining health for all as part of overall development.

Four basic principles underlie the primary health care approach (Tarimo & Webster, 1996):

- Universal accessibility and coverage on the basis of need;
- Community and individual involvement and self-reliance;
- Intersectoral action for health;
- Appropriate technology and cost-effectiveness in relation to the available resources.

Improvement of a population s health involves much more than simply delivering health services. The people themselves must become key actors in the process. Primary health care therefore promotes community self-reliance and a more active, responsible involvement in improving the community s own health.

This concept of community ownership and involvement has two important aspects. The first is a political issue: the more socially accountable governments are, the greater the potential for real community involvement, in health as in other matters. In addition, decentralization of decision-making allows for greater social control and better implementation of action for health at various levels of the health system. The second aspect of community involvement recognizes that if individuals are to realize their potential for self-reliance, they must take greater personal responsibility for their own and their families health.

The call for health for all was - and remains fundamentally - a call for social justice. Health for all is a process leading to progressive improvement in the health of people, and is not a single finite target. It can be interpreted differently according to the social, economic and health characteristics of each country. There is, however, a health baseline below which no individuals in any country should find themselves; all people in all countries should have a level of health that will permit them to work productively and to participate actively in the social life of the community in which they live. Health for all acknowledges the uniqueness of each person and the need to respond to their spiritual quest for meaning, purpose and belonging. At the same time, health for all is a societal response that acknowledges unity in diversity.

Health development and socioeconomic development are inseparably linked. Health development implies coordination at all levels between activities in the health sector and activities in other social and economic sectors such as education, agriculture, industry, housing, public works, water supply and communications. Hence the need for intersectoral action, that is, action in which the health sector and other relevant sectors interact for the achievement of a common goal. The determinants of health disparities make it clear that access to health care for all population groups is only one area among others to be developed. Others are related to public health services (such as preventive medicine, health education and information); to social policies (legislation, codes of practice) and infrastructure which promote health, especially the health of the most vulnerable; and, finally, to economic policies, maximizing health impact and minimizing health risks.

Health for all involves making health goals a high priority in the overall development process. This requires the fullest consideration of health matters whenever general economic developments are being planned. Evidence must be gathered to sharpen people s awareness of the health benefits of alternative economic development policies and to determine the costs of these alternatives. The health impact of a rise in food prices, a new factory, an irrigation project, or a social security scheme should be fully evaluated. Who benefits and who loses as part of these endeavours should also be assessed (Tarimo & Webster, 1996).

WHO s mandate in the area of sustainable development and health environments springs from the policy declarations of intergovernmental bodies. Three of its most pertinent components are as follows:

Health for all. The overall objective of the health for all policy for equity, solidarity and health is to assist countries and to ensure that health has its rightful place in development. This was endorsed by the World Summit for Social Development in Copenhagen in 1995. To reduce poverty and its health consequences is one of the strategic priorities.

Environment and development. In its Principle 1, the Rio Declaration on Environment and Development (1992) states that: Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature . Principle 3 stipulates that: The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations .

Health and human rights. The WHO Constitution recognizes that the enjoyment of the highest attainable standard of health is a fundamental human right, and WHO will therefore pursue the universal enjoyment of this right by all.

Principles inherent in translating this mandate into action include:

- **Sustainability**: WHO is concerned with the health component of sustainable development, emphasizing the dynamics and impact of globalization, trade and aid, and rapid socioeconomic transitions, and develops policies for ensuring sound nutrition, healthy environments and the right to health.

- **Equity**: Access to socioeconomic development opportunities, a safe environment and adequate food and nutrition is considered a fundamental right. Equity means that people s needs, rather than their social privileges, guide the distribution of opportunities for physical, mental and social well-being.

- **Responsibility**: Through their acceptance of the WHO Constitution, WHO Member States have taken on a shared responsibility for the advancement of human health. This embodies a moral imperative to support vulnerable groups, least developed countries and those affected by disasters, as well as the rights and responsibilities of individuals to promote and protect human health.

WHO s focus on health in sustainable development encompasses a response to the health needs of indigenous peoples. It has set out to provide this response by:

- Integrating health objectives in development policy:
  - technical cooperation with the most needy countries to develop and implement health components of poverty reduction and sustainable development with a strong focus on equity;
  - strengthening national capacities in the analysis of the linkages between poverty, environmental degradation and ill-health and in the assessment of macroeconomic and sectoral policies;
  - identifying and advocating the most effective health contributions to development policies of both countries and their development partners through collaborating with national and international development research institutions;
  - promoting health in development through personal advocacy by political leaders and eminent representatives of civil society and business.

- Incorporating an anti-poverty and equity focus in health policies and interventions:
  - promoting methodologies for identifying the poorest populations and regions as the basis for focused national policies and intervention programmes;
  - technical cooperation and action research, particularly with the most needy countries, to identify effective intervention strategies for combating health inequities and meeting the health needs of very poor populations;
  - promoting the health and well-being of minorities and marginalized populations such as indigenous peoples through international initiatives;
  - developing and exchanging experience of policies in favour of the poor through instigating a network of agencies.

- Coping with the health consequences of globalization, international conventions and other international trends:
  - assessing the health risks and impacts of globalization, including international trade and travel, private capital and aid, migration and transboundary pollution;

- developing risk assessment tools, instruments and methodologies to assess impact, and supporting their application by countries and regional economic cooperation associations;
- making trade and aid work better in improving health outcomes of the poor, and supporting countries in trade and aid negotiations in order to protect health;
- managing WHO collaboration with the World Trade Organization (WTO), UNCTAD, FAO and other international forums concerned with globalization and health;
- contributing to the monitoring and follow-up of major international agreements and conferences related to health, poverty and sustainable development.

5. Health care reform and indigenous peoples

The transformation of national health systems and the development of local initiatives are valuable tactical resources to overcome limitations of health systems among the indigenous population (Paganini & Capote Mir, 1990). This strategy aims to increase equity through decentralization and intersectoral action. However, given the poor social status and/or geographical marginality of the majority of indigenous peoples, it is necessary to assess and monitor closely the potentially negative effects of health reforms.

The aim of health sector reform is to achieve one, some or all of the following goals (Kutzin, 1995):

- To improve health status and consumer satisfaction by increasing the effectiveness and quality of services;
- To obtain greater equity by improving the access of disadvantaged groups to high-quality care;
- To obtain greater value for money (cost-effectiveness) from health spending, considering improvements in both the distribution of resources to priority activities (allocational efficiency) and the management and use of the resources that have been allocated (technical efficiency).

Health sector reforms have been implemented under strong pressures to prioritize budget reductions and cost-efficiency. Economic pressures have determined that reform efforts should focus on financing through user charges and health insurance. In addition, it is unlikely that additional support will become available from governments for health services. Health sector reform is based on the principles of economic efficiency and budgetary constraint. In practice, the goals of achieving equity in access to health care and the need to provide basic health care services to all sectors of the population are often assigned a low priority in the implementation process (Kutzin, 1995). This is so despite the economic assessment theory that, contrary to the case in many other parts of the national economy, governments should intervene in the health sector because of the presence of market failures, i.e. the actions of producers and consumers alone will not yield a socially optimal or economically efficient result (Barnum & Kutzin, 1993; World Bank, 1993a).

Health care reforms in general have fostered privatization of health care, fees for services and reliance on health insurance. For poor populations, this has resulted in the disintegration of safety nets provided by states to their citizens. Thus, the sectors in society with low purchasing power, indigenous peoples in particular, have suffered the greatest impact (WHO, 1995a; WHO, 1995b). The social contract between citizens and the state has been unilaterally and drastically modified to the detriment of the most vulnerable social sectors, as states relinquish their duty to secure their citizens right to health. One of the immediate consequences of health sector reforms has been the collapse of district hospitals and community-level health centres and clinics, and the introduction of user fees, cost recovery, and free-market sales of drugs. Even local medical

supplies and pharmaceutical industries have been affected, as market liberalization brings in imported medicines, paradoxically at exceedingly high prices. In Viet Nam, for example, by 1989, the domestic production of pharmaceuticals had declined by 98.5% in relation to its 1980 level, with many national drug companies closing down (Chossudovsky, 1997). The average annual consumption of pharmaceuticals per capita is considered low by World Bank standards; it is of the order of US$ 1 (World Bank, 1993b). In addition, the real salaries of health care workers have declined significantly and many of them have abandoned the public health sector (World Bank, 1993a). Because of the contraction in public expenditure, communicable disease control and prevention activities have been dramatically curtailed. In sub-Saharan Africa and in Latin America, there has been a resurgence of communicable diseases, including cholera, yellow fever, dengue and malaria. In Viet Nam, the number of malaria deaths increased threefold in the first four years of the economic reforms. This is attributed largely to the deterioration of health services and the increase in price of antimalarial drugs (UNDP/UNESCO, 1992).

According to a WHO analysis (Kutzin, 1995), the potential beneficial effects of health sector reform from the standpoint of equity are usually not realized because:

- Fees tend to dissuade the poor more than the rich from using services.
- Income-based pricing and exemptions have proved very difficult to implement in a consistent and accurate manner.

Studies in many countries, including Bangladesh, the Democratic Republic of the Congo Ghana, Peru and Swaziland, have shown that poor people are more likely to be put off by fees than the rich. Travelling distances, which reflect cost in both time and money, and which are more likely to affect indigenous peoples, have been shown to have a similar deterrent effect (Creese, 1991; Gertler & van der Gaag, 1990). Although the imposition of user fees has decreased utilization of services, there is no evidence that those deterred did not need them (Creese, 1991). Furthermore, no study has conclusively demonstrated the effect of user fees on health status. In addition, user charges have mobilized little economic support to improve the quality of government health services.

Another issue of concern regarding health sector reform is the increase in interregional inequities under decentralization schemes, particularly when they include local generation of resources such as user fees. The regions where indigenous peoples live are usually the poorest. Wealthier districts in a country would be able to spend more on health care and offer better service, thus exacerbating inequities between regions (Thomason, Kolehmainen-Aitken & Newbrander, 1991). Distortions created by health sector reforms should be compensated for by securing additional resources or reallocating existing resources to those in greatest need.

6. Articulation and ownership

The following are some examples of existing health systems among indigenous populations. A discussion on management transfer from government-operated Indian health services to Indian tribes and communities in the United States and Canada is also included.

Articulation of traditional and Western health systems

The Meitei

The health system in Manipur (India) is essentially pluralistic in character. It falls into two distinct categories: the indigenous community system and traditional institutions, on one hand, and the state-run Western health system on the other. Formal health services are still in a developmental stage and are mainly concentrated in the few urbanized areas. Traditional health systems and practitioners are numerous and widely accepted. The main disciplines within the traditional systems are pulse and palpatory diagnostics and manipulative healing, bone-setting and related treatments, herbal cures, and various prayers and ritualistic cures for the individual, family

and clan. The preventive and health promotion traditions are also linked to Meitei astrology. The British introduced a Western medical care system to Manipur at the turn of the 20th century. Since the early 1970s, this has been a regionally administered state health service organized into district- and subdistrict-level hospitals, primary health care centres and dispensaries. The health service is beset by a general lack of resources (1.3% of the total state budget in 1995-1996), inadequate training, lack of equipment, and no supervision. A recent trend has been that nongovernmental organizations are beginning to take on state responsibilities in

health care. This is particularly true in the field of alcohol and drug addiction rehabilitation, the training of nurses and community health care workers, care and support of the mentally ill and handicapped, and home and community care and psychosocial support for HIV/AIDS (Debabrata Roy, 1997).

Indigenous ownership

A serious barrier to health care access is the lack of cultural sensitivity within the health care system. Indigenous cultures and ways of life, including healing systems, are viewed with disdain. Health professionals often hold arrogant attitudes that interfere with patient-provider relations. Furthermore, the infrastructure and rules of functioning of health care facilities are utterly unfamiliar and uncomfortable for indigenous peoples. Therefore, increasing access necessitates accommodating indigenous peoples requests and suggestions on how to make them feel more at home. Indigenous peoples have also engaged in establishing ownership of the process of health development for indigenous peoples. This includes the incorporation of indigenous cultural practices and a holistic approach to healing. There is growing emphasis on the recognition and acknowledgment by native and non-native peoples that indigenous peoples are leaders in community development and in the uniqueness of their healing approaches. Issues of relevance for indigenous peoples are the relationships between land, cultural dispossession, poor health status, and the revitalization of traditional healing practices (Stout & Coloma, 1993).

PAHO's workshop on human resources and intercultural exchange, held in Managua, Nicaragua, in September 1998, brought together participants from government, indigenous organizations and training institutions in seven countries to address the cultural dimensions of health care. It concluded that the cultural dimension was a key factor in developing national health plans and in health sector reform, and was a fundamental strategy in developing health systems.

The Maori

Recent years have seen the growth of a wide range of Maori health provider initiatives motivated by the need to improve the poor health status of Maoris and fill gaps in services. Many initiatives have focused on primary medical care services as part of a broader primary health care service. It is now widely accepted that culturally appropriate services are needed to help improve Maori health status. Some examples of Maori health care organizations are the following *(*Te Puni Kokiri/ Alcohol Advisory Council of New Zealand, 1995): the Waipareira Trust provides a wide range of health services, such as cervical screening, substance and alcohol abuse treatment, monthly diabetic clinics, and free wellness checks; the Waiwhararikì branch of the Maori Women's Welfare League provides cervical screening services; Hiri Hauora provides a culturally appropriate and integrated maternity health service for Maori women; Nga Wairere o Te Ora Clinic conducts spiritual and herbal healing combined with primary health care delivery; and the Maori Mental Health Team has been working on the integration of Maori development through the mental health services.

Australian Aborigines

Crucial to the improvement of Aboriginal health is the development of Aboriginal community-controlled health services. For Aboriginal peoples, community control is the most practical and effective approach to solving their health problems. These services, however, are underresourced and have not received enough support from government agencies. Furthermore, Aboriginal participation in health planning is still at an early stage (Aboriginal Medical Services Alliance - Northern Territories, 1996). An example of Aboriginal-managed health care initiatives is the Alukura, an Aboriginal women s community-controlled health and birthing centre. The Alukura model of primary health care incorporates law, language and culture into a women s birthing service, and provides an alternative for Aboriginal women who feel coerced by the medical system. The feeling among Aboriginal women is exemplified by a quote from a participant in the Alukura programme: "White people have never asked us where we want to have our babies. They ve always said, 'You ve got to go to the hospital' ".

Central and South America and Mexico

The current process of decentralization of health services, within the framework of civil participation and local governance, and with a greater understanding of the pluricultural make- up of Latin American society, may open up possibilities for increased ownership by indigenous peoples (World Council of Churches, 1996). There are, however, a few experiences of indigenous management.

Two of these experiences are the indigenous health programme developed and managed by AIDESEP, the Indigenous Association of the Peruvian Rainforest, and Hambi Huasi, a project of FICI, the Indigenous and Peasant Federation of Imbabura, Ecuador. International funds provided support to set up Hambi Huasi, a community-based clinic staffed by Western-trained medical doctors who are indigenous, form part of the community, and have preserved a strong cultural identity and commitment to the community. The clinic s staff also includes a traditional healer. The relationship between the indigenous Western-trained professionals and the healer is one of mutual respect, and is non-hierarchical; patients choose providers freely.

AIDESEP has maintained health as a priority issue since its establishment in 1980. At present, the indigenous health programme of AIDESEP is a decentralized entity. The health programme is based on a system of clinics and health promoters, following a primary health model. Medical care to isolated communities has been extended and improved. A team of physicians, nurses and health promoters works as part of travelling teams. The health situation of 25 communities is systematically monitored through community-based medical outposts. Recovery, systematization, and dissemination of knowledge on medicinal plants are components of the skills-building strategy promoted by the programme. In the present phase, the programme is strengthening partnerships with the state health sector and universities in joint but indigenous-owned initiatives. At the same time, one of the main objectives of the programme is to strengthen and revitalize shamanic knowledge and the leadership role in communities. Shamans are mediators and have the political skills to intervene in all aspects of community life. The programme also supports indigenous students and professionals, and facilitates their organizational activities (AIDESEP, 1997).

United States of America

A variety of health care programmes in the United States are based on traditional healing practices. Such programmes include the Recovery and Spirit Camps. They are based on the belief that the land, living on it, and having intimate contact with it have intrinsic healing effects. In Alaska, the Spirit Camp idea came from a meeting of elders who were concerned about the effects of modernization and alcoholism on young people. They based the idea on recreating traditional fish camps in which people caught, fried and smoked their winter s supply of fish, living in a peaceful and friendly natural environment. Each village decides on a theme to be addressed in its Spirit Camp, so that the goals, activities and operations are determined by the villages. The project has support from the Alaska Native Human Resource Development Project at the University of Alaska. The Alaska Recovery Camp was started by an ex-drinker. It developed from a belief in the health influences of engaging in traditional activities in the bush, and from the poor results of sending people away to urban treatment centres (WHO, 1996).

Canada

In Canada, there are 382 prevention programmes and 50 treatment programmes, as well as inhalant abuse programmes and research initiatives funded by Health Canada and staffed and governed by Aboriginal boards of directors or by chiefs and councils. In addition, there are approximately 15 provincially funded treatment centres. These treatment initiatives translate into more than 895 treatment beds. A national health promotion programme (Celebrating Success) promotes national alcohol-free and drug-free role models for youth. Over 1400 communities are involved, initially with government funding, but now many are initiating their own programmes.

The approach in Canada has focused on abstinence, but in recent years increasing emphasis has been placed on health promotion and research strategies (WHO, 1996). The community is the heart of indigenous substance abuse prevention and treatment in Canada. Traditional healing practices and philosophy are seen by many Aboriginal people as the foundation for community wellness and empowerment, and such practices need to be part of both training and treatment. The National Native Alcohol Abuse Programme has been the primary national organization involved in treatment efforts. Two major prevention and awareness efforts initiated by the Nechi Training and Health Promotion Institute are the National Native Addictions Awareness Week and the Keep the Circle Strong Campaign, which now involves 1400 native communities across Canada. Spirituality and traditional healing practices are an important part of substance abuse prevention and rehabilitation programmes among Native Americans in Canada and the United States. A study conducted in 1982 in an urban centre for alcoholism treatment among native Americans showed that 74% of clients preferred a treatment approach that included traditional medicine (Locust, 1985). In Canada and the United States, healing circles, sweat ceremonies, and teachings of the elders are the building blocks in substance treatment programmes (York, 1990).

One example of these treatment centres is the Okonagegayin programme for solvent sniffers in Canada. The programme takes place at a rough bush camp about 50 kilometres from the district hospital. It operates in the Ojibwa language and in English, and is built around four phases of ceremonies. These ceremonies include and symbolize detoxification, purification, healing, and unification. Intensive use of sweat lodges is made to detoxify sniffers. Local native people help in preparing food and participate in talking circles. There is drumming, singing and dancing, walks and other ritual practices (WHO, 1996).

Managerial transfer

The Medical Services Branch of Health Canada was created in 1962. This is a Federal Government organization responsible for providing health care services to Indian people. An evaluation of Indian health services strongly suggested that efficiency was often compromised by cultural differences between native people and the health professionals providing services (Gibbons, 1992). The recommendations stressed the need for more native involvement in staffing, and more appropriate training and orientation for care-givers. In 1968, following increasing pressure from First Nations for constitutional endorsement of Indian self-governance, the Canadian Government initiated a new approach to health development. The Health Transfer initiative offered an option to communities in reserves to negotiate the transfer of funds for individual tribes to control certain public health programmes. The types of services that could be transferred included community health work, nursing, environmental health, health education, and management. The sustainability of community health programmes has, however, been compromised by a chronic lack of funds (Walters & Ankomah, 1996).

In Saskatchewan, there are 72 First Nations communities, five different tribes (Assiniboine, Cree, Dene, Sioux, and Saulteaux), nine tribal councils, and various non-affiliated bands. The geographic region is vast, with four types of communities: those classified as remote isolated communities, which are those northern communities accessible only by plane; isolated communities, which are those that have a road but are very distant from a medical facility; semi-isolated communities which are accessible by road and are at least 60 miles from a medical facility; and non-isolated communities, which are accessible by road and close to medical facilities. Given this situation, it is not easy to make decisions that take into account the needs of all. The 72 First Nations of Saskatchewan found it beneficial and cost-effective to work collectively on common issues. One such response was the collective effort to address the issue of funding. For this purpose an advisory group was established in 1995. It reviewed government funding received by tribes and made recommendations. As a result, some projects were coordinated regionally. Examples of these projects are the organization of the Women and Wellness Conference and the Men and Wellness Conference, the establishment of a Community

Wellness Centre, and the Community Action Plan on Inhalant Abuse (Saskatchewan First Nations Youth Inhalant Treatment and Outreach Program, 1997).

In the United States, members of the 550 Indian tribes recognized by the Government are eligible for services provided by the Indian Health Service (IHS). Federally recognized tribes enjoy a government-to-government relationship with the United States of America, based on treaties, Supreme Court decisions, legislation, and executive orders. The IHS is an agency of the US Public Health Service that operates hospitals, ambulatory centres, village clinics, and urban clinics. It provides health care to approximately 1.4 million American Indians and Alaska Natives. Native Hawaiians are not included within the system, nor are Native Americans who are members of non-government recognized tribes, members of recognized tribes who reside away from their tribal territory, or those who have less than 25% Native American blood. Thus, close to one million Native Americans, not including native Hawaiians, lack access to the IHS system. The Indian Self-Determination and Education Assistance Act, passed in 1993, provides tribes with the option of taking over from the IHS the administration and operation of health services and programmes in their communities, or remaining within the IHS direct health system. In 1966, 76 (53%) of the 144 administrative units of IHS were operated by the tribes. Since the allocation of budget for tribes that assume control of their health care programmes and infrastructure is essentially based on size of population, tribes with a smaller population are at a disadvantage. The health plan for native peoples and the transfer of services management to the indigenous communities have received some criticism on the part of native peoples, both in the United States and in Canada, because of the Western medical bias. Critics believe that the transfer is aimed at complying with other national policies, such as reducing the fiscal budget, and that this aim takes priority over the improvement of Native Americans health status (Culhane Speck, 1989; Bobet, 1988). Nevertheless, many Native Americans consider that the managerial transfer of health services is a recognition of the right to self-determination of native peoples and that the transfer of health services to the tribes will maximize the possibilities of improving the health of indigenous peoples (Gibbons, 1992).

7. Population control and Native women

The promotion of birth control methods as a means of population control among Native American women is a source of concern. This concern does not imply that the right of indigenous women to informed choice and access to birth control methods should be jeopardized. On the contrary, the preoccupation is shared by indigenous women throughout the world. This preoccupation stems from the history and experiences of imposition of surreptitious population control practices among poor and marginalized populations around the world (Hartman, 1995). For indigenous women, this is not a thing of the past, but an issue and a practice that can resurface at any time. A report by the Native Women s Health Education Resource Center in the United States addressed the use of Norplant - a relatively new form of contraception - among Native women who use the Public Health Service system. Concerns stem from the lack of appropriate guidelines for counselling, the lack of follow-up of Norplant users, and the lack of concern for the frequency of side-effects experienced (Asetoyer, 1992).

In Peru, a broad range of social actors, including health professionals and women s organizations, have severely criticized the current national family planning programme. This programme is plagued by problems, including the use of quotas, coercion and material incentives to promote sterilization among poor women, the majority of whom are indigenous. Independent research has confirmed that information to patients has been misleading, and the conditions under which surgery is performed have been poor, leading to several deaths.

A fundamental issue is that indigenous perspectives on reproductive health do not find any resonance within the health care system. No channels exist to facilitate the systematization of an indigenous framework for the health of women, the family and the community that can inform the making of health policy. Indigenous women have lacked adequate representation and participation, even in highly publicized international events such as the International Conference

on Population and Development (Cairo, 1994) and the Fourth World Conference on Women (Beijing, 1995).

8. Health training

Training of native health professionals

The training of native health professionals is a preoccupation of Indian communities and tribes in North America. In Canada there are only about 45 native physicians. Of the 234 000 graduate nurses and nursing students, only 2755 were native people. In Canada, the training of addiction counsellors and treatment staff has a history of more than 20 years. Aboriginal training and education programmes now exist in almost all of the provinces and territories, but only a limited number are owned and staffed by natives.

In the United States, the American Indian Health Care Association and the Indian Health Board are involved in health issues relating to Native Americans. Activities include research on health risk factors among urban Indians. The Association and the Board conduct research training for indigenous peoples. They have carried out studies on barriers and facilitating factors for cervical cancer screening among native women, and an educational programme on HIV/AIDS prevention. Recognizing that diabetes is a critical health problem for many Native American communities, not only in the United States but in other countries as well, the University of Arizona s Native American Research and Training Center periodically organizes an international conference on diabetes and indigenous peoples. The purpose of the conference is to exchange information about successful cross-cultural prevention and intervention strategies and programmes. The presence of Native people in the health professions facilitates provision of culturally appropriate health care for Native Americans. Tribes in the United States concerned at the lack of native health professionals have set up scholarships for their members. Other scholarships and training programmes receive government funding. The National Cancer Institute, for example, has funded the Native Americans Cancer Research Training Program, targeting more specifically Native women. This programme aims at increasing the number of native professionals involved in the assessment, development and implementation of cancer prevention and treatment programmes.

Training of traditional healers and midwives as health care workers

Significant efforts have been invested around the world in the training of traditional midwives and healers, both to adapt their practice to Western medical standards and to function as promoters of the Western medical paradigm. An informal assessment by PAHO in the Region of the Americas reached the following conclusions:

- *The training programmes usually did not appreciate or incorporate the knowledge and experience of the traditional practitioners. In general, the training used a top-down approach to impart information, and focused on and emphasized only negative aspects of traditional healing systems.*

- *According to PAHO s evaluation, trainees did not substantially change their practice. Midwives, for example, did not use the basic surgical instruments provided. The bag with the instruments provided during training was commonly seen displayed in homes as a souvenir next to the course diploma, while the surgical scissors were used for trimming bushes.*

    - *The need for the regulation of professional practice of traditional practitioners has also been a matter of discussion. It is important to acknowledge that malpractice can occur in both traditional and medical systems. Unscrupulous physicians exist for whom economic gain prevails over the patient's well-being. The practice of biomedicine by individuals who are not appropriately trained or*

certified is also known to occur. Similar anomalies may occur in the realm of traditional healing practices. Indigenous communities possess customary regulatory and monitoring systems that provide legitimacy for traditional healing practices. These forms of regulation are not systematized according to Western logic and may not be self-evident to outsiders. Within each culture, however, they are as valid as Western regulatory laws.

An evaluation of training programmes for traditional practitioners conducted by WHO (1991a) included a review of the literature and field evaluations of specific projects in Bangladesh, Ghana and Mexico (dealing with traditional practitioners and primary health care). The evaluation documented a few cases with positive outcomes. These included increased referrals to clinics for patients with dangerous symptoms, and improvement of working relations between nursing staff and traditional practitioners. Overall, however, the conclusions point to a series of limitations in this strategy. There was little if any evaluation or follow-up after completion of the training programmes for traditional practitioners. Not enough data were available to assess effectiveness and community satisfaction (WHO, 1991a). Similarly, a review by Piper (1997) found that the evaluation of training programmes for midwives had not produced any clear-cut answers. Rather, the studies had shown that the success of programmes depends on the resources available and on how the training is carried out. There has to be an understanding of traditional beliefs and practices, and a willingness to build on them. The review also found that there had been unwanted side-effects, such as increased infection resulting from regular vaginal examination, discouraging the squatting position, and promotion of bottle-feeding.

Differences in perceptions and lack of mutual knowledge impair the development of collaborative relations between traditional and medical health systems. In a village clinic in Bolivia, for example, the health worker in the clinic, actually a local himself, thought that healers were ineffective in treating illness, and that villagers were ignorant and lacking in hygiene. Villagers, on the other hand, thought that clinic personnel had a judgemental attitude towards their culture and towards the traditional systems of healing. They also thought that the care received at the clinic was ineffective. Through the intervention of a local nongovernmental organization, which aimed at strengthening local systems of knowledge and at improving mutual understanding and cultural sensitivity among health professionals, relations between villagers and clinic personnel then improved (Centro de Comunicación y Desarrollo Andino, 1993). These experiences point to the need to create opportunities for healers and medical personnel to come together at a common meeting point. Such a meeting point could be mutual learning about what each can contribute to community well-being.

9. Medicinal plants and bioprospecting

Medicinal plants are a useful resource for healing ailments of both indigenous and non-indigenous populations, but the use of medicinal plants should not be confused with indigenous healing systems. As previously stated, the latter constitute complex healing systems, and plants are only one of many intervening elements. Besides, medicinal plants often play a variety of roles within community life other than their therapeutic function. Some plants are used in religious ceremonies, possess sacred qualities, and are used as social facilitators and as a medium to communicate with the spiritual world. When ethnobotanists studied the gardens of the shamans of the Sibundoy Valley in Ecuador, it became apparent that these were much more than community pharmacies. In the first place, it was learned that the ethnobotanical categories used in the gardens had a greater degree of discrimination and wider variety of information than the categories used by Western botanists. It was also learned that, through the cultivation of plants, the shamans stored information about the community s history, symbols, and strategies to utilize the environment. The gardens were, in fact, a reservoir of collective knowledge (Pinzon & Garay, 1990).

Economic factors and crises such as wars and epidemics serve to increase the official acceptance, research, and promotion of the use of medicinal plants (Bodeker, 1993). Following

this trend of using low-cost resources, Thailand's Ministry of Health promotes the use of medicinal plants in primary health care. Other examples are the research on and systematization of plants useful in the treatment of burns in Viet Nam, the research on plants active against AIDS in Africa (Bodeker, 1993), and the search for antimalarial drugs to replace chloroquine-resistant synthetic drugs in South America (Milliken, 1997).

Information on the classification and use of medicinal plants is extensive (Morton, 1981; Duke & Vazquez, 1994). A variety of teaching modules for medical students as well as community resource educational materials also exists. Recovery and revitalization of traditional knowledge, particularly of medicinal plants, for community use have been the focus of many grassroots experiences led by nongovernmental organizations around the world. Community-based experiences have been successful in the systematization and dissemination of information on medicinal plants, as well as in promoting local cultivation. These initiatives commonly involve indigenous women, so that gender issues and women's health are also addressed. The following are examples of current initiatives related to the use of medicinal plants.

Médicos Descalzos (Barefoot Doctors)

In Guatemala, the nongovernmental organization Médicos Descalzos has conducted a successful project to strengthen, socialize, and apply traditional knowledge on the healing properties of herbs at the community level. The project s goal is to recover and systematize, through a participatory methodology, the knowledge of traditional healers and communities. It involved information-gathering, plant classification, studies of therapeutic effects, and the preparation of didactic material for the communities. Furthermore, it achieved the revalorization and incorporation of this knowledge within the existing governmental and nongovernmental primary health care system. Medicinal plants are now grown and processed in local gardens, thus providing communities with basic therapeutic products. This programme was initiated in 1990 in a small municipality in Quiché. By 1995, seven geographical areas in Guatemala were participating in the programme.

Global Initiative for Traditional Systems (GIFTS) of Health

The Global Initiative for Traditional Systems (GIFTS) of Health was established in 1993. Its aim is to ensure safe, effective and sustainable health care to those who use traditional medicine in the developing world, and to bring policy and funding attention to this area. Part of the work of GIFTS has been to hold a series of international meetings on the theme of traditional health systems and policy. Meetings have been held in Canada, Uganda, the United Kingdom (Oxford), Venezuela and Viet Nam, in conjunction with indigenous organizations and traditional medicine research and health care centres. The Initiative has published a series of documents and studies showing that it is possible to link biomedical and traditional health practices and services so that a genuinely sustainable pattern of health care can develop (Bodeker & Parry, 1997).

WHO's traditional medicine programme

WHO s traditional medicine programme was established by World Health Assembly resolution WHA30.49 in 1977. An Executive Board resolution in January 1999 stressed "the need for the governments of the countries interested in the use of traditional medical practice to give adequate support to engaging traditional medical practitioners in primary health care teams as and when appropriate and to the utilization of appropriate technology in these traditional medical practices, and to undertake adequate measures for effective regulation and control of traditional medical practices". The programme is conducted with the rationale that traditional medicine is an important part of health care. From 35 000 to 70 000 plant species have at one time or other been used for medical purposes. Most populations in the developing countries still rely mainly on indigenous traditional medicine for their primary health care needs. However, traditional medicine is not incorporated in most national health systems, so that the potential of

the traditional understanding of herbal medicines and their importance to the health of individuals and communities are lost.

In recent decades, in many developed countries there has been a growing interest in herbal medicine, acupuncture and alternative systems of medicine. As a result, the cost of herbal medicines and their international trade have increased. In 1993, the total sales of herbal medicines in China amounted to more than 14 billion yuan, not including US$ 400 million worth of exports. The Malaysian Government estimated that sales of traditional medicine amounted to US$ 60 million, which, for a country with a population of only 15 million people, is quite significant. In the United States and Canada, according to a report in the journal Market of Herbal Medicines, sales of herbal medicines reached US$ 860, million with a growth rate of 15%. In Germany, market sales of herbal medicines reached US$ 1500 million. The national growth rates in other Western European countries were from 5% to 22%, as reported by the European Scientific Cooperative on Phytotherapy in 1992.

In most countries, the same scientific methodology is expected to be used for the evaluation of pharmaceutical drugs and medicinal plants. This involves isolation of an active consttituent, as well as animal testing of toxicity and efficacy. The adequacy of this methodology as it applies to medicinal plants is, however, being questioned and reassessed. Medicinal plants do not act through an active component principle, but derive their properties from the synergy of the totality of component elements. Furthermore, often a variety of plants is used in treatment. Similarly, medicinal plants act by restoring systemic equilibrium rather by than curing a single disease. WHO s 1991 guidelines for the assessment of herbal medicines stated that "as a general rule, in this assessment, traditional experience means that long-term use as well as the medical, historical and ethnological background of those products shall be taken into account", and that "prolonged and apparently uneventful use of a substance usually offers testimony of its safety" (WHO, 1991b).

United States National Institutes of Health and Office of Alternative Medicine

In 1991, the United States Congress established the Office of Alternative Medicine (OAM) within the National Institutes of Health. The mission of the OAM is to encourage and support research on complementary and alternative medicine practices, with the ultimate goal of integrating validated medical practices into health and medical care. The OAM is also charged with training investigators who can help to fulfil this mission. The programme encompasses a variety of alternative medical practices, not only the use of medicinal plants. Its main focus is to validate and institutionalize the use of alternative medical practices among the non-indigenous population. It also seeks to obtain knowledge on indigenous healing practices that may benefit the non-indigenous population, and to conduct validation tests.

United States National Institutes of Health biodiversity programme

Bioprospecting is the search for plant, animal or human genetic materials of potential commercial interest. The launching of new international bioprospecting ventures has produced unease among indigenous communities and organizations, since the implications in terms of environmental and cultural disruption have not been clearly addressed (International Development Research Centre, 1994; Grifo & Rosenthal, 1995; Shiva, 1997; Shiva et al., 1997; Simpson, 1997; Torres, 1997).

The International Cooperative Biodiversity Groups Project is designated to stimulate the field of bioprospecting, to provide models for the development of sustainable use of biodiversity, and to gather evidence on the feasibility of bioprospecting, as a means to:

- *Improve human health through the discovery of natural products with medicinal properties;*
- *Conserve biodiversity through the evaluation of natural resources, training and infrastructure-building to aid in management;*

- *Promote sustainable economic activity of communities, primarily in less developed countries in which much of the world s biodiversity is found.*

The project includes analysis of natural products as potential therapeutic agents for diseases of concern to both developed and developing countries. Among its goals, the project also lists efforts to examine and preserve traditional medicine practices, to ensure sustainable harvesting, to carry out biodiversity inventories and surveys, and to promote training and infrastructure support for host-country institutions and long-term funding for biodiversity conservation in the host countries.

The project falls under the auspices of three United States governmental agencies: the National Institutes of Health, the National Science Foundation, and the US Agency for International Development. A team is established to conduct each international cooperative diversity group. Each team includes an academic principal investigator, academic research institutions, local and international nongovernmental organizations working in the host country, and pharmaceutical partners. The awards are in the form of cooperative agreements rather than grants. This means that the United States Government has continued involvement in the projects through scientific advisory committees that comprise representatives from each agency, as well as providing general facilitation and policy advice.

The cooperative relationship is established on the basis of innovative agreements, rather than contractual terms. The project requires that benefits flow back to the collaborating communities. Local individuals who collaborate with the project, frequently traditional healers, usually receive payment for their services. Royalty terms of contracts are negotiated depending upon the relative contribution of the partners to the invention and other aspects of the drug discovery process. The project prospectus, however, acknowledges that a "seemingly simple idea like returning benefits to communities can be extraordinarily complicated in practice". Bias towards the values of Western science, for example, would probably bear upon the determination of the relative contribution towards the invention. Thus Western scientists and researchers are likely to receive greater recompense than shamans and other knowledgeable individuals in the collaborating communities. Other problems include competing claims and representations. In addition, local communities or their representatives do not have sufficient commercial and legal experience to negotiate agreements. Furthermore, legal counsellors may lack cultural awareness and ignore potentially disruptive aspects of such contractual agreements. The unforeseen consequences of this new form of natural and cultural resource exploitation have yet to become fully apparent. Implementation of this programme does not take into account the detrimental and disruptive effects of the introduction or enhancement of dependence on a monetary economy, or of the promotion of individual competitiveness or animosity between communities.

Cooperative biodiversity partnerships have already been established between academic institutions in the United States, pharmaceutical companies, and local partners in Argentina, Cameroon, Chile, Costa Rica, Mexico, Nigeria, Peru and Suriname. Local partners include academic institutions and, in most cases, indigenous communities or organizations.

The Human Genome Diversity Project

The Human Genome Diversity Project is an effort of scholars around the world to document the genetic variation of the human species worldwide. This scientific endeavour is designed to collect information on human genome variation to help understand the genetic make-up of all humanity. The information will also be used to learn about human biological history and the biological relationships between different groups, and may be useful in understanding the cause and determining the treatment of particular human diseases.

The project has produced widespread concern and uneasiness among indigenous peoples. Indigenous organizations have manifested disapproval of this initiative through their declarations (PAHO, 1993b). The project intends to collect blood samples, hair roots, cells scraped from the inside of the cheek, sputum, and other biological material from a range of 4000

- 8000 distinct human populations around the world. A reason for urgency in collecting these samples, according to the project prospectus, is that many human groups may soon disappear. Although informed consent is a prerequisite for sample collection, it is unclear how the information will be made culturally appropriate in each case. An alleged benefit for indigenous peoples is the possibility of "learning what science believes to be the history and origins of sampled populations". Should any commercial products develop, the project is committed to return part of the financial gains to the sampled population. However, it is stated that "the best ways to implement those commitments are not yet entirely clear. Implementation depends on some complex issues of patent and contract law that have not been entirely resolved".

10. Summary of findings

The following are selected examples of mechanisms that have facilitated participation of indigenous peoples in country and local level governance (e.g. alliances with other social sectors, skill building and training, strengthening of indigenous organizations):

- *In 1751, the civil rights of the Sami were recognized in the Sami Codicil.*

- *In India, under the 73rd Constitutional Amendment pertaining to local government, a number of Jaunsari women and men have taken their place in governance. The Government of India recently passed the Provisions of the Panchayats (Extension to the Scheduled Areas) Act, 1996. The population of the scheduled areas is almost totally composed of tribal and indigenous peoples. All seats for chairpersons in these territories have been reserved for the Scheduled Tribes.*

- *The relevance of indigenous peoples issues in South Africa stems from the constitutional reform that ensures the right to participate in one's own culture. International funding has facilitated the introduction of a cultural mediation programme. Training has targeted teachers, pupils, community leaders and other authorities.*

- *The Russian Federation has passed some laws to protect minority interests, but implementing the new legislation is expected to take time and effort.*

- *The leader of the Nentian Dayak of East Kalimantan, L.B. Dingit, received the 1997 environmental Goldman Award. International recognition fostered an increase in public awareness of the problems faced by indigenous peoples within Indonesia, especially on the part of nongovernmental organizations and local scientists.*

- *In Latin America, Governments such as those of Colombia and Argentina passed constitutional reforms recognizing the social, cultural and land rights of indigenous peoples. These accomplishments are the result of the mobilization of the indigenous organizations and communities. The indigenous movement in these countries has made effective use of communication media, and developed education campaigns and alliances with diverse sectors of society.*

- *In some countries, the indigenous movement strives to have indigenous representatives in parliament. This process implies the use of the structures of traditional political parties, or building and leading new political movements that bring different sectors of society together (e.g. as in Bolivia, Colombia, Ecuador and Guatemala).*

- *Alliances and coordination with international and local environmental nongovernmental organizations have facilitated resistance to development projects deemed to be harmful. Nevertheless, evaluation of the role of non-indigenous nongovernmental organizations with regard to indigenous peoples calls for a case-by-case approach. The impact of each initiative must be carefully assessed on its own merits.*

- *In the Indian state of Manipur, as in most countries, nongovernmental organizations are taking over the State s responsibilities in health care. This is particularly true in the fields of alcohol and drug addiction, HIV/AIDS, rehabilitation, the training of nurses and community health care workers, and the care and support of the mentally ill and handicapped.*

- *Indigenous organizations in Latin America have been wary of non-indigenous nongovernmental organizations acting as intermediaries, and receiving funding in the "name of the Indians". As indigenous organizations grow stronger or dialogue is established, relations may improve. In many cases, however, there is good mutual collaboration.*

- *With support from nongovernmental organizations and academic institutions, the Van Gujjar (India) have developed an alternative to a Government-proposed state park that would have evicted them from their land. The Community Forest Management Protected Areas Plan, the first people's park in India, is managed by the Van Gujjar.*

Health systems

- *Access to health services and health promotion and prevention programmes for indigenous peoples are limited and inadequate. In general, services and programmes are culturally inappropriate.*

- *Barriers to health care include:*

    - *Structural and economic factors: distance and location of health care facilities, and isolation of indigenous communities; lack of health insurance or economic capacity to pay for services; time factor - the relative value of losing a day of productive activity.*
    - *Lack of cultural sensitivity and appropriateness of health care systems: disregard and disdain shown by health personnel towards indigenous peoples or their culture; disrespect for traditional healing practices; language barriers; uncomfortable and impersonal environment of hospitals and clinics.*

- *Indigenous ownership and leadership should drive the development of culturally appropriate health care programmes.*

- *Training of indigenous peoples in the health professions and providing cultural sensitivity training to all health professionals are urgent tasks if culturally appropriate health care systems are to be developed.*

- *The principles of health for all and primary health care are compatible and could form a basis for developing appropriate health systems for indigenous peoples.*

Health sector reform

- *Economic pressures result in a focus on cost-effectiveness rather than on equity of access and quality of care for disadvantaged groups.*

- *The impact of health sector reform on health status is not properly assessed.*

- *There is no evidence that those deterred from seeking health services do not need them.*

- *Health sector reform tends to exacerbate interregional inequities.*

- *Indigenous peoples and communities suffer the greatest impact from the privatization of health care and the imposition of fees for services because of their low purchasing power and their location at a greater distance from services. This distortion should be compensated for by devoting additional resources to health and by the reallocation of existing resources to those in greatest need. Urgent measures must be taken to counter the negative impact of health sector reform on indigenous populations.*

Articulation of traditional and medical health systems

- *In general, the interaction of the Western medical establishment with traditional practitioners is characterized by ethnocentric preconceptions and poor performance in terms of cultural sensitivity. The emphasis on training rather than on mutual learning approaches shows a disregard for traditional knowledge. Top-down and hierarchical relations have precluded bidirectional learning and articulation.*

- *Proclamatory language and practical guidelines often include recommendations for conducting participatory and culturally sensitive interventions. In practice, paternalistic attitudes have been difficult to overcome.*

- *Collaboration between traditional practitioners and medical professionals can be promoted within the physical space of the community, without the need to institutionalize joint practices within a medical setting.*

Medicinal use of plants and bioprospecting

- *Community-based and indigenous-led projects focusing on the systematization of knowledge about medicinal plants and their use in community health care have yielded positive results.*

- *Innovative, promising approaches seek partnership with indigenous organizations, and focus on ailments affecting indigenous peoples rather than populations in industrialized countries. Initiatives should channel academic and scientific contributions towards practical applications for indigenous communities and avoid commercialism.*

- *Current interest in the curative properties of plants has provoked a sense of unease among indigenous peoples and organizations. This unease stems from the following considerations:*

    - *The focus of pharmaceutical research is on potentially profitable products. Thus, major efforts are directed at finding products that are active against diseases that affect or concern affluent populations in developed countries, rather than those affecting indigenous peoples.*
    - *Indigenous healing systems use a variety of methods of restoring harmony, other than plants (e.g. ceremonies and manipulations of the body), and traditional communities constitute reservoirs of knowledge on many issues other than therapeutic science.*
    - *Plants used out of the cultural and physical context of a community, or provided without the power that emanates from the healer, may not have the expected effect.*
    - *Contractual agreements between pharmaceutical industries or their intermediaries and indigenous communities or individuals must be closely monitored.*
    - *The long-term effect of these new joint enterprises on the overall social and cultural cohesiveness of indigenous communities is of concern. Monitoring and evaluation mechanisms must be set up to avoid unethical exploitation and potentially harmful cultural disruption.*

V. WHO INITIATIVES ON THE HEALTH OF INDIGENOUS PEOPLES

Within the framework of the United Nations Decade of the World s Indigenous People (1994-20009, WHO s Executive Board has issued a mandate for developing a global programme of action, and requested WHO's regional committees to consider the adoption of regional action plans (Appendices II, III and IV).

· *WHO International Consultation on the Health of Indigenous Peoples*

WHO conveened an International Consultation on the Health of Indigenous Peoples at WHO Headquarters in Geneva, Switzerland, on 23-26 November 1999. The consultation was opened by Dr Gro Harlem Brundtland, Director-General of WHO. It was attended by 149 participants and observers with balanced representation of indigenous and non-indigenous health professionals from the five continents, and esentatives of governments, United Nations agencies and multilateral organizations. The Consultation was organized by the Department of Health in Sustainable Development (HSD) in the WHO cluster on Sustainable Development and Health Environments. Its aim was to initiate, in partnership with indigenous peoples, the development of appropriate policy to be implemented through a global plan of action addressing and promoting the right to health of indigenous peoples for the International Decade and beyond. The Consultation represented a major starting point in realizing WHO's commitment to give greater attention to the health needs of indigenous peoples, with a participatory approach.

2. WHO programmes on the health of indigenous peoples

Indigenous peoples and substance abuse project

WHO s indigenous peoples and substance abuse project was proposed as a result of the initial findings from a number of activities of the WHO Programme on Substance Abuse in 1992 and requests from indigenous peoples throughout the world. The first phase of the project involved commissioning case study reports from 11 different indigenous communities, and a summary document bringing together the important issues raised in the reports. The second phase was initiated in late 1995. A project planning meeting took place on 25-29 March 1996 in San José, Costa Rica. Following recommendations, a community training manual for prevention of substance abuse was developed by indigenous health professionals. It includes community action, monitoring and evaluation and policy making modules. The manual has been pilot tested in indigenous communities in one of the pilot sites, the province of Jujuy, Argentina. A comprehensive action plan is being developed by the participant community.

Programme officers and indigenous peoples involved in the project attended the Third Healing our Spirits Conference, held from 1-6 February 1998 in New Zealand. The conference provided an opportunity for networking among indigenous peoples in the health professions.

The project principles are:

- *Recognition and acceptance of cultural diversity among indigenous peoples;*
- *Recognition of the special relationship of indigenous peoples to the earth/land;*
- *The need for sustainability, self-determination, equality and reciprocity;*
- *The need for partnership and active participation.*

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The project is based on the understanding that, over the centuries, indigenous peoples have come to learn about the mind-altering properties of many of the naturally occurring substances around them. These substances are often highly valued for their medicinal and nutritional properties, and used in religious and sacred practices. Within indigenous cultures, strict taboos and restrictions have helped to regulate the use of traditional

psychoactive substances. Whereas many indigenous communities have managed to maintain their traditional practices, many more have seen the erosion of their cultures in the face of assimilation and integration policies of dominant groups. The situation is extremely dynamic; as global economic development occurs, more communities are exposed to non-indigenous psychoactive substances. With no tradition of use and social controls, the introduction of new substances can be devastating. In some communities, the use of substances poses the greatest threat to their healthy development. Thus, it is not possible to promote health for all among indigenous peoples without addressing the problems associated with substance use.

Nations for Mental Health initiative

Nations for Mental Health is a global initiative of WHO developed in collaboration with the Department of Social Medicine, Harvard Medical School, USA. Its aims are:

- *To raise awareness of people, communities and governments of the world about the effects of mental, neurological and behavioural problems on psychosocial well-being and physical health.*
- *To promote and support the implementation of mental health policies around the world.*
- *To create country-level demonstration projects to serve as models for larger-scale implementation.*

Dementia, mental retardation, depression, schizophrenia and epilepsy are five examples of disabling mental and neurological problems which Nations for Mental Health will address. Each disorder adversely affects the ability of persons to function in society, and each has dramatic consequences for families and communities. Nations for Mental Health is primarily an initiative for underserved populations. A number of groups of people, because of extremely difficult circumstances or conditions, are at special risk of being affected by the burden of mental problems. These groups include persons in extreme poverty, children and adolescents experiencing disrupted nurturing, abused women, abandoned elderly people, persons traumatized by violence in various forms, migrants, and many indigenous populations. Nations for Mental Health has issued a document entitled "The mental health of indigenous peoples: An international overview" (Cohen, 1999). This document underscores the paucity of research data and the methodological problems faced by cross-cultural psychiatry.

Noncommunicable Diseases (NCD)

Noncommunicable diseases, such as asthma, hypertension, cancer and diabetes, are an important health problem among many indigenous peoples, The link between noncommunicable disease and changes in lifestyle has been demonstrated in a number of studies. In North America, indigenous peoples experience a much higher rate of diabetes than white Americans. NCD has gathered information on diabetes among indigenous peoples, and evidence points towards a causal link with the rapid introduction of carbohydrate foodstuffs.

Roll Back Malaria (RBM)

The aim of the programme is to halve the malaria burden by 2010 by establishing consensus, promoting joint action in countries, ensuring consistent technical guidance, tracking progress, evaluating outcomes, communicating results and providing backing for research and product development. The programme recognizes that partnership is important in improving the health and living conditions of indigenous peoples. Local-level partnerships should engage indigenous communities and nongovernmental organizations. Partnership experiences include the Kayapo Healthy Indigenous Project in the Amazonian Region, Brazil, and a mobile public health programme that brings health care to indigenous communities in Venezuela. In the western hill tract regions (Bangladesh, Thailand and Myanmar) where

malaria is a major health problem, action is being taken to provide health care to disadvantaged communities, and particularly tribal populations.

Special programmes in the Western Pacific Region

In the WHO Western Pacific Region, two countries have particularly active programmes for indigenous peoples. In Australia, programmes include increasing the availability of general medical practitioners and improving health services for sexually transmitted diseases, including HIV/AIDS. A national training and employment strategy, in partnership with Aboriginal communities, supports the development of a workforce for health service delivery to indigenous communities, especially those in rural and remote areas. The New Zealand Government plans to increase the responsiveness of the health sector, with resource allocation priorities that take into account specific Maori health needs. A critical requirement to support improvements in Maori health status is an accelerated development of professional Maori health care staff.

3. PAHO's Health of Indigenous Peoples initiative

In 1993, PAHO's Health of the Indigenous Peoples initiative was established in the context of the heightened attention given to indigenous peoples that surrounded the 500th anniversary of the arrival of Europeans on the American continent. During this period, indigenous peoples and their organizations were able to capture the interest of the media, forge alliances with a range of social sectors, obtain government recognition, and lobby for supportive legislation. An ongoing dialogue was also established with international organizations that conduct programmes affecting the lives of indigenous peoples. Within this framework, the Canadian Government drew attention to the need to address the health of indigenous people. In recognition of the technical complexity and political implications of the issue, it was recommended that a regional consultative workshop be held. This workshop was held in Winnipeg, Canada, in 1993, under the sponsorship of the Canadian Society for International Health and other agencies, including the International Development Research Centre. Eighteen countries were represented at the workshop. The meeting brought together government officials, health professionals, indigenous organizations, international agencies and nongovernmental organizations. As a result, the Health of the Indigenous Peoples initiative was launched.

Indigenous recommendations were incorporated in a report, which was then adopted by PAHO's Directing Council in resolution CD 37.R5 and confirmed by the countries' ministers of health. The Directing Council s resolution, approved in September 1993 (see Appendix I), entails a commitment by the Member Governments, at least at the policy level, to give priority to the improvement of the health of indigenous peoples, and to respect their culture and ancestral knowledge. The resolution is based on the following principles that incorporate the fundamental concerns of indigenous peoples (PAHO, 1993b):

- ***The need for a holistic approach to health;***
- ***The right to self-determination of indigenous peoples;***
- ***The right to systematic participation;***
- ***Respect for and revitalization of indigenous cultures;***
- ***Reciprocity in relations.***

Subregional meetings replicated the consultative process and served to sensitize not only PAHO s representatives but government officials as well. Indigenous leadership and participation have continued to be part of the planning and analytical aspects of the initiative. At the institutional level, there has been a predisposition to believe in the capacity and potential of indigenous peoples, to recognize the contributions of indigenous

knowledge and culture, and to appreciate cultural diversity as an asset. At the country level, however, greater involvement of indigenous peoples and organizations needs to be achieved. Country-level implementation of institutional directives is generally more problematic and difficult to monitor.

PAHO's initiative is in concert with the goal of achieving health for all and with the equity principles of health sector reform, which accord priority to the provision of health care to the most vulnerable groups of the population. The initiative currently comprises four areas of work:

- ***Building capacity and alliances;***
- ***Supporting the countries to implement the resolution;***
- ***Mobilizing resources for projects that address priority health problems in vulnerable populations;***
- ***Developing and strengthening health systems in multicultural communities.***

Initial efforts focused on the promotion of intercultural training of human resources, and the elaboration of basic health indicators for indigenous peoples in the Americas.

The following are some of the tangible process-oriented products of the initiative:

- ***Adoption of resolution CD37.R5 on Health of indigenous peoples by PAHO s Directing Council (September 1993);***
- ***Intersectoral regional workshops (Andean, 1994; Meso-American , 1994);***
- ***Collaborative agreement with the indigenous Parliament of the Americas (1996);***
- ***Traineeships for indigenous health professionals;***
- ***Regional meeting on traditional medicine (Guatemala, 1994);***
- ***Working meeting on health policy and indigenous people (Quito, Ecuador, 1996);***
- ***Working meeting on research and indigenous peoples (Washington, DC, 1995);***
- ***Sponsorship of country workshops on indigenous peoples and health, and facilitation of the establishment of task forces in countries;***
- ***PAHO Meeting on Strategic Orientation for the Implementation of the Health of Indigenous Peoples initiative (Washington, DC, December 1997);***
- ***PAHO Workshop on Human Resources and Intercultural Exchange (Managua, Nicaragua, September 1998).***

4. Lessons learned

Several years after the launching of the PAHO Health of Indigenous Peoples initiative, it is important to reflect on its accomplishments and limitations. As an innovative approach to interethnic and intersectoral relations in the continent, the initiative has contributed significantly to the development of public policy. The implications of this approach and the lessons learned can provide insights for the sectors involved, and for those interested in the development of social policies in a world that has a precious yet undervalued asset: its cultural diversity.

Public policy accomplishments

In terms of public policy, the initiative s accomplishments have been as follows:

Promotion of intersectoral dialogue

The PAHO ‘s initiative is innovative in several ways. First, it represents an institutional response to expressed needs of indigenous peoples. Second, indigenous participation and ownership are essential. Third, it requires multisectoral participation at

the country level. Thus, governments and indigenous organizations must come together in a process of negotiation and consensus building. This type of initiative provides an opportunity for a horizontal, bidirectional joining of parties that often regard each other with mutual distrust.

Recognition of indigenous peoples as social actors

Direct contact and involvement with international organizations accord recognition to indigenous peoples as social actors and strengthen their negotiating leverage with governments. Issues of common interest to indigenous peoples and international institutions include: the contribution of indigenous peoples knowledge to achieving sustainable lifestyles, the protection of the environment, and the benefits of a holistic approach to health and development. The ability of indigenous peoples to mobilize funds and social support at the international level has a positive influence on the way in which local multisectoral relations are conducted. Indigenous peoples and organizations often have to deal with local governments from the standpoint of disenfranchised citizens with little lobbying capacity. International recognition of their cause increases their validity as social actors capable of participating in local governance.

Education of the public

Contributing factors to mistrust, prejudice and paternalism towards indigenous peoples are misinformation and lack of knowledge. A common pattern throughout the countries of the Region of the Americas is that the mainstream society in general, and professionals and public officials in particular, lack information and understanding of indigenous peoples. Even in those countries where indigenous peoples constitute a broad and evident sector of the population, explicit and covert social segregation and boundaries keep indigenous peoples invisible to the eyes and minds of the non-indigenous. Although often living in close contact, few venture into the indigenous social sphere. Even fewer do so without preconceptions of the superiority of Western culture. Socially constructed perceptions about the "invisible others" are blurred and arise from fear of the unknown. They are based on the distorted and prejudiced descriptions inherited from a history of colonial relations. Lack of mutual knowledge and misinformation hamper the possibility of dialogue and understanding. In recognition of this state of affairs, public information and education have been a main focus of activity of the indigenous movement.

Paucity of information has also been recognized by international institutions as one of the main barriers to the implementation of programmes related to indigenous peoples in the region. On one hand, there is disbelief in the capacity and potential of indigenous peoples to assume positions of leadership and management, and in the premise that traditional knowledge and ways of life constitute a sound basis for sustainable and prosperous communities. On the other hand, the aspirations of indigenous peoples to assume control over their collective and individual destiny have raised fears of segregation and separatism. Whether in one-to-one personal contacts or workshops and public forums, initiatives of international agencies contribute to bidirectional education and information, and to influencing public perceptions about indigenous peoples. They create opportunity for dialogue, where potentially conflictual issues can be explained and negotiated.

Facilitating factors

Factors facilitating the PAHO initiative include the following:

Favourable sociopolitical conditions

At the time PAHO s initiative was launched, the indigenous social movement in the Region of the Americas had achieved a significant level of organization. Furthermore, the

sociopolitical environment was conducive to public debate and civic participation. This is not to imply that similar initiatives cannot be launched under less favourable political conditions, but rather that, under such circumstances, opening channels of social participation and intersectoral dialogue may be a necessary component of the initiative.

Tagged project funds

As with any other resource, the distribution and allocation of government funds is to a large extent a function of the lobbying capacity and political clout of each interest group within a country. Indigenous peoples are at a disadvantage, compared to other sectors of society, in lobbying for state funds. The drastic economic reform programmes launched by governments in the region, coupled with the increase in the population living in poverty in the last decade, have reduced the capacity of the state to divert specific economic resources to meet the needs of indigenous peoples. The availability of international funds specifically earmarked for indigenous peoples provides a response to the plight of those in greatest need. Alternative channels that allow direct allocation of funds to indigenous organizations and communities must be sought. However, when resources are managed through state agencies, indigenous leadership, ownership and participation must be ensured.

Speaking a common language

Speaking a common language means a meeting of minds aimed at sharing value systems. Understanding the differences between concepts such as a "vision of the universe" and "human development" is bound to bear fruit in terms of common understanding of what is needed and how to formulate it. Indigenous perspectives on health, well-being, spirituality and traditional healing systems - in sum, the indigenous cosmovision - have been incorporated as part of the philosophy of the PAHO initiative. This process has entailed a revision and reassessment of the medical paradigm and its relevance to non-Western populations. The common language of the initiative and of indigenous peoples is conducive to developing mutual understanding and learning.

Reciprocal relations

Reciprocal relations refer to dialogue and a will to learn and understand. These are factors that contribute to consolidating trust and more solid collaborative relations. PAHO has strived to establish a dialogue with indigenous peoples. It has promoted among professionals, within and outside the institution, a predisposition to learning and a belief in the capacity of indigenous peoples. The social dynamics derived from this approach have facilitated the interrelationship of indigenous peoples with the institution and its representatives. In September 1997, the emphasis on this approach was reaffirmed by PAHO's Directing Council in resolution CD40.R6. This resolution states that, in recognition of the multicultural character and heterogeneity of the people in the Region, the initiative's plan of action will be based on a multicultural, multidirectional, intersectoral and interdisciplinary process of mutual learning and skill building.

Setbacks and limitations

PAHO's evaluation of the Health of Indigenous Peoples initiative has highlighted the following setbacks and limitations that need to be addressed to improve the is effectiveness.

Lack of epidemiological data

Few countries routinely collect and analyse vital, epidemiological or health service data by ethnicity. Therefore, it has been difficult to develop baseline data by country, and to

have an adequate assessment of the health and living conditions of indigenous peoples in the Region. Future efforts will be directed at promoting the classification of core data by ethnicity, with the goal of monitoring inequalities in health status and access to services. In the short term, substitute indicators will be used, such as data by municipalities with 50% or more indigenous population as compared to national data. This database will permit a more efficient allocation of scarce resources. It will also permit further analysis of risk and protective factors by ethnicity.

Lack of recognition of ethnic diversity

The majority of the countries in the Region have demonstrated interest or are actively participating in the initiative. However, a few have taken the position that they do not have an indigenous population or that all citizens have access to health services. They argue that there is no need to focus on a particular ethnic group. This may result from a lack of understanding of the attributes of distinct societies and cultures.

Equity and health care reform

The countries in the Region have advanced in health sector reform. Equity and provision of essential health services for all are stated guiding principles of this reform. However, the process is driven by an emphasis on privatization and economic efficiency. In order to comply with the equity principle of health care reform, governments should assume responsibility for providing good-quality and appropriate health services for indigenous peoples.

Limited indigenous participation

Although the initiative has sought indigenous guidance, only a few of the large number of organizations and communities throughout the continent are involved. Therefore, not enough progress has been made in systematic indigenous participation. Very few countries have established technical government commissions with indigenous representatives, although a number have developed interprogrammatic task forces or commissions in ministries of health. Governmental indigenous institutions do not always have visible indigenous involvement and do not consider health as a high priority.

Slow indigenous mobilization to participate in intersectoral initiatives

At times, indigenous organizations are suspicious of the efforts of international or governmental institutions to establish a dialogue, without thoroughly assessing the potential benefits of the situation. When an undesirable outcome is feared, and the benefits of the situation are not clear, indigenous organizations may choose to withdraw from participating. This strategy is often a result of negative experiences in the past.

Institutional shortcomings in tracking interprogrammatic efforts

Tracking interprogrammatic initiatives within PAHO that relate to indigenous peoples has been problematic, especially when a more general project includes a component or activities related to indigenous health. In the case of the initiative, this issue acquires special significance, since it entails the adoption of ethical and practical principles that may not be evenly understood or shared across programmatic areas within the institution. Monitoring compliance with guiding policies at the institutional level is problematic, and is even more difficult at the country level.

Uneven commitment across PAHO s programmatic areas

Another problem, common to large institutions, is the uneven level of interest in and commitment to the initiative across different programmatic areas within PAHO. Given the high workload and demands of existing programmes, it is common to encounter the perception that most of the responsibility for carrying out the initiative falls on the initiative's own staff. The aims of the initiative and its development tend to be isolated from overall programmatic interests.

Limited capacity to disseminate information about the initiative

PAHO s initiative and the Directing Council resolution on the health of indigenous peoples constitute important tools for indigenous peoples and concerned health professionals since they express a governmental commitment to promote the participation and the health and well-being of indigenous peoples. Dissemination of this information in the countries, however, has been limited. This in part results from the limited capacity of PAHO to reach a variety of social sectors and to elicit the interest of some indigenous organizations, which may mistrust PAHO as a foreign institution. In response to these concerns, PAHO has produced and distributed a video and a brochure. It is nevertheless also important for indigenous peoples and their organizations to assume responsibility for examining, assessing and socializing relevant information, especially when it has been delivered to them. Similarly, indigenous participants in regional consultative workshops must also assume responsibilities for information dissemination.

Failings in resource mobilization

Mobilization of economic resources in support of the initiative has been slow. Funding sources are fewer than initially expected. Barriers to accessing funds have not yet been clearly identified. PAHO will focus on efforts that can be carried out with limited additional resources, encourage programmes and countries to allocate small amounts of regular funds, and look for assistance from less traditional donors.

Barriers to effective implementation

The barriers to effective implementation of the PAHO initiative include the following.

Human attitudes

Human attitudes and behaviours are inherently difficult to modify. Human beings construct their perceptions and their view of the world as they process and internalize information from the physical and social environment that surrounds them. As a human being reaches maturity, behaviours and attitudes are normally ingrained in the individual personality. Behavioural change is by then a difficult process. However, it is worth attempting. As in every other aspect of human socialization, interethnic relations bear the burden of preconceptions and stereotypes that the social actors bring into the interaction. In developing a programme of action such as the Health of Indigenous Peoples initiative, individual’s ability to overcome potentially prejudiced preconceptions is of utmost significance. On the other hand, the inability effectively to overcome ethnic stereotyping and prejudgement is a significant barrier to the development of constructive interethnic relations. A felt need expressed in almost every intersectoral workshop and consultation has been the need to develop effective strategies for intercultural sensitivity training and skills development for health professionals and health sciences students.

Complexity of working through governments

On one hand, working through government agencies provides opportunities for institutionalization and continuity of specific actions. On the other hand, it imposes on projects a slow pace and reduced effectiveness that may be avoided by direct involvement of indigenous organizations or communities. Effective indigenous participation and ownership require special efforts. Governments may be prone to seek participation only from indigenous organizations or communities that are political affiliates. Alternatives to working through governments should also be sought as a means of diversifying activities and approaches.

Coordination among indigenous organizations

A barrier to the more systematic and widespread participation of indigenous peoples is their inability to develop effective mechanisms of coordination at the country level. Often, indigenous organizations appear fragmented, and to outsiders the internal politics of the indigenous movement may seem like a maze. Even though the existence of centralized indigenous organizations may facilitate the work of outside institutions, this may not be the choice of the local organizations or communities. In fact, in some cases, this will not be in their best interests. Nevertheless, the new opportunities for social participation require the development of some forms of indigenous coordination that will allow for effective interactions, flow of communications, and participatory and expeditious decision-making.

5. Summary of findings

In summary, the contributions of international initiatives are as follows:

- **Development of intersectoral dialogue and concordant public policy;**
- **Recognition of indigenous peoples as social actors;**
- **Education of the public.**

Factors that facilitate the implementation of international initiatives include:

- **Favourable sociopolitical conditions;**
- **Tagged project funds;**
- **Speaking a common language;**
- **Reciprocal relations.**

Limitations and setbacks likely to be faced by international initiatives for indigenous peoples include the following:

- **Cases in which there is a lack of recognition of ethnic diversity;**
- **Limited indigenous participation;**
- **Deficiencies in tracking interprogrammatic efforts;**
- **Uneven commitment across programmatic areas;**
- **Limited capacity to disseminate information about the initiative;**
- **Deficiencies in resource mobilization;**
- **Poor country-level coordination among indigenous organizations;**
- **Slow indigenous mobilization to participate in intersectoral initiatives;**
- Unfavourable human attitudes;
- Complexity of working through government.

VI CONCLUSIONS

The conclusions set out below include those drawn from the main findings of this review as well as general conclusions drawn principally from the proceedings of meetings of indigenous peoples in the Region of the Americas.[1]

General Principles

Public action for supportive environments for health must recognize the interdependence of all living beings and must manage all natural resources taking into account the needs of coming generations. Indigenous peoples have a unique spiritual and cultural relationship with the physical environment that can provide valuable lessons for the rest of the world. It is essential therefore for indigenous peoples to be involved in sustainable development activities and negotiations that are conducted concerning their rights to land and cultural heritage.

Initiatives that involve indigenous peoples should be based on sound philosophical principles that ensure mutual understanding and respect. These principles include:

102. The need for incorporation of a holistic world-view.

103. The decision-making rights of indigenous peoples over issues that affect their life.

104. The right of systematic participation.

105. Respect for and revitalization of indigenous cultures and ways of life.

106. Reciprocity in relations.

Health conditions

In terms of health conditions, the following conclusions may be drawn:

107. Mortality and morbidity patterns among indigenous peoples reflect inequities and curtailment of their right to health.

108. Tradition and culture provide health-promoting resources, such as social support network, self-sufficiency, and access to food and other material resources such as healthy diets.

109.

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[1] See WHO/PAHO (1994 b,1994 c); WHO/PAHO/ Canadian Society for International Health (1994); WHO/PAHO (1995); World Council of Churches (1996). See also the Sundsvall Statement on Supportive Environments for Health,adopted at the Third International Conference on Health Promotion, Sundsvall, Sweden, June 1991.

Environmental contaminants (e.g. radioactivity, heavy metalsand oil spills) and land displacement pose significant risks for indigenous peoples, who are highly dependent on the environment for survival.

110. Sociocultural factors associated with Western lifestyles are conducive to deterioration of health among indigenous peoples (e.g. severed social networks, perceived socioeconomic inequalities, stress as a result of discrimination, and disjunction between the material and spiritual world).

111. The health situation of indigenous peoples is the end result of a historical process that has fostered dependency, loss of identity and marginalization.

112. Indigenous peoples define and understand the circumstances surrounding their life in terms of multifactorial processes, rather than by taking a problem-specific approach.

Health systems

With regard to health systems, the following conclusions may be drawn:

113. Data on the health conditions of indigenous peoples around the world are indicative of inadequate access to health services and prevention programmes or of the cultural inappropriateness of the health care system.

114. Barriers to health care include structural and economic factors, and lack of cultural sensitivity and appropriateness.

115. Current evidence indicates that access to health services among social groups with low purchasing power, such as indigenous peoples, has been further limited by health sector reforms.

116. The interaction between the Western medical establishment and traditional practitioners has been characterized by poor performance in terms of cultural sensitivity.

117. The principles of the health for all strategy are compatible with, and serve as a basis for, developing appropriate health systemsfor indigenous peoples.

118. The development of appropriate health services requires the training of indigenous peoples in the health professions, and providing cultural sensitivity training to all health professionals. These are urgent tasks if culturally appropriate health care systems are to be developed.

119. Health care planning requires capacity- building within indigenous communities for monitoring and evaluating physical, mental, spiritual and cultural conditions, and for defining and implementing solutions.

Medicinal use of plants

With regard to the medicinal use of plants, it can be concluded that:

120. Community-based and indigenous-led projects focusing on the systematization of knowledge about medicinal plants and their use in community health care reflect generally positive experiences.

121. Current interest in the curative properties of plants is a source of concern among indigenous peoples and organizations. This unease stems from a focus on potentially profitable products and from a disregard for the potential long-term detrimental effects on health, culture and the environment of these commercial ventures.

Policy

With regard to policy, the principles of equity demand immediate concerted action on the part of governments and international agencies to ensure access to comprehensive and culturally appropriate health services, and to promote health development among indigenous peoples. Policy guidelines include:

122. Promotion of indigenous ownership, and management of culturally appropriate health services for indigenous peoples.

123. Strengthening and revitalizing traditional healing systems and promoting the articulation of Western and traditional healing systems, with mutual learning approaches.

124. Promotion of respect for ethnic and cultural heterogeneity of indigenous peoples and understanding of the inadequacy of universal health care models.

125. Promotion of joint efforts between indigenous peoples, governments and national and international governmental and nongovernmental agencies to address the complexity of the health situation of indigenous peoples.

126. Promotion of joint international action to set boundaries to development and ensure support for alternative indigenous self-development models.

Proposals for action

International agencies should take the following steps:

127. Require the participation of indigenous peoples in the leadership and management of initiatives from the earliest stages.

128. Establish a programme of international and national cooperation activities.

129.

Establish intra-institutional, interprogramme coordination.

130. Provide support for workshops in countries, to promote dialogue, networking and the establishment of links between official institutions, nongovernmental organizations, and indigenous organizations.

131. Provide technical assistance and cooperation, through collaborative action programmes, to countries and to indigenous communities and organizations.

132. Seek direct relations with communities and nongovernmental organizations in addition to working through governments.

Suggested activities

133. Facilitating local programmes of action (technical assistance, fund-raising).

134. Traineeships for indigenous health professionals.

135. Programmes for cultural sensitivity training among health professionals.

136. Elaboration of basic health indicators and health monitoring systems for indigenous peoples.

137. Promoting intersectoral regional and national action plans.

Countries should ensure that the following measures are implemented:

138. Establishment of multisectoral task forces (government, indigenous organizations, and nongovernmental organizations).

139. Formulation of country policies and strategies at the local level, with indigenous leadership.

140. All health projects and programmes for indigenous peoples should require indigenous leadership and ensure respect for the culture, values and traditions of indigenous peoples.

141. Provide cultural sensitivity training to non- indigenous health workers who work with indigenous peoples.

142. Universities and other training centres should provide scholarships to ensure that indigenous peoples have access to training in the health professions.

143.

Develop health monitoring systems for indigenous people, and build local capacity among indigenous communities for monitoring health status, risk and protective factors.

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