The Communication of Information in Western Samoa. The Case of Health.

A thesis
submitted in partial fulfilment
for the Degree
of
Master of Arts in Geography
in the University of Canterbury
by
Kevin Bishop

University of Canterbury
1995
Frontispiece:

Matatutu, Lefaga
Acknowledgements

"Still so young but somehow so much older"
Cold Chisel

There are a number of people who have made this thesis possible and who I would like to take this opportunity to thank.

Fa'afetasi lava (Thank you);

To my family for their support (both emotional and financial) during the last five years. You have always been there for me, and although it has not always been shown, it has always been appreciated.

To my supervisor, Dr Doug Johnston for your encouragement, criticism and hunger for knowledge on Western Samoan health.

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"I can no other answer make but thanks, And thanks, and ever thanks"
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<td>afakasi</td>
<td>Mixed race population of Samoa</td>
</tr>
<tr>
<td>aiga</td>
<td>Family, descent group or kinship in all its dimensions</td>
</tr>
<tr>
<td>aitu</td>
<td>Spirit or ghost</td>
</tr>
<tr>
<td>astasiga</td>
<td>Visitation or inspection</td>
</tr>
<tr>
<td>aualama</td>
<td>Society of unmarried, widowed or separated women who are consanguinial members of the groups comprising a nu'u</td>
</tr>
<tr>
<td>'aumaga</td>
<td>A society of untitled men, an institution in every nu'u</td>
</tr>
<tr>
<td>faaliga-o-manatu</td>
<td>Story telling or informal discussion</td>
</tr>
<tr>
<td>fa'amatai</td>
<td>The matai system of government</td>
</tr>
<tr>
<td>fa'a Samoa</td>
<td>In the manner of the Samoans; according to Samoan customs and tradition</td>
</tr>
<tr>
<td>fa'alupega</td>
<td>The dignified reference to all chiefs present — traditional form of greeting referring to all chiefs present and symbolises rank, status and privilege</td>
</tr>
<tr>
<td>fagogo</td>
<td>Role playing</td>
</tr>
<tr>
<td>faise'au</td>
<td>Minister of Religion</td>
</tr>
<tr>
<td>faipule</td>
<td>Member of Parliament under colonial system</td>
</tr>
<tr>
<td>fale</td>
<td>Samoan style house</td>
</tr>
<tr>
<td>faleai'itu</td>
<td>Village play or comedy</td>
</tr>
<tr>
<td>faleta'utu</td>
<td>Courting party</td>
</tr>
<tr>
<td>faletua ma tausi</td>
<td>In-marrying wives of the matai</td>
</tr>
<tr>
<td>feusaiga</td>
<td>Relationship</td>
</tr>
<tr>
<td>fono</td>
<td>Village council</td>
</tr>
<tr>
<td>kirikiti</td>
<td>Samoan cricket</td>
</tr>
<tr>
<td>koko Samoa</td>
<td>A rich, dark drink made from cocoa beans, sugar and water</td>
</tr>
<tr>
<td>komiti tumāmā</td>
<td>Women's Committees</td>
</tr>
<tr>
<td>lavalava</td>
<td>Samoan wrap around skirt worn by male and female alike</td>
</tr>
<tr>
<td>lotu</td>
<td>Religion, prayer, sacred, act of worship</td>
</tr>
<tr>
<td>ma'i</td>
<td>Ill health</td>
</tr>
<tr>
<td>malae</td>
<td>Village green</td>
</tr>
<tr>
<td>mama</td>
<td>Masticate</td>
</tr>
<tr>
<td>matai</td>
<td>A political representative of an 'aiga who holds a title bestowed by that 'aiga; custodian of land and property of that 'aiga. Divided into &quot;high chiefs&quot; ali'i; or &quot;orator chiefs&quot; tulafale</td>
</tr>
<tr>
<td>Mau</td>
<td>Samoan independence movement of the 1920s</td>
</tr>
<tr>
<td>meaalofoa</td>
<td>Gift or presentation of food or money</td>
</tr>
<tr>
<td>niu</td>
<td>Immature coconut used for drinking</td>
</tr>
<tr>
<td>nu'u</td>
<td>Village or local polity</td>
</tr>
<tr>
<td>palagi</td>
<td>Those of European descent (refer page 39 for full explanation of the term)</td>
</tr>
<tr>
<td>pe'a</td>
<td>Traditional Samoan tattoo</td>
</tr>
<tr>
<td>pulenu'u</td>
<td>Village Mayor</td>
</tr>
</tbody>
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sa'o tama'ita'i
The daughters or sisters of high ranking ali'i of a
village who lead the aualuma

tagata
People — the Samoan people

tala anumua
Ancient stories explaining elements of culture or the
environment

talo pa'ia
Ceremonial presentation of food

tamaiiti
Young children

tapa
Indigenous fabric made from the bark of Broussonetia
(also known as siapo)
taula-aitu-o-aina
Class of priest (abbreviated form taulaitu)
tauli'ale'a
A young or untitled man

taupo
Samoan princess

tausi
Wives of orators

tautai
Fisherman, or literally those involved in sea and
marine activities

telea'a
A nationally acknowledged aitu from Lepea, Upolu

totoga sa
Forbidden or holy organ, polite term for penis

tulafale
Orator
Sa'uma'iafi
A nationally recognised aitu from Sale'imoa, Upolu

Samoan Proverbs

E pala ma'a, 'ae pala 'upu
Stones rot but words last forever

Se'i fono le pa'a ma ona vae
Let the crab take counsel with its legs
Acronyms

AIDS  Acquired Immune Deficiency Syndrome
CMO  Chief Medical Officer
DHN  District Health Nurse
DMO  District Medical Officer
HEU  Health Education Unit
HIV  Human Immuno-Deficiency Virus
IECs  Information, Education and Communication materials
IPPF  International Planned Parenthood Federation
LMS  London Missionary Society
MCH  Maternal Child Health
MTP  Medium Term Plan (for HIV/AIDS)
MTP II  Second Medium Term Plan (for HIV/AIDS)
NAMC  HIV/AIDS National Advisory Monitoring Committee
NAP  Western Samoan National AIDS Plan
NCD  Non-Communicable Disease
NGOs  Non-Governmental Organisations
NZHR  New Zealand House of Representatives
PHC  Primary Health Care
SPC  South Pacific Commission
STD  Sexually Transmitted Disease
STP  Short Term Plan (for HIV/AIDS)
TAC  HIV/AIDS Technical Advisory Committee
WHO  World Health Organisation
WSFHA  Western Samoan Family Health Association
WSNH  Western Samoan National Hospital

Exchange Rates

As of March 1995 (when the majority of field research took place):

$NZ 1 = $US .6279
$NZ 1 = $WS 1.5286
Health and development are inextricably linked. Within the current development paradigm, Primary Health Care (PHC) has emerged as the dominant approach to address the health problems in Lesser Developed Countries (LDCs). An important element in the process of PHC is the dissemination of health information, enabling communities to improve their own health situations.

Using Western Samoa as an example of a developing nation, this thesis investigates the diffusion of health information and its change over time. Analysis of communication processes revealed barriers which reduce the effectiveness of health information diffusion. HIV/AIDS and diabetes information used as two contemporary examples for investigation.

Communication barriers have resulted in a separation between the senders and receivers of health information. The evolution of the Western medical paradigm is established as the cause of many of these barriers.
Chapter One: Introduction: Primary Health Care, Communication and Development.

"Who needs information?"

Roger Waters (Radio Kaos)
1.1 Introduction: Health and Less Developed Countries (LDCs)

To remain healthy is a goal of all humankind; to be unhealthy is a universal risk. Human societies have universally developed ideas, technologies, behaviours, and social roles related to health care. Even within the industrialised more-developed countries (MDCs), a diversity of health care delivery systems are evident; from established medical practices to various "alternative" treatments that border on quackery. Just as the availability of medical personnel, facilities and funding are problemsome in the MDCs, issues of health care delivery are even more acute in the less-developed countries (LDCs). This thesis examines some of the health care problems in Western Samoa, an LDC in the South Pacific, and points to some of the difficulties in establishing effective health care delivery systems in a nation of the developing world.

In the developing world, health care is often difficult due to the presence of infectious diseases, such as dysentery, which are related to a poor diet and a lack of basic sanitary facilities. In addition, health care problems in the developing world are exacerbated by a lack of resources and a growing population, which places even greater pressure on the meagre resources some LDCs have. In parts of Africa for example, it is estimated that there is one doctor for approximately 70,000 people (Phillips 1990). Western-style health facilities may exist, often as a result of foreign aid or a relic of the colonial era, but tend to be concentrated in urban centres where Westerners or the local elites live. Hospitals and dispensaries, particularly in rural areas, may be redundant from a lack of trained staff or an absence of health supplies available in MDCs (Gesler 1984:16).

Health and development are intrinsically related. Just as the levels of social and economic development differ between LDCs and MDCs, so too does the extent of health care facilities and practices. For the majority of the world's population living in LDCs, access to Western-style medical care is constrained. However, the aim of many national governments has been to increase the availability of "modern" health care facilities that are more commonly accessible in MDCs. Thus, in the late twentieth century the challenge remains to deliver health care to a largely poor, often rural, population in the context of: a variety of local beliefs and traditions about illness and its treatment; a high cost of introducing and maintaining a Western medical system; and uncertainty about the most appropriate directions for improving health care delivery.
The latest thrust by the international health establishment (alongside individual governments), to solve the overwhelming problems of health care and disease in the developing world today has been an approach labelled primary health care.

1.2 Primary Health Care

Primary Health Care (PHC) has emerged as the dominant approach to health problems in most LDCs. PHC is an approach designed to address the main health problems in the community by providing promotive, preventive, curative and rehabilitative services. The underlying objectives of PHC integrates the local community in terms of infrastructure, education, initiatives and resources (Phillips 1990:152). The World Health Organisation (1978:34) regards PHC as

"essential health care made universally accessible to individuals and families in the community by means acceptable to them, through full participation and at a cost that the community and country's can afford. It forms an integral part of the countries health system, of which it is the nucleus, and of the overall social and economic development in the community".

At a conference in Alma-Ata (in the former USSR) in 1978, an explicit approach to PHC was articulated in a joint critique by the World Health Organisation (WHO) and UNICEF. Goals were set forth to achieve universal health care which combines medical, social, economic and political institutions. Underlying the PHC approach is the ideal of "Health for All" (Hirshman 1989:23).

Figure 1.1 shows a conceptual model of a comprehensive health system based on the principles of PHC and the main elements involved in the PHC approach.
The primary health care approach detailed by the World Health Organisation in 1978, marked a revolution to health care delivery systems throughout the developing world. Nevertheless, primary health care was hardly a new concept; Phillips (1990:151) states that PHC has, "undoubtedly existed for as long as man (sic) has sought assistance for health care and to tackle wider conditions harmful to health". It was not until the conference at Alma Ata however, that a formal approach to primary health care was explicitly formulated at the global level. The Conference's declaration stressed the right and duty of people to participate individually and collectively in the planning and implementation of their health care.

This approach came about during the 1960s and 1970s when many theorists argued that the provision of medical care for the majority of the population, rather than a privileged few was important in developing countries (King 1966:45). King (1966) suggested that delivery of health services be planned from the bottom up, with local resources being utilised to find appropriate conditions. The PHC approach emerged as part of a wider movement away from the dominant paradigm\(^1\) of development that held sway at the time.

\(^1\)Paradigm is defined as, "The working assumptions, procedures and findings routinely accepted by a group of scholars, which together define a stable pattern of scientific activity, this in turn defines the community which shares it" (Johnston et al.1994:432).
1.2.1 Developmentalism

Through the 1960s a dominant paradigm ruled intellectual definitions and discussions of development and guided national development programs. This concept of development grew out of certain historical events, the quantitative empiricism of North America social science and capitalist economic/political philosophy (Rostow 1960). Implicit in the ruling paradigm was numerous assumptions which were generally thought to be valid (or were at least not widely questioned), until the 1970s (Rogers 1976:122). The definitions of development during this time centered around the criterion of the role of economic growth, with development being measured in purely economic terms. Such values as dignity, justice and freedom did not fit on a monetary measurement scale.

Rogers (1976) summarised the dominant development paradigm as being based on four criteria: i) economic growth through industrialisation, with economic growth and per capita income as principal measuring sticks; ii) capital-intensive and labour-saving imported technology; iii) centralised planning orchestrated by economists to guide and speed up the above growth of the economy; and iv) the causes of underdevelopment lay within developing nations (cited in Carmen 1990:7). In this view of development, health received little specific attention. It was however, assumed that a healthy population was needed to work in the new industries, and that a population that suffered from ill health was a hindrance to economic development. Under developmentalism, health was best obtained through economic growth (Phillips 1990).

Although it was not specifically stated in the dominant development paradigm, the Western bias of those who created, advocated and implemented its theories meant that in terms of health care delivery, a Western medical system was advocated. This focused on modern health care facilities (such as hospitals) staffed by professionally trained and specialised health professionals (such as those which existed in Western countries) as the best way to deliver health care. Health care resources would be centered in these facilities, with the argument that when economic growth occurred, the number and size of these facilities, and the people they could serve would also improve.
1.2.2 Alternative Development Perspectives and the Emergence of PHC

A number of events occurred in the 1960s and 1970s which saw the dominant paradigm of development severely criticised and the process of development re-examined and redefined (refer Myrdal 1968). One of the main reasons for this re-evaluation was the slow rate of economic growth that was occurring in the majority of LDCs, and the growing loss of faith in the "trickle-down" theory of distributing benefits. Although many developing countries experienced short-term economic growth, it severely disrupted the established values and traditions of the people in these countries. In addition, many developed and developing countries' environmental problems were increasing and social inequalities appeared to be more evident (O'Riordan 1976 and Sachs 1992).

Opponents of developmentalism viewed underdevelopment as a consequence of processes external to the LDCs (Griffin 1968; Rodney 1972). Developmentalism was seen as overly optimistic. For many critics it ignored the external causes of underdevelopment, such as how colonial powers had historically created imbalances and class contradictions within developing countries (Myrdal 1968 and Wallerstein 1979). The 'modernisation' of LDCs placed significant costs on these countries' populations, particularly the poor. Modernisation caused an increase in social inequalities, widening the gap between the have and the have-nots. In particular, it emphasised the interests of the urban areas (which in many LDCs contained less than twenty percent of the population) resulting in neglect of the rural communities and consequent massive reduction in the agricultural workforce.

Development was redefined in more general terms such as those put forward by Rogers (1976:113):

"Development is a widely participatory process of social change in a society, intended to bring about both social and material advancement (including greater equality, freedoms and other valued qualities) for the majority of the people..."

In such approaches, development was not led by economic growth, but by an improvement in social and material benefits for the general population. In terms of health these alternative paradigms realised that the link between health and development was more complicated than first proposed.
Ostergaard (1992:110) regarded health and development in the same class as the chicken-and-egg dilemma,

"Development and Health are intrinsically inter-related: without a certain level of economic and social development, we cannot provide the population with basic health care. And without a basic state of health, the population does not have the physical and mental energy necessary to develop the society".

Although it was appreciated that significant improvements in health care can be facilitated by social and economic development (through for example the construction of hospitals and medical centres), this was not occurring in the vast majority of LDCs. In many these countries there remained inequalities in access to, and utilization of, formal health services. The centralised, technological health care models of the industrialised world were to a large extent, unsuccesssfully adopted (or imposed) in most developing nations (Djukanovic and Mach 1975).

In this context PHC emerged as the dominant health care delivery approach. Amidst a growing recognition of the inequalities in access to, and utilization of health services in many countries, a formal approach to PHC evolved (Gesler 1984:2). An important element in this process was the concept of "participation". Development was no longer a process imposed from above but involved the community in all aspects of development. As "community participation" became the theoretical catch phrase, it was realised that due to the limitations that beset LDCs in terms of health care delivery, an approach that utilised the LDCs main asset (its people) and addressed these limitations would be the most beneficial. The view that health advancements could be achieved without the use of expensive technology and large-scale centralised facilities, was also propounded.

1.3 Elements of PHC

As shown in Figure 1.1, PHC contains a number of elements which all play a vital role in the effective delivery of health care. Table 1.1 expands on this by outlining these elements of PHC and their main goals. Although there is some debate as to the number and title of the elements involved in PHC, it is widely agreed that the eight elements shown in the table (Food and Nutrition, Water and Sanitation, Disease Control, Maternal and Child Health, Essential Drugs, Curative Care, Traditional Medicine, and Health Education) make up the basic principles of PHC (Finau 1987:20).
Table 1.1: The Main Elements of PHC and Their Goals
(Source: adapted from Finau 1987:20)

<table>
<thead>
<tr>
<th>ELEMENTS</th>
<th>GOALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food and Nutrition</td>
<td>To ensure an adequate, affordable food supply and a balanced diet</td>
</tr>
<tr>
<td>Water and Sanitation</td>
<td>Providing everyone with clean water and basic sanitation</td>
</tr>
<tr>
<td>Disease Control</td>
<td>Immunisation against childhood diseases and combating others like malaria</td>
</tr>
<tr>
<td>Maternal and Child Health</td>
<td>Trained birth attendants, promotion of family planning and monitoring child health</td>
</tr>
<tr>
<td>Essential Drugs</td>
<td>Restricting drugs to 200 essentials preferable locally manufactured, and made available to everyone at a cost they can afford.</td>
</tr>
<tr>
<td>Curative Care</td>
<td>Training village health workers to diagnose and treat common diseases and injuries</td>
</tr>
<tr>
<td>Traditional Medicine</td>
<td>Enlisting traditional healers, giving additional training and using traditional medicines.</td>
</tr>
<tr>
<td>Health Education</td>
<td>Educating people in understanding the causes of ill health and promoting their own health needs.</td>
</tr>
</tbody>
</table>

As can be seen, PHC involves promotive, preventive, curative and rehabilitative services. It also implies a cooperation between traditional and modern medicine. PHC therefore, forms the first component of what is potentially a continuing health care process. It is seen as a "grass roots" approach which can be adapted contextually to suit local conditions and requirements. It is important to appreciate that PHC is multi-sectoral in that it involves health and community development (Rifkin 1985). Figure 1.3 puts all of the main elements of PHC together.

![Figure 1.2: The Philosophy Behind, Characteristics of and Elements Involved in PHC](image_url)
One of the most important elements of PHC is health education. Ritchie (1991:6) defines health education as the,

"Planned or formal efforts to stimulate and provide experiences at times, in ways and through situations leading to the development of the health knowledge, attitudes and behaviour that are most conductive to the attainment of individual, group or community health"

(cited in Mala-Toelupe 1991:165).

Health education therefore, has an important role to play in PHC (refer Figure 1.3). Finau (1987:18) argues that if PHC is to provide more than just a basic level of health services, then education is the most important prerequisite;

"Information and education must foster activities leading to situations where people:
— want to be healthy;
— know how to attain health; and
— do what they can, individually and collectively and to seek help when needed".

Finau (1987) argues that health education is a means by which the community can take responsibility for their health, rather than relying upon the delivery of health care by professionals and technologies.

Figure 1.3: The Role of Health Education as the "Hub" of PHC
(Source: Oakley 1989:3)
One of the most important elements of health education is the communication of information on health between health workers and the community, allowing them to take control of their own health situations. Renford (1986) recognises that the mobilisation of public opinion in support of improved health standards, cannot come about unless information and motivation are developed into a meaningful process of communication with the public. Continuing on this theme Oakley and Marsden (1984:28) argue that,

"Participation as an end is the inexorable consequence of the process of empowering and liberation. The state of achieving power and of meaningfully participating in the development process is in fact the objective of the exercise."

With participation comes what Kronenburg calls "knowledge empowerment" which is the very antithesis of the conventional knowledge paradigm based on the premise of the monopoly of knowledge embodied in the expert, educator or communicator, and exposed by Freire (1973) as "banking education". As Kronenburg (1986) stated,

"With the newly acquired knowledge, which has not been given or taken away from somewhere, but has been autogenerated, the participants can influence the course of events to liberate themselves from oppressive situations and determine their own destiny"


Providing populations with information on the prevention, diagnosis, management and treatment of illness and disease allows them to make their own informed decisions concerning health. In this sense the communication of health information can be seen to be tied into the theoretical framework that has shaped the approaches to alternative development. By receiving health information, populations have the ability to take control of their own health destinies and futures and improve their own standards of living, with limited outside intervention. The communication of health information involves therefore, elements of community participation, self help and even some of the notions of sustainable development. The communication system set up to deliver this information therefore, plays a crucial role in the process of health education. Unless health messages are received by the appropriate audience, the potential for increased health knowledge, and consequently improved levels of wellbeing, are significantly reduced if not completely diminished.
1.4 Research Objectives

The previous sections have shown that health and development are inextricably linked. The most appropriate health system within the emerging development paradigms is one based on the notions of primary health care. An important element of PHC is the diffusion of health information to the population. The dissemination of health information therefore can be seen to be an essential ingredient in the development process in LDCs. It is consequently the focus of this research.

This research examines the objectives through two key questions:

1) "How has the communication of health information in Western Samoa changed?"

2) "What are the barriers and distortions in the communication process?"

Having now established the theoretical context and the research objectives, Chapter Two will progress to an examination of the communication process. This provides the theoretical background from which to investigate the diffusion of health information. From a critique of current communication theory, an appropriate conceptual model of this process is presented. This model is used to structure the ensuing research.

Before presenting results, Chapter Three introduces the methods used to explore the research objectives. Chapter Four is the first of the results chapters and considers the health information communication system and the manner in which health information was diffused in pre-contact Western Samoa. A similar structure is followed in Chapter Five, which considers the colonial period, and in the examination of the contemporary health communication system which features in Chapter Six. Chapter Seven is a critical analysis of the barriers and distortions facing current health communication systems. The major research findings and implications are drawn together in Chapter Eight. First, however, the context in which this research will be undertaken must be explored.
1.5 Western Samoa: the Research Context

Western Samoa has a total land area of 2934 km², consisting primarily of the two large islands of Savai'i and Upolu (refer Figure 1.4). In 1992 the Western Samoan population was 161,298 (Hardie-Boys 1994:9). The island of Upolu is home to over 115,000, and of these 35,000 live in the capital (and only urban area) Apia. Savai'i has fewer than 50,000 residents, while the two smaller islands of Manono and Apolima are home to a combined population of less than 2,000.

![Figure 1.4: Western Samoa](image)

Western Samoa was selected as an appropriate context in which to consider the communication of health information because it displays the characteristics of a LDC. It has a large, semi-subsistent agricultural sector which accounts for 42% of the total work force (ibid). 1991 Census data revealed that 70% of households were agriculturally active. GDP per capita, in 1990, was equivalent to approximately WS$ 1590 (NZ$1040 and US$660). Total Overseas Development Assistance (ODA) to Western Samoa in 1993 was WS$82.1 million (NZ$53.7 and US$33.7), an amount equivalent to approximately one third of total GDP (World Bank 1994:251).
In addition, Western Samoa is an appropriate field site due to its national health programme. It was established before the Second World War and contained elements of the current PHC ideology. For example the health system was village based and encouraged community participation (Schoefel 1986:20). This enabled it to be one of the earliest nations in the developing world to adopt a health care system that contained the modern principles of PHC. Such factors allow a exploration of temporal development of PHC within the Western Samoan context.

1.6 Summary

The communication of health information has been introduced as a vital ingredient in the development of health systems in LDCs. Health was shown to play an integral role in the development process. Within this conceptual framework the research objectives were outlined. The following chapter examines the communication system which is seen as an fundamental part of the diffusion of health information.
Chapter Two: The Communication System
-a Conceptual Treatment

"Communications are at the very core of human existence, and, in one sense, the essence of being human is measured by our power to communicate"

Shouksmith (1978:1)
2.1 Introduction

In the opening quote, Shouksmith (1978:1) considers that the essence of being human is measured by our power to communicate. This sentiment expressing the importance of communication has been introduced in the previous chapter, which concluded that in the delivery of primary health care, systems of communication are an integral component. The aim of this chapter is to introduce the conceptual model of the communication process which will be adopted by this research. Communication, as a concept, will firstly be defined. From this baseline the communication system will be itemised into its various components. Various arrangements of these components into communication models have been propounded by several theorists. Each will be reviewed and critiqued. It will be argued that current models of the communication system are inadequate to explore the movement of health information, and consequently, a model constructed by the author will be presented as the most appropriate conceptualisation of communication.

2.2 What is Communication?

The word communication derives from the Latin *communicare* meaning, "to make common, to share, to impart or to transmit" (Ouchi and Campbell 1985:3). However, current definitions of communication vary according to the theoretical frames of reference employed and the stress placed upon certain aspects of the total process (Watson and Hill 1993:38). Simply expressed, the communication process begins when a message is conceived by a sender. It is then encoded — translated into a signal or sequence of signals — and transmitted via a particular channel to a receiver who then decodes it and interprets the message (ibid). Therefore, the essence of communication is that certain people ("senders") transmit information and others receive it ("receivers") (Gold 1974:9).

For this thesis however, the process of communication is more than just the transmission of information between senders and receivers. As Broughton (1980:18) states

"...communication has as its central interest those behavioural situations in which a source transmits a message to a receiver with conscious intent to affect the latter's behaviour".

Rogers (1973:26) continues on this theme when he said that communication is the process by which an idea is transferred from a source to a receiver with the intent to
change their behaviour,

"Usually, the source wants to alter the receiver's knowledge of some idea, create or change their attitude toward the idea, or persuade them to adopt the idea as part of their regular behaviour".

Therefore, communication can be further defined as, not only the transmission of information between a source and a receiver, but the transmission of this information with a view to affect the receivers knowledge, attitudes or behaviour. It is this definition of communication that will be adopted throughout this thesis.

### 2.2.1 Itemising the Communication Process

However communication is defined, it is agreed that the communication process can be broken up into five fundamental elements: a message; source (also known as the initiator or sender); an audience (receiver or recipient); a channel (mode or vehicle); and an effect. To understand communication, the elements that make it up need to be defined.

The message is what an act of communication is about, and is therefore an integral part of the process of communication. Without a message an act of communication could not occur (Watson and Hill 1993:116). The source (the term "source" will be used in this thesis to represent what have also been called the initiator, sender or communicator) is the originator of the message in the communication process. It exercises decision-making powers in the selecting, shaping, encoding and packaging of messages for transmission to the ultimate audience (Gold 1974:14).

Encoding is the translation by the source, of an idea into a message appropriate for transmission. Communication occurs by means of a variety of visual and aural signals and symbols which are assembled according to certain rules or codes. Thus, "To encode is to change a meaning into a symbol" (Rogers 1973:47). If Person A wishes to convey to Person B a message which Person B is likely to understand, then the message has to be encoded with Person B's ability to decode the message-carrying signals in mind (Watson and Hill 1993:67).

Each message-carrying signal requires a route along which it is transmitted from the sender to the receiver. A channel, medium, mode or vehicle is the means by which messages travel from a source to a receiver (Misra 1968:42). Two types of channels can be distinguished: mass media and interpersonal.
Mass media communication has been formally defined as,

"the institutions and techniques by which specialised groups employ technological devices (press, radio, films etc.) to disseminate symbolic content to large, heterogeneous and widely-dispersed audiences"

(Janowitz 1968:41).

Mass communication channels therefore, involve the use of a mass medium to enable a source of one, or a few individuals, to reach an audience of many. It can not only reach groups separated spatially but also, by means of recording systems, reach groups separated temporally. Interpersonal communication channels are those that involve face-to-face message transfer between a source and a receiver. It may be dyadic (two-person) or triadic (three people), or it may involve many individuals communicating with one another. They must however, be in close emotional or physical proximity (Hiebert et al. 1988:2).

To speak of a mass medium usually means a channel of communication where a machine and a communication organisation have been interposed, whereas an interpersonal channel is a channel that reaches from person to person, without such things interposed (Cassata and Asante 1979:9). Table 2.1 shows the key differences between mass and interpersonal communication modes.

<table>
<thead>
<tr>
<th>COMMUNICATION ELEMENT</th>
<th>INTERPERSONAL</th>
<th>MASS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
<td>Independent</td>
<td>Complex Organisation</td>
</tr>
<tr>
<td>Message</td>
<td>Private or Restricted</td>
<td>Public</td>
</tr>
<tr>
<td>Channel</td>
<td>Vocal/Written</td>
<td>Electronic and Print</td>
</tr>
<tr>
<td>Audience</td>
<td>Individual or Small Group</td>
<td>Mass</td>
</tr>
<tr>
<td>Feedback</td>
<td>Immediate</td>
<td>Delayed</td>
</tr>
<tr>
<td>Example</td>
<td>Family Discussion</td>
<td>Radio Programme</td>
</tr>
</tbody>
</table>

The individuals who receive the information, from either mass or interpersonal communication channels, are called receivers, recipients or the audience. Their task is to decode the message sent by the sender. Decoding is the translation, by the audience, of the received message into an idea. If to encode is, "to change a meaning into a symbol", then decoding is to change that symbol back into a meaning (Rogers 1973:47).

The purpose of most communication, as has been stated, is to bring about effects in the audience that are intended by the source. Communication effects are the changes in the audience's behaviour that occurs as the result of the receipt of a message. There are
three main types of communication effects: changes in the knowledge of the audience; changes in the audience's attitudes (defined as the, "relatively enduring organisation of an individual's beliefs about an object that predisposes their actions"); and changes in their overt behaviour. Changes in their overt behaviour could include such things as purchasing of new or different products, planting of alternative crops or use of contraception (Rogers 1973:49). These effects however, are many and diverse. They may be short-range or long-run, strong or weak. They may derive from any number of aspects of the communication content, and may be considered psychological, political, economic or sociological in nature (Berelson and Janowitz:1966:379).

The communication process is therefore, made up of five fundamental elements. To help understand the process of communication and the relationship between the elements involved it is helpful to view the communication process as a model. The modelling of processes is an analytical tool utilised throughout geography. Models are simplified accounts of a complicated and inter-related real world system. Modelling such systems allows the fundamental aspects of reality to be easily distinguished, and hence more effectively studied.

2.3 Reviewing Communication Models: Re/arranging the Components

The communication system has been represented in modular form because it is a process that contains easily identified aspects that creates a complex whole. By modelling, many intervening variables are removed and a framework is provided which creates a starting point to begin examining the act of communication. Indeed, for Cassata and Asante (1979: 63-4),

"A communication model represents or replicates in abstract terms the essential features and eliminates the unnecessary details of communication in the 'real world' ".

This process of representing the communication system in modular form has been undertaken by several theorists. This section will review each attempt in a chronological order.
2.3.1 One-Step Flow Model

The first model designed to represent the communication process has been labelled the "One-Step Flow Model". This type of model was essentially a product of the academic thinking in Sociology and Psychology during the 1930s and 1940s. Sociologists talked about a "mass society", consisting of "atomised" individuals who might be dependent on one another in various ways but who lacked any unifying purpose or common direction (Elliot 1972 cited in Gold 1974:11). Psychological thought revolved around instinct theory, with non-rational humans reacting mechanically to given stimuli. With such ideas being put forward it was not surprising that the outcome was a view of communication in which the communicator was able to move their audience to almost any desired point of view (Gold 1974: 11).

The "One-Step Flow Model" has also been called the "Hypodermic Needle Model" because of the rather grotesque analogy of a, "giant hypodermic needle pecking and plunging at a passive audience" (Rogers and Shoemaker 1971: 203). The net result of this approach is the type of model depicted in Figure 2.1. The model shows a direct flow of information from the communicator to the audience, which then accept the communicator's views and act accordingly.

![Diagram of One-Step Flow Model]

Figure 2.1: One-Step Flow Model

Shannon and Weaver (1949) developed the "One-Step Flow Model" further with a model of their own (refer Figure 2.2), which used a systems approach to describe the communication process (Hiebert et al.,1988:5). In it they included the concept of "Noise", which they defined as, "an impedance or barrier between the sending and receiving of communication signals". They posed two levels of noise problems, engineering noise (which involved physical and technical problems) and semantic noise (defined as an impedance in terms of codes, be they linguistic, psychological or cultural) (cited in Watson and Hill 1993:130).
The model was constructed mainly to tackle technical problems, with the inherent assumption that solving technical problems by improved encoding will, almost automatically, lead to improvements in difficulties emanating from other areas in the communication process (Watson and Hill 1993:16-17). Later research has shown that this idea of reducing "Noise" to make the communication process more effective is very simplistic (i.e acting only on the channel), and does not include the many other elements involved in the communication process.

The "One-Step Flow Model" and the Shannon and Weaver models of communication are now regarded as being simplistic in trying to describe the communication process. They fail to take into account a number of important elements that future theorists realised were included in the act of communication (i.e feedback, context). These elements have been bought out by more recent communication theorists.

### 2.3.2 Two-Step Flow Model

An alternative model to that of Shannon and Weaver and the "One Step Flow Model" was developed by Lazarsfield et al. (1944). Their paper described a study which had been established on the basis of the One-Step Flow model. It showed that few examples of voting behaviour in the 1940 United States Presidential elections could be directly attributed to the influence of the media. Rather the research team had gained the impression that the flow of information took place in two stages; from the media to influential individuals known as "opinion leaders" and through them to the rest of the population. Armed with this knowledge, the "Two-Step Flow Model" was developed (Watson and Hill 1993:71).
An opinion leader is someone able to informally influence other individual's attitudes and/or behaviour in a desired way with relative frequency. This influence is earned and maintained by the individuals technical competence, sociability and conformity to the norms of the social system. When such leaders are compared to their "followers" it becomes clear that they differ in a number of ways. They participate more in social situations in which relevant information is transmitted, have a greater sensitivity to 'external' information sources (also called "cosmopolitaness"), have additional or more varied information sources, are better informed in the opinion area, give advice to "followers" in their area(s) of expertise and are normally of a higher social status (Palmore et al. 1971:413). Opinion leaders therefore, differ from other sections of the population by such things as their exposure to all forms of communication, their cosmopolitaness and social status.

To explain the role of the "opinion leaders" in the "Two-Step Flow Model", Cassata and Asante (1979) created another model (refer Figure 2.4), which shows that opinion leaders act as intermediaries between the single communicator and multiple members of the audience.

---

Figure 2.3: Two-Step Flow Models

![Diagram](image1.png)

Figure 2.4: Opinion Leaders Role in the "Two-Step Flow Model"
(Source: Cassata and Asante 1979:15)
The "Two-Step Flow Model" stressed the interdependence of mass and interpersonal communication, where the media are able to directly influence a small elite who in turn convince a much larger section of the general public. This model therefore, suggested that personal contact was more potent than the media in persuading people to accept an opinion. This is hardly surprising, for interpersonal communication draws upon all the advantages of social situations, bringing a two-way exchange of information where the communicator can support their case with additional information, answer queries, admit error, or even lie to convince their audience (Watson and Hill 1993:12).

The Two-Step Flow model represents the mass audience as being composed of interacting and responsive individuals rather than of the socially isolated passive atoms of earlier mass society theories (Watson and Hill 1993:135). There is also feedback, two-way communication, between the audience and the "opinion leaders". Feedback is essentially communication in reverse, and is designed to influence the senders and their future communication. It is an evaluation process enabling the sender to adjust their message, change the context in which the communication takes place and to ultimately maintain efficient operation.

There are two types of feedback, negative and positive. Positive feedback confirms to the source that the intended effect of the message was achieved, in essence it tells the source that, "everything is going well" (Rogers 1973:50-51). Negative feedback, on the other hand, informs the source that the intended effect of the prior message was not achieved, meaning adjustments must be made in the elements of the communication system if the source is to secure the desired effects on the part of the receivers (ibid:51).

Feedback also differs according to which form of communication is taking place. In interpersonal communication, feedback is immediate and may be continuous between the sender and the receiver (i.e a conversation, discussion or argument). For mass communication, feedback is delayed and can only be measured indirectly by circulation or listening figures, or directly through such things as letters to the editor or to programmers of television stations. Feedback is thus designed to inform the source of the effectiveness of their messages in reaching the audience, and their attitudes towards these messages. It is a vital ingredient in any communication process because, as Watson and Hill (1993:71) state, without feedback "meaningful contact halts".

The Two-Step Flow Model, containing the new elements of opinion leaders and feedback, was readily taken up by researchers who wanted an alternative to the 'hypodermic needle' model which proved so disappointing in practice. It too however, had its failings. There are still many compelling relationships which are conveniently
omitted. The majority of the audience were assumed to be passive "followers", who received their information from opinion leaders, rather than directly from the mass media. If this is rigidly applied it creates a false dichotomy between these two groups of the audience, for it misses the point that individuals will fill both roles at different times. Which role they will adopt in any given situation will generally depend on what is being communicated. It is also a fallacy that mass communication always needs the intermediary of opinion leaders (Gold 1974:12).

As with the "One-Step Flow Model" and Shannon and Weaver's Model, the "Two-Step Flow Model" fails to put the process of communication in a context. Every act of communication takes place in a context, which may be social, political, economic and/or environmental in nature. Context effects and influences all aspects of the communication process, and to ignore the concept of context in the communication process does not allow a comprehensive and complete understanding of the process. The next section briefly mentions some of the major theorists, and the models they developed, to explain the concept of context in the communication process.

2.3.3 Context in Communication

The first to introduce context as a factor in the role of communication in a society or a social relationship was Newcomb (1953) (refer Figure 2.5). One of the first and most distinct features was that, in contrast to the majority of previous models, Newcomb's was triangular in shape. In the model, A and B are communicators and X is the situation or social context in which the communication takes place. Both the individuals are orientated to each other and to X, and the communication is conceived of as the process which supports the orientational structure (Watson and Hill 1993:125).

![Figure 2.5: Newcomb's ABX Model (1953)](Source: Watson and Hill 1993:125)
Riley and Riley (1959) also posed a model in which context was an integral element of the communication process. For Riley and Riley, both the communicator and the recipient are influenced in the message process by three social orders: the primary group which they are both members; the larger social structure, that is the immediate community (social, cultural, industrial) to which they belong; and the overall social system. They perceive the mass media audience as being, "a composite of recipients who are related to one another and whose responses are patterned in terms of these relationships" (cited in Mertons et al. 1959:112).

Berlo (1960) produced a model which gave due acknowledgement of the significance, to both the Source and Receiver, of culture and the social system in which the act of communication takes place (refer Figure 2.6). For Berlo the social system is an important element in both the "Source" and the "Receiver" components.

![Figure 2.6: Berlo's Model of Communication](image)

All of these models introduced and developed the idea of context and social system in the act of communication but failed to include them in the overall process of communication. They did not look at context in relation to all elements of the communication process, but instead looked at them in isolation. The process of communication involves the interplay of all the elements, and a complete understanding cannot be gained by looking at its parts in isolation. Although the Multi-Step Flow model (refer Figure Five) does not include context in its representation of the communication process, it is a development on both the One and Two-Step flow models.
2.3.4 **Multi-Step Flow Model**

When it became apparent that the "Two-Step Flow Model" was no more a complete answer than the "Hypodermic Needle Model" had been, the need to have frameworks which recognised the variety of ways that the audience can receive information led to the adoption of "Multi-Step Flow Model". It argues that information can not only reach the audience through the activities of opinion leaders, or directly, but also by a combination of both channels.

The model also alters two important elements that effect the transmission of the message. It shows that noise impinges on all aspects of the communication process, not only on the channel as in Shannon and Weaver's model. Also feedback occurs, not only between the channel and the receiver, but also between the receivers and the opinion leaders and between the opinion leaders and the channel. Due to these changes the "Multi-Step Flow Model" extends all previous communication models. It is not specific about the number of steps there will be in the communication process, nor does it specify that messages must originate from a source and then pass straight through opinion leaders to the audience. Its flexibility is an asset in that it is less restrictive and makes fewer assumptions about the way that information reaches the audience (ibid:12-13).

![Diagram of Multi-Step Flow Model]

*Figure 2.7: Multi-Step Flow Model*

Although the "Multi-Step Flow Model" was certainly an improvement in representing the movement of information through a communication system than its predecessors, it must be stressed that communication is a *process*. This means that it is continuous through time, never-ending and never-beginning. To help in understanding, we find it useful to "freeze" the action in this continuous "film" and isolate certain
elements in the communication process. Linear models are one way to show the communication process in this "frozen" state. However, the linear models that have been critiqued so far in this Chapter do not view communication as a complete system. They see the act of communication as having a beginning and end point. The linear approach implies a mechanistic concept of the communication, one which aids understanding because of its simplicity but which does great harm to reality. As Beltran (1972 cited in Rogers 1973:45) states;

"It assumes an active source operating on a passive receiver via the persuasive monologue. It thus suggests a vertical relationship in which the source will tend to direct or dominate the behaviour of the receiver".

Communication would therefore amount to a special type of receiver manipulation by the source. However, communication is a multi-variable, dynamic interplay of numerous elements, whose complexity can hardly be expressed in a linear model with the channel, "carrying messages from the source to the receiver, like a bucket carries water" (Diaz-Bordenave 1972 cited in Rogers 1973:44). Such a transmission approach to communication implies taking a message from one place and reproducing it in another.

The over simplification of communication models led to a growing interest in conceptualising communication as a system. This theoretical view puts the multi-variability back in communication models, and emphasises the closeness and interdependence of the elements in the communication process. The system model of human communication assumes greater equality of the participants in the communication event. The transaction is a dialogue in which receiver power is recognised. Source manipulation of receiver may be counterbalanced by receiver influence on the source. The receiver in any event, is largely free to determine the meaning of the source's message for themselves (Rogers 1973:44-45).

The most recent models representing the communication process have used a systems approach, but unlike their linear represented predecessors, are circular in appearance.
2.3.5 Circular Models

The most comprehensive and intricate model of communication yet developed was created by Vora and Akula (1978). It represented the concepts of diffusion and knowledge, attitude and behaviour change in a dynamic and progressive spiral, which utilised mass communication and interpersonal channels. Attention given to the mass communication process went beyond a consideration of the source, message, channel and receiver components, stressing the external and internal environment factors as well as the effects component (Cassata and Asante 1979:71).

Another circular representation of the communication system was the HUB model (1989). It described communication as a process similar to that of dropping a pebble into a pool, an action which causes ripples that expand outward until they reach the sides of the pool. A few ripples reflect off the outside and bounce back in towards the centre. In the HUB model the message is the pebble that is dropped into a pool of human affairs, with the ripples that bounce back towards the centre, feedback.

![Figure 2.8: The HUB Model](Source: Hiebert et al. 1988:9)

Although circular models represent the process of communication in a different and more comprehensive way than earlier linear models, they too have their difficulties. The main criticism levelled at circular models is that they are too complicated and have "lost site" of the main reasons why the communication process has been modelled (Chorley 1967:12). As Cassata and Asante (1979:64) stated, modelling is supposed to represent the essential features of communication and eliminate the "unnecessary
Circular models, although showing more of the details involved in communication than previous models, have been accused of having too much detail which hinders their effectiveness in effectively representing the communication process.

2.4 Addressing the Limitations: An Appropriate Conceptual Model of the Communication System

Throughout the previous section the limitations of current representations of the communication system have been identified. These limitations fall into three main themes. First, most of the previous attempts at modelling communication have viewed it as a process with a beginning and end point. As stated earlier, communication is a complex system of inter-related parts that form a whole. Therefore, communication never begins and never ends; it is continuous. Second, previous theorists have failed to take into account the complexities and inter-relatedness involved in an act of communication, and have thus excluded important elements, for example feedback and noise. Lastly, Hahn (1992:37) states that the context an act of communication takes place in is one of the most dominant elements involved. She argues that context impinges and interacts with every element involved in communicating messages. Models that have begun to examine context (such as Newcomb 1953) do not however, address other equally important elements of communication. A more appropriate model to represent the act of communication should take into account these limitations.
2.4.1 A Revised Communication Model

This section will present a model that has been constructed to address the limitations of previous attempts at modelling the communication system. First, the revised communication model as presented considers communication as a system placing both message and feedback flows between every element in the system. It therefore addresses one of the major limitations of the previous models. Previous models have also failed to include all the relevant elements involved in the communication process or have failed to adequately define them. An example of this is the concept noise. Many theorists argue that any distortion or intervention between the sender and receiver in communication is noise. This broad distinction has included physical (such as radio static) linguistic, cultural and social elements, for example differences between encoding and decoding messages between social classes. However, this concept of noise is too broad to study effectively. By including an element entitled "not reached", the revised communication model reduces the boundaries of the definition of noise. This allows for a more concise examination of this concept.

Noise impinges on every aspect of communication, not merely on certain parts of it (Shannon and Weaver argued that noise just effected the channel while the "Multi-Step Flow Model" did not show the effect of noise in the links between the opinion leaders and the audience, and from the audience to the communication effects). Noise also impacts on the feedback that occurs in a communication system as it can determine if this vital ingredient is significantly altered between the receiver and sender. The role of feedback in the communication system has also been altered since it now occurs between every element in the system, not merely between certain elements.

As has been previously stated, every act of communication takes place in a context. Most of the previous communication theorists represented this important element in their models. The revised communication model clearly shows that context impinges on every aspect of the communication system and shapes every interaction that occurs. Without understanding the role of context in the communication system, vital facts (such as why a certain message represented in a certain way may have different effects if communicated from one day to the next) may be missed. As Hahn (1992:56) states:

"A full recognition of context would redefine communication by bringing the background into the foreground and seeing the message as residing in the context".
Figure 2.9: A Revised Communication Model
It must however be reiterated that at many points in this thesis the model is forced to follow, by implication, a linear and unidirectional model of communication in order to facilitate understanding. But it must be stressed that this one-way and "timeless" conception of human communication is only for structural purposes and clarity. It is repeatedly stressed that the communication process is a close knit system in which the elements operate in a balanced, interdependent and intricate fashion.

Now that both the research context (Chapter One) and the communication system developed to examine the communication of health information in Western Samoa (Chapter Two) have been examined, the practical methods used to examine these areas must be considered in the following chapter.
Chapter Three: Practical Context

"Travel is of two kinds; and this voyage of mine across the ocean combines both...I was not only travelling out of my country in latitude and longitude, but also out of myself in diet, associates and consideration"

Robert Louis Stevenson
3.1 Introduction

Chapters One and Two have examined the theoretical context in which this thesis takes place. The following chapter examines the methods that were used to answer the research questions posed. It explains these methods, their limitations, and some of the difficulties faced undertaking this research in Western Samoa.

3.2 Pre-Contact Communication System

To gain an understanding of the movement of health information in pre-contact Samoa and the players involved, an examination of more than just existing medical belief or the diffusion of health information was required. This was due to the fact that, although early Samoan missionary accounts were useful in gaining insights into the leading causes of mortality and morbidity in Samoa, and a number of academics have studied various elements of pre-contact Samoan medical belief and practice (i.e. Clement (1982), Forsyth (1983) and Macpherson and Macpherson (1990)), there is nothing written specifically on health information in pre-contact Samoa. The majority of the works that were consulted therefore, dealt with more indirect indicators of how health information was diffused. These included looking at such factors as the form and history of Polynesian oratory, anthropological studies such as Keesing's (1956) on elite communication, pre-contact Samoan beliefs about the role of spirits, the structure of pre-contact Samoan society as well as Sinaviana's (1992) study on Samoan village theatre.

Although this analysis of pre-contact Samoan health information diffusion was based predominantly on secondary literature, personal correspondence was entered into with Cluny Macpherson, Professor of Sociology at Auckland University and co-author of Samoan Medical Belief and Practice. This contact proved to be of immense value as there has been very little written on pre-contact medical belief and practice in the Pacific.
3.3 Colonial Communication System

Before an understanding of the diffusion of health information in colonial Western Samoa could be attempted, the changing definitions of health, due to the introduction of Western medical belief and practice, were examined. To this end, missionaries and their beliefs on medicine were examined and Lange (1988) and MacLeod and Lewis (1988) were also consulted to provide a more theoretical grounding on the introduction of Western medicine into colonial countries, and particularly within the Pacific. Also important in this process was an understanding of the effect of introduced epidemics to Western Samoa (especially the 1918-1919 flu epidemic). This was important in explaining not only changing Samoan perceptions of the causes of morbidity and mortality, but also the increased focus of the colonial administration on, and provision of resources for, health care. Pirie (1963), Thomas (1990), Macpherson and Macpherson (1990) and Tomkins (1992) all examined various elements of introduced epidemics in Western Samoa.

The main mechanisms for information diffusion during this period were the women's committees. Both Thomas (1986a and 1990) and Schoeffel (1984 and 1986a) have examined the role and structure of the women's committees, and Thomas' thesis, Dimensions of Diffusion: Delivery of Primary Health Care in Western Samoa was consulted extensively. Although the National Archives in Wellington were used to obtain information on the introduction, establishment and growth of the women's committees during the New Zealand colonial period, tracking down copies of other historical material on Western Samoa proved a very difficult exercise. This was because the majority of these works are held in libraries and depositories elsewhere in the world making them difficult and expensive to view. There has also been little academic research dealing with Samoan health, restricting the accumulation of academic knowledge on Samoan health issues that occurs with extended critical debate.

It must also be noted that the vast majority of the works consulted for the first two sections of this thesis were written by Europeans and their analyses of Samoan society are therefore based on non-Samoan cultural values and viewpoints. Consequently, two methods were deployed in order to reduce the possibility of Eurocentric bias giving an unrepresentative account of these periods. Firstly, cross-referencing data provided some facts to substantiate events and processes that were occurring, especially in colonial Samoa. Additionally, extensive use was also made of the limited number of Samoan works available in this field (such as Fannaafi (1992), Sinaviana (1992), La'avasa Macpherson (in Macpherson and Macpherson 1990) and Schoeffel (1980; 1984 and
Nevertheless, it must still be kept in mind that this part of the thesis is coloured by the European author's interpretation of the events and processes that took place; an unavoidable limitation when using secondary literature, especially colonial records.

Difficulties were also faced while attempting to study the colonial health information system through sources in Western Samoa itself. First, it was desirable to examine the Department of Health's detailed records of the colonial period. This however, proved to be impossible as the majority of these had been destroyed by fire in the 1980s. It was also unfortunate that the research occurred before the rebuilding of the Nelson Memorial library had been completed. The library had been destroyed by Cyclone Val in 1991 and was temporarily rehoused in the main Government building. Most of the books however, were in storage and it was difficult, if not impossible, to get the required materials. This did not prove to be as serious a problem as first thought however, as Thomas (1986a) had made a thorough and extensive search of the New Zealand colonial records in the National Archives in Wellington, and it was possible to obtain any relevant letters and memos of the period from the National Archives.

The author also attempted, while in Western Samoa, to get in contact with any health administrators, doctors, district nurses or members of the women's committees who were involved in the health system to gain a more complete picture of the introduction, growth and adaptation of the women's committees. This proved very difficult as the majority had died, keeping in mind that the Women's Committees were first set up in 1923. When two women who remembered the setting up of the women's committees in their village were found, their failing memories provided little information about their feelings towards the introduction of the 'new' institution.

### 3.4 Contemporary Communication System

The bulk of the actual field research undertaken for this thesis was spent examining how the contemporary communication system in Western Samoa is set up to deliver health information. This section, for clarity and to aid in understanding, is divided into the various components of the communication system model, (source, mechanisms for information transfer, opinion leaders, context, feedback and audience).
3.4.1 Source

The analysis of the contemporary communication system begins by examining the "Source" section of the model. The first task was to ascertain the main focus of the Western Samoan government in relation to health issues, and hence the main pieces of health information that were to be diffused. To do this government policy documents and annual reports from the Health Department, containing data on the changing epidemiological situation in Western Samoa, were obtained as well as a Education Curriculum Booklet from the Education Ministry. In addition, interviews and discussions were held with Chief Health Educator (Palanitina Mala-Toelupe) and the National AIDS Co-ordinator (Dr Le Mamea 'Ata Matatumua). Through these sources it was ascertained that diabetes and HIV/AIDS were the two main contemporary areas of concern for the Western Samoan Department of Health.

To examine the role, influence and actions of any outside institutions in terms of funding or in affecting the focus of health issues in Western Samoa, two main sources were used. The most important of these, due to the resources it provides, was the World Health Organisation (WHO). Access to the WHO's Western Pacific Regional Library in Apia yielded the files on work done by WHO in Western Samoa and joint WHO/ Western Samoan government policy documents. Dr David Parkinson (Head of the West Pacific Region for WHO) was also interviewed about his perceptions of the role of WHO in Western Samoa concerning the diffusion of health information. An interview with Bill Doobie from the New Zealand High Commission in Apia provided information on the amount of money spent by the New Zealand Government, through its Overseas Development Assistance (NZODA), in relation to health in Western Samoa.

In terms of examining the Health Department, as the main mechanism of health information diffusion in Western Samoa, a number of difficulties had to be overcome. Before any interviews with staff and access to Health Department materials and resources were possible, a lengthy and at times frustrating administrative procedure had to be undertaken. Research involving any staff member of the Western Samoan Health Department has to be formally approved by the department's Health Research Council (HRC). Without such approval it was not officially possible to interview any member of the health staff or use Health Department resources.
Rapidly, I set about trying to contact the Chairman of the HRC to convene a meeting, but this proved to be difficult and another month passed before contact was finally made and the HRC met to discuss the matter. Permission was finally granted for research to officially begin, eight weeks into the planned 12-week stay in Samoa.

While a number of interviews had actually taken place before permission was granted, a large number of interviews were not possible until after this formal approval was granted. There are several reasons for the delay and reluctance of the HRC to grant acceptance for this research: Wendt (1986) outlines a number of elements involved in the interplay between bureaucracies (such as the Health Department) and the traditional Samoan way, (fa'aSamoan), which are relevant to the difficulties faced undertaking this research. First, he noted that there is strong, rigid adherence to rules and formality in the new bureaucratic settings and to the hierarchical management systems which are put in place. This follows fa'aSamoan which accords great emphasis to the safeguard and maintenance of social order. This meant that before the people that would be of the most assistance for this research were reached, those in higher ranking administrative positions, but who were of very little help in what was being studied, had to be consulted. Gaining access to these senior members of staff was a difficult task as they were often very busy, due not only to lack of staff, but also the lack of delegation that exists in the Western Samoan Department of Health.

Wendt (1986:9) argues that the delegation of authority in Samoan bureaucratic settings is very much contrary to the socio-cultural beliefs of the Samoans. In fa'aSamoan rank, title and position carries with it designated authority, and those that hold this authority are required to use it to direct, guide, control and regulate social life. It is not normally delegated. It was not only difficult therefore, to make appointments to see these senior staff, but when access was finally obtained they could not delegate the responsibility for examining the research proposal to other staff members. This created further delays.

These delays caused by the strict adherence to bureaucratic procedures, the hierarchical nature of Samoan bureaucracies and the lack of delegation were further compounded by the way fa'aSamoan has built-in mechanisms for resolving the uncertainties of new proposals or initiatives. This mechanism is to simply defer it to another day, to sleep on it or leave till later so as to delay decision and action.

"It is the practice of the belief that the passage of time will bring greater enlightenment, ease the burden, and may even make the uncertainty or responsibility go away" (ibid).
These delays made the sections of research that involved the Department of Health a time consuming and often frustrating experience. As the research visit to Western Samoa was just short of three months, spending two months waiting to talk to the relevant parties was a major hindrance. There were many people who it would have been beneficial to consult, but who could not be interviewed before having to return to New Zealand. Head of the Diabetes Clinic, Dr John Adams, is one that falls into this category.

When access was finally gained, further difficulties arose when trying to obtain the required information from Health Department staff. There was hostility towards me, due to the perceived "over-abundance" of palagi academics who have studied health issues in Samoa. Considerable work has been done by foreign researchers in Western Samoa, especially on the clinical side of health issues (i.e Baker and Greska 1982; Bindon and Baker 1985; Gage 1980; Zimmet et al. 1978; and Zimmet and Dowse 1991). There now appears to be an open reluctance among the staff of the Health Department to provide assistance, of any nature, to foreign researchers.

A frequently encountered belief amongst health workers was that a Samoan should be doing this sort of research, as only they can fully understand the processes that are occurring. I would agree with them and say in an ideal world this would be the case. In reality however, there are not enough trained and skilled Samoans who have the desire to undertake this sort of study. I openly acknowledge that my work falls short of a full and comprehensive understanding of the real issues involved in Western Samoa. As a white, middle-class New Zealander without any prior knowledge of Western Samoa, whose interest in and contact with Samoa began with this thesis, I take full responsibility for the shortcomings of this research. I am not dealing with my own language, culture, history, geography or social system.

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1 Palagi (abbreviated form of papalagi) literally means 'heaven bursters'. It was the Samoan name given to the first European people to come to Samoa. The Samoans thought the heavens began at the horizon. So when European boats appeared on that horizon the term palagi was adopted as the visitors hadliterally 'burst from the heavens' (Turner 1961:103 cited in Hardie-Boys 1994:49). Today palagi refers to people of European origin.
There were however, also positive elements involved in being a *palagi* doing research in Western Samoa. Being able to view the communication system from a detached position, both practically and theoretically, was of benefit. What was found could be viewed, interpreted and analysed without the possibility of inherent bias caused by being part of the "system" as such. Also, by being detached from Samoan society I was privy to a lot more information and knowledge as people spoke more freely to someone who they knew did not have any *aiga* (family), or political links within the society. This was particularly true while researching in the case study village.

The attitudes of staff in the Health Department towards foreign researchers is not entirely unfounded for a number of reasons. First, they are very busy people, particularly as a consequence of a lack of staff in the health-care sector in Western Samoa, and they do not have an abundance of time to spare to help researchers. Secondly, they are very resentful of past researchers who they have devoted time to, in neglect of their own work, and who have failed to even supply a copy of the completed project back to Western Samoa. I believe that the hostility that was faced from Health Department staff was merely a backlash from those who had preceded me doing health research in Western Samoa. As one person from outside the Health Department said to me, *"You're just doing the wrong thing, at the wrong time, in the wrong place."*

### 3.4.2 Mechanisms For Information Transfer

The Health Education Unit (HEU) is the main mechanism for information diffusion in contemporary Western Samoa and thus, received the bulk of the attention when focusing on the mechanisms for health information transfer. A number of interviews and discussions with Chief Health Educator, Palanitina Mala-Toelupe, and one of her staff members, (Andrew Petereu) took place, and access was gained to the HEUs files from which the methods used for information diffusion were ascertained. Interviews were also conducted with the Head of the Nutrition Centre, Christine Quested and the National AIDS Co-ordinator, Dr Le Mamea 'Ata Matatumua.

Initially it was planned to do a questionnaire survey among the District Health Nurses (DHNs) in Western Samoa, as they are one of the major channels for the diffusion of health information. These plans however, had to be abandoned when it became clear that there was going to be little cooperation from the nurses, with *palagi* researcher. This reluctance to participate in outside study was due to the actions of a previous foreign researcher in Western Samoa.
This researcher studied the communication of health information in Western Samoa during the 1980s, looking specifically at the women's committees. According to various sources within the Health Department they were given considerable assistance (in the form of accommodation, transport and interpreters) throughout the stay. The Samoan health workers spoken to said that the subsequently completed work was both biased and factually incorrect, and in their view did not give a fair and balanced account of the DHNs role in the communication of information. As one person stated; "After all the help that we gave them they still went home and stabbed us in the back."

The District Health Nurses (DHNs) who provided most of the help for that study, came in for the most damning criticism and any attempt on my behalf to even get them to speak to me failed. Due to this difficulty the focus of this thesis changed slightly. More use was made of secondary materials (such as a study undertaken by Mala-Toelupe (1991a) on diabetes education in Western Samoa) and the case study involved in the "Audiences/Receivers" section received increased attention.

Health information delivered through government departments, other than Health, is limited in contemporary Western Samoa. An interview with Luagalau Foisaga Eteutai-Shon, Secretary of the Women's Affairs Department, was sufficient to examine the role of her department, the only other one to play a role in health information diffusion.

3.4.3 Messages

Analysis of the health messages that are sent through the current communication system was based on material released by the HEU. These included Information, Education and Communication materials (IECs) such as pamphlets, posters and calendars. In terms of the broadcasting media, the content, duration, numbers and distribution of radio spots were was examined through material supplied by the HEU, while figures on the use of radio and television by the HEU was obtained through the Department of Health's Annual Reports. Various South Pacific Commission (SPC) publications such as Pacific AIDS Alert, a monthly publication centered on HIV/AIDS in the Pacific and Pacific Wize, a series of comics produced by the SPC about the prevention of HIV/AIDS were also examined.
3.4.4 Opinion Leaders

To examine the role of opinion leaders in relation to health information diffusion in Western Samoa two main strategies were adopted. The most important opinion leaders in Western Samoan society are the clergy of the various churches, and to understand their role interviews were conducted with a senior member of the most powerful church, the Congregational Christian Church of Samoa, as well as with a local faife'au (pastor) in the case study village. Also as the Health Department is the main mechanism of information diffusion in contemporary Western Samoa a number of their senior staff were interviewed. These included the: National AIDS Coordinator Dr Le Mamea 'Ata Matatumua, Chief Health Educator Palanitina Mala-Toelupe and head of the Nutrition Centre Christine Quested.

3.4.5 Context

As stated in Chapter Two every act of communication takes place in a context, be it social, political, economic or environmental in nature, which influence all aspects of the communication process. To gain an understanding of how context shapes the interactions that take place in health information diffusion, both secondary and primary materials were consulted. The secondary material focused on any Samoan cultural attitudes which may impinge on health information diffusion. While in Western Samoa a number of interviews were completed on the topic of context in health information communication, as well as an analysis of the local media for any information on health information that may have been presented.

3.4.6 Feedback

The level of feedback in a communication system is a very difficult element to quantify. Instead of trying to measure the quantity of feedback occurring in the system, it was attempted to find out what mechanisms were in place to get the views and ideas of the information receivers back to the senders. To this end three main sources were used. Reports written by HEU staff on audience reactions to the form, presentation and content of their various presentations were examined. Furthermore, information on the amount, type and effectiveness of feedback that occurred between the HEU and the various groups they worked with was obtained through an interview Health Educator Andrew Petereu.
Chief Health Educator, Palanitina Mala-Toelupe completed a thesis in health personnel education in 1991 at the School of Medical Education at the University of New South Wale. The thesis was entitled; \textit{An Evaluation of Health Education Services for the Prevention and Control of Non-Communicable Disease in Samoa} and was extensively consulted to provided a guide to the amount and type of feedback that occurs in the health communication system in Western Samoa.

### 3.5 Audience/Receivers

To examine the audience/receivers section of the model of health information communication in Western Samoa two procedures were used. The first involved the use of secondary materials, in particular the studies undertaken by Mala-Toelupe (1991b) and Thomas (1986a). Use was also made of a 1990 nationwide survey undertaken by the Department of Health on HIV/AIDS knowledge, attitudes and preferred sources of information on AIDS, and Wolman's (1995) project on the geographic perspectives of family planning in Western Samoa. The bulk of the information for this section was however, obtained through researching in a village case study.

### 3.5.1 Case Study

As an ideal research exercise three village case studies, a remote rural village, a less remote village and an urban village, would have been examined to see if the diffusion of health information changes spatially in Western Samoa. This was however, not possible due to time constraints and the difficulty of access to undertake research in Western Samoan villages. These are discussed shortly. Due to these constraints it was planned to compare only two villages, one each from the two main islands of Western Samoa (Savai'i and Upolu). The two villages were to be compared to see whether there were any differences in terms of the delivery of health information between villages in Upolu and those in the more geographically remote Savai'i.
Conducting research in a Western Samoan village can require very time consuming, and sometimes expensive procedures. These normally consist of having to work through a Government department to obtain a formal letter of introduction to the village Pulenu'u (village mayor). The Pulenu'u would then have to call a full village fono (council meeting) to discuss the request before permission is granted. This can be a very long and slow process and the letter of introduction in no way guarantees acceptance of the request. The process can also prove to be expensive due to the researcher having to present a meaaloafa (gift) of money or food to the village before work could begin.

It was fortunate however, that access to two villages (Matatutu, Lefaga on Upolu and Vailoa on Savai'i) was obtained without having to go through this process. Access to Matatutu was possible through the help of the National AIDS Coordinator, Dr Le Mamea 'Ata Matatumua, while a friend had family from Vailoa enabling access to this second case study (refer Figure 3.1 for location). These two villages were chosen, therefore, not because they filled any predetermined criteria but due to the availability of access to undertake research in these villages.

Unfortunately these plans were radically altered when I became ill and was taken to the National Hospital at Motootua before the planned research visit to Vailoa. A firm diagnosis was not possible in Western Samoa it was decided that the safest option would be for me to return home as soon as possible. I was rushed back to New Zealand where I was diagnosed as having viral meningitis and told that I was lucky to have arrived home alive. This highlights one of the more serious difficulties of doing fieldwork in the Pacific. It was not possible therefore, to do a comparative study of two villages in Western Samoa, thus limiting somewhat the scope of the research findings.
3.5.2 Matatutu, Lefaga

As stated earlier, access to Matatutu became possible through contact with the National AIDS Coordinator, Dr Le Mamea 'Ata Matatumua. Although he now lived in Apia, Dr Le Mamea aiga was from Matatutu and it was from this village that his matai title was held. He had spent time in Christchurch during his medical training and understood some of the difficulties of an outsider studying in a foreign land and so was only too willing to help me complete my research.

My first experience of Matatutu was one Sunday when Dr Le Mamea took me to church in the village and to introduce me to his cousin, and holder of the same matai title, who was to be my host in the village. The rank and status of both Dr Le Mamea and his cousin, through both their matai titles and the obtained status of being a doctor, meant that the village residents knew they were expected to offer what assistance they could. Without the social status of the people who introduced me into the village and of the family that provided accommodation while in the village I would have had considerable difficulty getting the villagers to answer a questionnaires.
Matautu, Lefaga is situated approximately 35 kilometres by road from the only urban area in Western Samoa, Apia (Note Figures 3.1 and 3.2). The bus trip from Apia takes anywhere between one and a half to three hours, depending on the time of day, the number of passengers aboard and the driver's mood at the time. Matautu is controlled and directed by a council of all the matai, (the political representative of a family), called the fono. The role of the fono is to administer, legislate and arbitrate village affairs. In this sense, Matautu is run as a traditional Samoan village.

It is not possible to give an exact population for the village as the Western Samoan Census figures do not have population data specifically on Matautu. It is included in the figures for the district of Lefaga which covers not only Matautu but also the villages of Gagaifoolevu, Vaiana and Savaia (refer Figure 3.2). Various village residents who were asked estimated its population somewhere between 900 to 1000, which makes it quite large by Samoan standards. The village was basically divided into two separate sections; Matautu-uta (lower) and Matautu-tai (upper) (refer Figure 3.3). The bulk of the village residents live in Matautu-uta and all of my research was undertaken in this area.

Matautu contains a large number of churches with the CCCS being the largest, not only in its physical structure, but also in its congregation numbers (66 percent of the questionnaire respondents said they were affiliated to the CCCS). It also has Mormon, Methodist, Assembly of God, Catholic and Seventh Day Adventist churches. The village has a primary school with the older children either attending the nearby Lefaga Lower Secondary school in Savaia or secondary schools in other parts of Upolu, including some who travel to Apia. The majority of villagers have their own family plantations, which account for most of their food supplies. The sea also provides a large proportion of their dietary requirements. Matautu does not have a village store of its own, so the villagers have to either get their supplies in nearby village stores or from Apia. There are few opportunities for cash income in the village. A number of the tauale'a (untitled men) worked for a nearby forestry company, but there were not many of these positions available. A large number of the village residents were supported by remittances from aiga members in both Apia and overseas. Many of the younger village males lived and worked in Apia during the week returning at weekends, bringing food and money back with them.
3.5.3 Research Undertaken in the Village

Communication of health information to Matatutu was examined through two main procedures. First, a questionnaire survey of 29 Matatutu residents was undertaken and secondly, a series of interviews with certain formal and informal opinion leaders, both in the village was completed. The selected opinion leaders were: the local CCCS faite'au, (Pastor), one of the highest tulafales (talking chiefs) in the village; one of the ali'i, the two presidents of the women's committees present in the village; and a traditional healer.
The questionnaire was prepared while in Western Samoa (refer Appendix One), once the main issues and types of health information that the Western Samoan Government were trying to get convey were known. It was pretested in a number of ways. A bilingual Samoan family from Apia went through it and recommended changes to the way the questions were worded. For example, initially one of the questions asked "Are you married?", but it was changed after consultation to ask "Do you have a partner, or are you single?". This was due to the different notion of marriage in a Samoan context. I also received help in setting out the questionnaire by staff at the Alafua Campus of the University of the South Pacific (USP) and by the staff of the Health Education Unit. The questionnaire was then administered to a number of Samoan students studying at USP to see if the questions were clear and concise. Although I did not have the opportunity to pretest the questionnaire on rural Western Samoans I was satisfied that the questions I was asking in the village would give me the information that I required.

The questionnaire begins with a series of background questions examining important issues such as age, sex, religious affiliation, marital and social status. This not only provided relevant information but also helped break down barriers between myself as an interviewer and the respondents. Given the delicate nature of asking questions about HIV/AIDS (such as those concerning the transmission of HIV through sexual intercourse) the respondents needed to feel comfortable with the questionnaire and the questioner.

Focus then moved on to the respondent's access to, and use of, media devices (radio, television and newspapers). The questionnaire then divides into three sections, one each for women, men and children (under 16 years of age) to seek information about membership and attendance of, for women: the women's committees; for men: male clubs and organisations within the village; and for children: school attendance, youth groups and girls and boys brigade. All interviewees were then asked if they have learned about diabetes at any of these groups or organisations, who taught them and how the lessons were conveyed.

The "Knowledge" section of the questionnaire measures the degree to which the message that the Source is trying to convey is actually reaching the audience. It tests the respondent's knowledge of the main pieces of information being disseminated (such as the signs and symptoms of diabetes or means of transmission of HIV etc). The questionnaire concludes by asking the respondent's perception of the communication system, how they wish to receive health information and their rating of the various mechanisms used to transfer health information.
The respondents were selected on the basis of their age, sex, social status and geographic location within the village. An even spread of ages and sexes in the village was the objective and, as can be seen from Table 3.1, was obtained. The survey also attempted to cover all parts of Matatutu-uta to avoid bias towards any one aiga. Through my interpreter it was also possible to gain a cross section of the different status groups within the village. Table 3.2 shows the different social groups that were interviewed. The three village school children who were interviewed attended the nearby junior secondary school. As my Samoan sister taught at the school I was able to gain access to the children and the interviews were conducted shortly after school had finished. However, due to only interviewing three school children, the sample size is not large enough to use their data with any degree of satisfaction or confidence. Their responses, therefore, were treated merely as antidotal evidence of what was occurring in terms of HIV/AIDS and diabetes information flows through schools.

Table 3.1: Age and Sex of Questionnaire Respondents

<table>
<thead>
<tr>
<th>SEX</th>
<th>0-20</th>
<th>21-30</th>
<th>31-40</th>
<th>41-50</th>
<th>51-60</th>
<th>61+</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>Female</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td></td>
<td>14</td>
</tr>
</tbody>
</table>

I went to Matatutu without an interpreter but was put in touch with Onesima by the local CCCS faite‘au. Onesima had spent eight years living and working in Australia and his English was therefore very good, although lately underused. His family had lived in the village for generations and he was well known and liked in the village. He also had respect through his work teaching the village children in the local Pastor's school. His familiarity with the village and its inhabitants and the high esteem with which he was held made him an ideal interpreter, although one major difficulty was encountered working with Onesima. Those readers who have conducted research through an interpreter, I am sure, will appreciate the frustrations of a "Yes" or "No" response from the interpreter when the respondent has just spoken solidly for some minutes. Although I would try and explain to Onesima that I needed to know everything they said he would just smile and say that he would try, to no noticeable effect at the next interview. This however, was a small price to pay for his English/Samoan skills, and his status and contacts within the village.
Table 3.2: Respondents by Social Status

<table>
<thead>
<tr>
<th>Status</th>
<th>Titled</th>
<th>Married to Title</th>
<th>Untitled</th>
<th>Church</th>
<th>School Children</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number</strong></td>
<td>7</td>
<td>5</td>
<td>11</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td><strong>Percentage</strong></td>
<td>24</td>
<td>17</td>
<td>38</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

During the interview programme I found, for the first time in my life, being an unhappily addicted smoker actually had its advantages. As each interview took over half an hour to complete my nicotine cravings were just beginning to kick in. Sharing a cigarette with the respondents, the majority of whom smoked, after the formal interview was over was a very good way to build friendship and help facilitate discussion on the interview that had just taken place. As I passed around the cigarettes the conversation became more relaxed and I discovered similar results to those found by Thomas (1986a:23) when she stated;

"It was frequently in the relaxed conversation following the completion of a formal interview that opinions reflecting the "real" rather than "ideal" situation were expressed."

Informal conversation also helped when addressing the problem of affirmative answering in Samoa acknowledged by Swaney (1990:21), Elmqvist (1992:4) and Hardie-Boys (1994:7). As discussion took place between the respondent, Onesima and various other members of the aiga (normally the whole family, attracted by the palagi, would watch the interview) I would be going through my record of the interview to see if their responses now differed from the ones they had given in the formal interview setting. The inclination of the subjects to answer "Yes" to every question because they believe this response will please the interviewer, was in some way also negated by the structure of the questionnaire. Every question that required a positive or negative response was followed by a question or series of questions, that required more information on this answer. For example under the section headed "Female" it was not only asked if they ever heard or learnt about HIV/AIDS at the women's committee but also when this was, how was the information was presented and who told them about it.
It was unfortunately not possible to do any interviews at night in the village, as this was viewed as inappropriate behaviour. Being able to do the interviews only during the day limited, to a degree, the number of people that were able to be interviewed. This limitation however, was somewhat lifted by attending a village fono. There I was able to interview some of the untitled men (taule'ale'a) of the village who would have normally been out working in the family plantations, but who were gathered to serve their matai. Furthermore because of its distance from Apia, very few of the village residents commuted daily to paid employment outside the village. For these reasons I believe I did not miss out on a significant part of the village population by being able to interview only during the day.

Several authors, notably O'Meara (1990) and Wendt (1977; 1979 and 1991), describe Samoan life vividly. The purpose of the next section is to give a more personal account of life while researching in a rural Western Samoan village. In so doing, some insights into research in a developing nation are provided. This personal account concludes the methodological setting for the research. The following Chapter begins a more detailed journey into the health information communication system, in particular in pre-contact Western Samoan society.

3.5.4 One Day Out Researching

The day began early, for me at least it seemed very early. The rest of the aiga were already up and the previous night's sleeping mats and mosquito nets had been put away. The fire, fuelled predominantly by coconut husks, was burning well in the cooking fale and already my Samoan brother and sister were off to the family plantation and work respectively. I counted the number of mosquito bites from the night before (this time only seventeen between the elbow and wrist on one arm) and thought of the day ahead. The sun, as always, beat down mercilessly on this dark-green carpeted land but the gentle splashing of the ocean, barely fifteen metres from where I lay, provided a relaxing way to awaken.
After washing in the tepid, crystal clear ocean I put on my lavalava, struggling to keep it up before, yet again, resorting to using a belt. I then headed to breakfast with Le Mamea, one of the ali'i of the village and my family's matai. We were served buttered bread, fresh bananas, nu'u and koko Samoa and talked in a netherworld language, somewhere between English and Samoan. Onesima arrived around 8 a.m and we headed up the main village road to begin the day interviewing.

Figure 3.3: Matatutu: Showing Different Sections, Size and Main Transport Links of the Village

Throughout the interview schedule Samoan custom and etiquette had to be followed. For example, before entering a fale footwear was taken off and conversation could only begin once you were at the same level as the other person involved in the conversation (i.e if they are sitting on the floor you had to be sitting on the floor). Onesima would then formally introduce me saying where I was from and what I was doing in the village. I would nod and smile in the right places and try and fit in as many Samoan words as I knew. The interview would then begin, taking between half to three quarters of an hour to complete.
As the formal interview was finished food would begin to appear. It consisted of either cooked bananas in coconut creme or raw fish and, of course, koko Samoa (chocolate drink). I, unfortunately, have to admit that I struggled with the culinary delights of Samoa, although not through lack of effort. I ate sufficient to be polite, but my lack of appetite was certainly made up for by Onesima who appreciated the offerings much more. Including informal discussion, cigarettes and food the interviews took between an hour to seventy-five minutes to complete.

I continued to do interviews throughout the day stopping, of course, for the usual huge lunch back in my own family's fale. The day's activities in the village would wind down after five o'clock. The young men of the village would either go fishing or head, barefoot, to rugby practice on the postless sand "field". The village children played in the cooler temperatures while their sisters and mothers set about preparing the evening meals. I was lucky enough to be invited to go reef fishing with my Samoan brother but never managed to see the fish he stalked before finally ensnaring them in his net. Fish would definitely not have been on the menu that night if only I had been sent on the fishing expedition.

The village activities would cease as the lotu bell sounded, once in warning, and the second time for the beginning of prayer. This normally occurred around seven o'clock, although the exact concept of time is somewhat lost in the village setting. Le Mamea would lead the family in prayer and song while I, struggling to understand any of the Samoan being spoken, watched the ants and mosquitoes wrestle for control of the floor mats. The lotu bell would ring once more to signify the end of prayer and the village again went about its evening business.

The rest of the evening, before bed, would be spent with Le Mamea. As we walked along the beach front he would tell me about the legends and customs of Samoa and the history of the village he had spent his life in. These conversations bought the land and its people vividly to life in my mind. As we walked the night, still warm, enveloped the land with its streetlight-free darkness and the ocean continued its relentless struggle with the shore. These were some of the best and most memorable moments of my time in Western Samoa.
Everything seemed to be at one as I began to fall into a deep restful sleep. With the sound of the ocean nearby, I recalled a poem by Albert Wendt about this part of Samoa (his aiga comes from a village not far from where I lay);

"The grey-manned waves count
my years that break
on Lefaga reef;

Matautu Peninsula palms
and fale sprouting from black
rock, curves into sea's anger;

in the mouths of the dazzling seabirds
the sun is caught, a bright
fish kicking.

As I walk across
shredded coral on the beach
and evening stabs through the horizon,

my shadow merges
with the dark..."

("Lefaga" in Inside us the Dead 1976:25).
Chapter Four: Pre-contact Health Information Diffusion

_E pala ma'a, 'ae pala 'upu_ (Stones rot, but words last forever)

Samoan Proverb
4.1 Introduction

This chapter is the first in a series of three which examine the health information communication system in Western Samoa. This chapter begins the journey, by looking specifically at pre-European contact Samoan society and the process of health information diffusion. Before an understanding of this process can be gained it must first be understood what was meant by the terms "health" and "health information".

4.2 Defining Health and the Causes of Ill Health

For the Samoan people, health was not simply about the absence of sickness, nor was it a fall from a state of well-being that those socialised in traditional western health beliefs and values would define as health. In pre-contact Samoa, health was defined in broader terms including elements of the relationship with the social system, group norms and values, and the involvement of spirits in everyday affairs (Macpherson and Macpherson 1990:151). In pre-contact Samoan society, sickness was viewed as an affair of the complete social group, not merely the individual. It was believed that the health of an individual was so interwoven with the situation of the whole social group to be almost indistinguishable from it. For the Samoan people, managing and treating illness involved re-establishing the spiritual wholeness, not just of the sick person but also of the social group, through the process of caring for and curing the sick person (Kinloch 1985:16).

The other important element in this holistic view of sickness was the belief that health was tied up with the relationship between humans and the spirit world. Most illnesses, trauma and accidents which beset Samoans in pre-contact times were believed to have been caused by various spirits (aitu) who observed all human conduct. Illness was caused by these spirits drawing attention to activities which offended their sense of propriety. These illnesses were called ma'i aitu (literally "ghost sickness") and were believed to be the signs that the relationships between humans and the supernatural world were in need of attention (Macpherson and Macpherson 1990:151).
In traditional Western definitions of health, sickness is commonly viewed as an affair of the individual rather than an affair of the 'people'. In the Samoan context 'people' signified the series of relations which organise individuals into various groups, be they social, kin or cultural. Yet in pre-contact Samoan society, 'people' (tagata) signified more than groupings of individuals, 'people' was "a series of relations to other individuals, the land and the world of the spirits, without which being is not human" (Kinloch 1985:15). Ideas and beliefs on health therefore, involved the notion that sickness was more than an individual suffering from a particular physical complaint. Sickness was believed to be part of the individual's relationship with the entire world, be it physical, social or spiritual. The most important element in this belief was the idea that sickness was caused by a disruption in the equilibrium between any parts of this system.

The absence of spiritual and social tension was, therefore, viewed as health and was obtained and maintained through the preservation of equilibrium between and within, these different spheres (Macpherson 1995 pers. comm.). Health was obtained, not as traditional Western medical belief would argue, by specific health related sets of knowledge, but by looking at ways to control and address tension in the system. To understand this notion of defining health it is important to examine the tensions that affected the social and spiritual equilibrium in Samoa at this time. To do this the pre-contact Samoan social system must, firstly, be examined.

4.3 Social Structure

In pre-contact Samoa the two most important elements of the social structure, in relation to social and spiritual balance and the areas for potential tension were: the maintenance and reproduction of the social order through links with the past; and the way in which Samoan society was rigidly structured with each person having prescribed roles and positions in the social order (Mead 1969:23).

The fa'amatai system was the foundation of Samoan society, directing people's behaviour and actions. The system was hierarchical in nature with those at the top of the social order claiming legitimacy for their positions through links with the past. The attainment of power enabled the individual to control the two most important elements in a subsistence based lifestyle: land and labour. The maintenance and reproduction of the entire society, therefore, relied on the legitimisation of power through links with the past.
In the fa'amatai system, the aiga (extended family) was the basic unit of social life which provided individuals with their identity and their position within the nu'u (village). Each nu'u was made up of a number of extended families, with each aiga containing a large grouping of blood, marriage or even adopted connections. All members of the aiga acknowledged one person as the matai, or head, of their particular family (Gratton 1948:10). The matai was elected by all members of the aiga (primogeniture did not apply) and although a matai title could be either male or female, the vast majority of matai were, and are still, male. When a matai title was bestowed upon a person, that person immediately assumed responsibility for being the trustee of the family properties and the protector and promoter of the aiga welfare. Therefore they were the controller of the aiga land and labour. In return for their leadership, a matai was entitled to the services and co-operation of all the aiga members. A matai title carried with it the right to use land, to assert priority to scarce resources, and to make and enforce decisions (Fannaafi 1992:120).

At the village level power was also controlled and maintained through genealogical links. Village affairs were controlled and directed by a council of all the matai of the village known as the fono, who met regularly to decide on any issues relevant to village affairs. Within the fono the power and influence of a matai were in direct relationship to their rank, and therefore the rank of their aiga. The title, rather than the individual, determined power and prestige, as well as the specific nature of a person's interactions with another. The role of the fono was to administer, legislate and arbitrate village affairs and it had the authority to enforce its decisions by fining, banishing or ostracising offenders. As each family, through its matai, acknowledged the authority of any decision reached by the fono, the importance of power resting in titles handed down through family lines can be clearly seen. The belief that aitu could cause illness if they, or their family titles, were not respected meant that those currently holding the matai title gained respect and legitimacy and their decisions were adhered to. The risk for those that decided to challenge the hierarchy was retribution in the form of illness caused by these family or village spirits.

Another important element in gaining an understanding of pre-contact health information diffusion is the way in which Samoan society was clearly ranked, leaving little doubt at family, village, district or national levels as to the relative importance of titles. The various positions in the social order implied certain roles or expected modes of behaviour, speech and dress (Thomas 1980b:18-19).
In Samoan society each person had a particular act or role to play within certain situations which was clearly defined by tradition and the expectations of society (i.e. a untitled man, *taula'ale'a*, had to show obedience and courtesy to a *matai*). Within the village all adults belonged to one or other of the village organisations according to sex, and this division produced what was known as the "village of the ladies" and the "village of gentlemen". The village of the gentlemen comprised the *fono* and the *aumaga*, while the "village of the ladies" was made up of the *ausaluma*, *faletua ma tausi* and *fafine laiti* (Thomas 1986a:30). Table 4.1 shows the different groups in the village and the roles they performed.

**Table 4.1: The Various Social Groups That Made Up a Pre-Contact Samoan Village**

<table>
<thead>
<tr>
<th>VILLAGE GROUPING</th>
<th>MEMBERSHIP</th>
<th>SPECIFIC ROLE(S) (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td>matai</td>
<td>Political representative of an aiga who holds a title form that aiga</td>
<td>Responsibility for being the trustee of the family properties and the protector and promoter of the aiga’s welfare. Also controller of the aiga’s land and labour</td>
</tr>
<tr>
<td>fono</td>
<td>Council of all the matai of the village</td>
<td>To administer, legislate and arbitrate in village affairs</td>
</tr>
<tr>
<td><strong>MALE GROUPS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>'aumaga</td>
<td>Made up of the taule'ale'a (the untitled men of the village)</td>
<td>The tillers of the soil; the planters; the tautai; the builders and makers of weapons and tools; the preparers, cooks and servers of food; the poets, singers, dancers and entertainers; the sportsmen and the fighters in times of war.</td>
</tr>
<tr>
<td>aualuma</td>
<td>Consisted of the sisters and daughters born in the village</td>
<td>Providing a court and ceremonial setting for the village taupou (or virgin), and to provide entertainment for visitors. In practical terms, young girls were taught to weave mats, to sing, dance and to conform to the strict demands of etiquette.</td>
</tr>
<tr>
<td><strong>FEMALE GROUPS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>faletua ma tausi</td>
<td>The in-marrying wives of the matai</td>
<td>The foreign element in the social organisation and were the ‘non heirs’ to the matai title. Mothers of the aumaga, <em>tama'ita'i</em> and <em>tamaititi</em>.</td>
</tr>
<tr>
<td>tama'ita'i</td>
<td>The daughters of the matai.</td>
<td>Members of the aualuma and it is from this group that the taupou was chosen.</td>
</tr>
<tr>
<td>fafine laiti</td>
<td>The in-marrying wives of the untitled men</td>
<td></td>
</tr>
<tr>
<td>tamaititi</td>
<td>The young children of the village</td>
<td></td>
</tr>
</tbody>
</table>
Thus, within a *nu'u* each person was part of a specific and clearly labelled status or gender group. Each person knew their position in the system and this position carried with it certain roles and actions. Rank provided the guiding principal for all interaction between the different social groups. In this system individuality had little place, conformity to social norms was expected and any other behaviour was strongly discouraged. Mead (1969) pointed out that in Samoa there were;

"very few matters of free choice; they are implied by age, sex and status of the individual. The canons are known to all and deviation from the accepted amenities, economic or social are visited with outspoken disapproval"


However, although Samoan society was hierarchically-ranked and authoritarian with its political structure dominating day to day activities and interaction, there was mutual interdependence and recognition of titled and untitled people in the system. Each group had recognition and its respected place in the community and Samoan society could be described as a jigsaw puzzle; "with the picture never being complete and whole unless every piece was in its place" (Kinloch 1985:11).

The maintenance and reproduction of the social system, however, depended on the strict adherence to the prescribed and expected roles. This was a major source of potential tension in the system and the reduction or dismissal of this tension was an important area of concern for the Samoan population. The belief was that if everybody fulfilled the roles expected of them and acted in the ways prescribed, then tension, and thus the potential for illness, disease or death, would be significantly reduced (Muse 1991).

For this study, the two most important characteristics of the Samoan social system therefore are; the legitimisation of control over land and labour through links with the past (and the role *aitu* had in this), and the way rank provided the guiding principal for all forms of interaction. These two points are important to bear in mind as this chapter considers the health information communication system.
4.4 Reconstruction of the Pre-Contact Health Status

The variety and prevalence of disease and illness are important determinants of the medical paradigm that has been developed to explain and define health, the way health was treated and managed and the way health information was diffused. As there are no published records on the pre-contact health status of the Samoans it is difficult to draw conclusive answers to their health status during this period. It is possible however, through a number of scientific and ethnographic observations, to form a tentative reconstruction. It must be noted, however, that this reconstruction is based on European accounts of the time and is centered on diseases and ailments known and recognised by them, therefore excluding any spiritual component.

Prior to 1830, contact between Samoa and the rest of the Pacific was restricted (refer Campbell 1989). The opportunities for the introduction of disease were therefore restricted. The Tongans however, were reputed to have conquered and occupied the Samoas between 950AD and 1450AD and continued to travel regularly between Samoa and Tonga. In addition, there were also small settlements of Wallisians and Fijians in two districts of Savai'i (Henry 1979:19). While these and other contacts, could have provided the opportunity for the introduction of diseases, this seems unlikely for two main reasons. Firstly, the long and arduous nature of the canoe voyages would have ensured that few sick voyagers would have survived to introduce illness. Secondly, the Samoan practice of isolating the bearers of certain illnesses and limiting contact with them and with the corpses of the deceased, would have further reduced the likelihood that introduced diseases might have spread (Macpherson and Macpherson 1990:27-28).

It appears, however, that on at least one occasion Samoa was subjected to the introduction of a severe epidemic illness. This epidemic, which occurred long before European contact, was associated in Samoan culture with 'sailing gods' and led them to avoid contact with later visitors wherever possible. Turner (1884:139) suggests that the epidemic "which raged with fearful violence many years ago, answers to the description of cholera". This epidemic was clearly a major event in Samoan history as a number of authors mention ceremonies in which the Samoans attempted to forestall the return of the feared 'sailing gods' (Turner 1884; Stair 1897 and Kraemer 1902).
Turner outlines a ceremony in which an offering was made to principal family gods which included the line "Keep away from us sailing gods; lest they come and cause disease and death." (cited in Macpherson and Macpherson 1990:28). It may have been this fear of 'sailing gods' which forced both Roggewein in 1722, and Bougainville in 1786, to trade at shipside while in Samoan waters (Gilson 1970 cited in ibid).

It seems, therefore, that before 1830 limited contact with the outside world, and an epidemic associated with visitors, which discouraged further hospitality to outsiders, produced a period of epidemiological stability. The range of pre-contact illnesses which had to be explained was further limited by a relative absence of natural and environmental hazards in Samoa. At sea, these were confined to stings, poisonous spines and wounds inflicted by sharks, giant clams and certain shellfish. On land there were even fewer natural hazards to contend with; only the bites of a venomous ants and centipedes. Aside from these the greatest dangers could have resulted from exposure to the elements, the quality of drinking water supplies and the occasional trauma incurred in war and work (Macpherson and Macpherson 1990:29).

A series of common practices further reduced the incidence and chance for transmission of illness in pre-contact Samoa. Among these practices was regular freshwater bathing and the use of plants with leaves that had mildly astringent properties to cleanse. The British Consul in 1887 observed that the Samoans were; "both in person, and in their domestic life most scrupulously clean, bathing never less than twice a day" (cited in ibid:29). Bathing was supplemented by other practices which could have had similar effects on the incidence of illness. These included limewater washes and the short cropping of hair, which were effective in the control of 'utu (Pediculosis humanus) and the application of coconut oil to protect the skin from exposure to the harsh tropical sun (Macpherson and Macpherson 1990:30-31).

Whether or not a high standard of personal cleanliness was associated with the control of illness by the Samoans is not clear, and these measures may have been no more than a preoccupation with personal appearance. However, the motive is perhaps less important than the fact that the practice probably reduced the likelihood of the contraction and transmission of certain types of illnesses.
There was also a limited range of other endemic illnesses in Samoa during this time. Wilkes in 1845 commented on bronchial disorders and skin diseases, and in 1884 Turner reported a high incidence of ophthalmia and eye disease (Thomas 1990:5). Although it is not possible with any accuracy to ascertain the range and distribution of endemic illnesses in Samoa during this time (the variable quality of the early reports makes this difficult) it can be seen that: "there was a relative lack of endemic illnesses in Samoa during this time" (Macpherson and Macpherson 1990:36). This contributed to the epidemiological stability that characterised this time period.

The contribution of dietary habits to the pre-contact health of the Samoans is also usefully considered. The range of vegetable products available was extensive, growing relatively quickly and easily in most parts of the Samoan islands. They provided the basis of the diet with several types of flesh also available. Fish was the staple flesh with the sea also providing a range of shellfish, octopus, squid, crabs, lobsters, turtles, shark and rays of various sorts. A limited range of land animals also provided meat in the diet, including pigeon, flying foxes, land crab, native rat, and pigs (Macpherson and Macpherson 1990:33-34). This combination of ocean and reef resources, land animals, together with tree and root crops, assured an adequate supply of protein and energy in the pre-contact Samoan diet (Hanna et al. 1986:276).

The physical regime in pre-contact Samoa may also have had a significant impact on the population's health. The need to cultivate crops in difficult terrain at a distance from villages, the harvesting of tree crops and fishing from small craft in open seas all meant that the process of food production, at least for untitled people, was arduous. Also the division of labour ensured that the burden of production was shared amongst a significant proportion of the population, as there is little evidence of specialisation. The link between diet and physical lifestyle meant that there was little obesity and its associated illnesses (Macpherson and Macpherson 1990:35).

Early accounts of European contact certainly contain no evidence of widespread obesity or malnutrition in the population. These accounts of the Samoan people were; "unanimous in stressing their superior physical development and their generally robust, healthy appearance" (Pirie 1963:24). La Perouse (1787) described the Samoans as; "the tallest and best made that we have yet met with...their stature is less astonishing than the colossal proportions of the different parts of their bodies" (cited in Thomas 1990:5).
It can be assumed that before contact, therefore, an apparently small range of endemic diseases, a low level of contact with the outside world, relative absence of natural and environmental hazards, various customs concerned with personal hygiene, an adequate supply of protein and energy in the diet and the arduous nature of food production, all contributed to the generally good standard of health reported by many early European visitors to Samoa. Therefore, with the exception of intermittent periods of warfare, once childhood was survived, the rates of mortality and the occurrence of seriously debilitating diseases in pre-contact Samoa seem to have been low until old age.

In Samoa therefore, a limited range of illnesses had to be explained, relatively stable relationships existed between variables influencing patterns of illness, and there was isolation from potential sources of instability. These are all important points to bear in mind in relation to the way disease and sickness were diagnosed and treated, and the way health information was diffused.

4.5 Management and Treatment of Sickness

The accounts of Europeans who visited and worked in the Samoas in the period immediately following contact suggest that the range of indigenous medical beliefs and practices were limited. Although there was use of medicinal herbs and plants, surgery and massage, as mentioned previously, the majority of matters dealing with physical well-being were bound up with the Samoan interpretation of life and religious concepts.

As has already been discussed, *ma'ī aitu* was the Samoan term for any kind of illness thought to or shoqing the symptoms of having supernatural origins. Most cases of ghost-sickness were said to involve the actual possession or entering of a person by a ghost, usually malicious and generally of a once-living human being. This usually involved speaking in a descendant's voice, vomiting or any other action that seemed out of character for that person. The first step in treating *ma'ī aitu* was identifying the spirit involved. As Turner stated the;

"Samoans in their heathenism seldom had recourse to any remedy...As (they)...supposed disease to be occasioned by the wrath of some deity, their principal desire, in any difficult case, was not for medicine but to ascertain the cause of the calamity" (1884:140).
Some possessing spirits had national recognition and were connected with specific villages and particular mediums. The majority of cases however, were caused by family aitu exacting revenge and punishment on former friends, relatives or descendants (Shore 1978:177). Recognition of the offending spirits differed in relation to rank. In cases of illness which involved those of low status or children or which were not considered serious, it was usual for the head of the family to invoke the family gods. These gods would then speak through the father, or some other member of the family, telling them what to do in order to remove the illness, or to avert a threatened one (Thomas 1990:4). For illness that involved those of high rank or more life-threatening illness there was a class of priest, the taula-aitu-o-aina, (or in the more commonly used form taulaitu) who had the role of curing illness, and was responsible for communicating to the patient and family the intentions of the gods concerning the prognosis (ibid).

Possessing ghosts could suddenly leave on their own accord; through the treatment of a curer, the exhortations of a medium, or more rarely, upon the death of the possessed. The 'cure' for possession, however, was normally a dramatic confrontation between ghost and curer, in which the ghost was encouraged to have its say. A confession of wrong-doing, either by the patient or their family and friends, was normally considered a prerequisite for healing (Shore 1978:177 and Macpherson and Macpherson 1990:39). This confession served a definite purpose. It allowed the possessed individual, speaking through the voice of the aitu, to rid themselves of accumulated guilt through the confessions of various sins. It also allowed a person to speak rudely to those they should speak to with respect (i.e a matai), or to tell those above them in rank, authority or age, what they are doing wrong, thus acting as a way of diffusing tension (Clement 1982:200). It was emphatically asserted by all informants in such confessions that it was the ghost speaking and not the possessed person. As Shore (1978:178) noted; “Ghosts are omniscient, and speak directly about such sensitive matters; people are not”.

Another major arena of overt conflict-management was the faleaitu or village play. Faleaitu's were comic interludes, which were "scripted" orally, rehearsed, then performed in public by a small troupe of local players. Comedy and satirical skits were traditionally part of any Samoan festivities, and included conventional dramatic devices such as mimicry, slapstick and elaborate ve:bal play (Sinaviana 1992:174 and Shore 1978:178). Plots were often marked by the humorous treatment of authority figures who were dramatically ridiculed through the use of caricature and hyperbole.
In the sketches normative status roles were reversed — the high was made low, the world temporarily "turned upside down". The social licence permitted to clowns was extraordinary, particularly given the normal Samoan emphasis on tact, propriety and etiquette in most public performances (Shore 1978:178).

The performers were often referred to as aitu 'ghosts' as the comedians were sometimes said to be possessed by ghosts. This is clearly a Samoan metaphor for role-playing, and in this case the emphasis was on the fact that it was the ghost and not the person who was speaking. Thus, under the guise of drama, matters of contention could be aired without fear of reproof or retaliation (Thomas 1980a:22). The faleaitu therefore, appeared to function as an informal regulatory institution of conflict management, by acting as a catharsis for collective resentments and frustrations that structurally would have no other socially sanctioned outlet. In this way, the comedies may be seen as contributing to the maintenance of social equilibrium (Sinaviana 1992:176).

Spirits were also offered forms of placation. Where this was done correctly, the patient lived and if it was not they remained ill or died. Turner (1884:140-141) describes an example where the giving of gifts and confessions of wrong-doing were both involved in trying to cure illness.

"The friends of the sick went to the high priest of the village...If he said they were to give up a canoe to the god, it was given up. If a piece of land was asked it was passed over at once. Or if he did not wish anything from the party, he would probably tell them to assemble the family, "confess and throw out". In this ceremony each member of the family confessed his (sic) crimes and any judgements which in anger, he (sic) had invoked on the family or upon the particular member of it then ill".

Regardless of the means taken to chase away the spirit, (whether confession, prayers or placations), the afflicted was brought back into the family or other social unit and made to feel a welcome, valued part of it again (Goodman 1980:478). Tension was thus significantly reduced.

Although the availability of this supernatural paradigm meant that the development of a secular, biological paradigm of health was limited, there were examples of some of these practices in pre-contact Samoa. Along with illness caused by spirits (ma'i'a itu) there was also another type of known illness known as ma'i' gau, or broken bone illness, alluding to some incursion into the wholeness of the body (Thomas 1990:5). It was the fofô, or traditional healer, who specialised in the treatment of ma'i' gau through massage and herbal treatments.
There was limited use of plants in the treatment of disease and sickness in pre-contact Samoa, although early European accounts point to an almost complete lack of indigenous knowledge on medicinal usage of Samoan plants. A missionary, Heath, noted that the practice of using plants and herbs for medicinal purposes was far more advanced, and successful, in Fiji and Tonga than in Samoa during this time. Also Pratt's Grammar and Dictionary of the Samoan Language (1862), the most authoritative account of the Samoan language of the early nineteenth century, lists 336 plants and all their known usages, both inside and outside Samoa. Of these 336 plants, only nine had medicinal usages (Macpherson and Macpherson 1990:42).

More attention seems to have been placed on the practise of massage of various types. There were several varieties of massage in Samoa during this time, all dealing with different parts of the body and the force used to give the treatment. Wilkes in 1845 noted;

"Among the few curative means that the natives do employ is a sort of shampooing. This is performed by rubbing the body and limbs with the hands, at first gently, and gradually more and more roughly. These manipulations are applied as a restorative after fatigue and to alleviate pain" (cited in ibid:44).

If the practice of Samoan internal medicine seems to have been limited in the period following contact, so too does the indigenous practice of surgery. Turner's (1884:141) summary of the surgical practice of the Samoans is succinct;

"they lanced ulcers with a shell or a shark's tooth, and, in similar way, bled from the arm. For inflammatory swellings they sometimes tried local bleeding...To take a barbed spear from the arm or leg they cut into the limb from the opposite side and pushed it right through."

These measures seemed to be ineffective in the main and as Stair (1897) noted the practice of lancing by Samoan doctors was;

"often most thoughtlessly practised by them; hence veins were frequently cut, to cope with which they had no sufficient remedy, so death often ensured..." (cited in Macpherson and Macpherson 1990:44).
The existence of a paradigm that focused on spiritual causes of illness meant that the development of a medical paradigm based on science was limited. Although there were examples of internal medicine, massage and surgery in Samoa, these were contained within strict boundaries defined by the beliefs of Samoan society on the causes of sickness and disease. Treatment of illness was therefore, based around this belief and centered on the search for ways to restore the equilibrium. This was done through confessions of wrong-doing or the giving of gifts.

This chapter has so far discussed the way health was defined, provided a health reconstruction of the Samoans during this time and reviewed the ways in which illness was treated and managed. It is now appropriate to move on to examine the processes by which health information was diffused in pre-contact Samoa.

4.6 Pre-Contact Health Information Diffusion

As has been shown, health in pre-contact Samoa was tied in with the maintenance of equilibrium between, and within, the spiritual and social spheres. Health was obtained, therefore, not as Western medicine would state, by specific health related sets of knowledge, but by following social norms and values. All social intercourse which stressed the role of conformity in the maintenance of 'health', can therefore be defined as health information (Macpherson 1995 pers. comm.).

To examine the diffusion of health information in Samoa during this period we must first examine the way health was tied in with the maintenance of social equilibrium and reduction of social tension. Health knowledge diffused through priests who dealt with the identification and removal of aitu is the subject of the second section. Finally the way information on medicinal plants and herbs, surgery and massage techniques, which Western medical systems would define as "health information", was diffused through the fofoș.
4.6.1 Social Intercourse Stressing Conformity

As has been shown, the maintenance of strict social norms and values in Samoan society was believed to reduce the risk of creating tension within society and also between humans and the spirit world. Accepted forms of behaviour and etiquette were widely known and people were socialised from an early age in "acceptable" ways to behave. There were also myths concerning aitu which reinforced these notions.

An example of such myths is that concerning two aitu named Telesa'a and Sa'uma'iafi. Telesa'a and Sa'uma'iafi were taupo, (princesses), in their respective villages, and were, and are still, perhaps the most widely recognised national aitu. These spirits had certain dislikes concerning clothing, hair styles and etiquette patterns. Offensive or disliked behaviour could draw punishment from the respective spirit. Visitors were warned to observe certain preferences of the spirit and to stay away from certain areas during specific periods of the day to avoid an encounter. If a person was perceived as being afflicted by one of these spirits, they were taken to someone in the village whom the spirit respected, such as a high chief, so that the offender could apologise (Clement 1982:201).

As illness was ghostly punishment for acting in a socially unacceptable way, the perceived risk of illness was a powerful tool in social control. People took great care in, firstly, both learning and teaching what was acceptable behaviour (as illustrated above with locals teaching visitors what was acceptable), and secondly, making sure that they always observed these prescriptions.

Another way that information was diffused to help in the maintenance of social equilibrium was through links with the past. It has already been discussed, at some length, why the past was important in maintaining social equilibrium, but there are other important points, in relation to health information, that deserve consideration. The fa'amatai system of titles and order of rank was supported and reinforced by numerous ceremonies and conventions, each regulated by complicated etiquette. Rank was reinforced at regular special occasions, feasts, life crises and ceremonial journeys. All such functions opened with the orator's stylised recitation of the fa'alupega (dignified reference to all chiefs present). This was the traditional form of greeting which reminded all present of the relative rank and importance of those present (Thomas 1980b:15-16).
By being the channel through which rank and status was reinforced, the *fa'alupega* was important in the reproduction of the social order. Through this reproduction of order, balance and equilibrium were maintained, not only between social groups but also between humans and the spirit world. Everyone knew their place and how to behave.

These are just two examples of the ways, by teaching, learning and following specific social norms and values, by which a state of good health could be maintained. It must again be stressed that all social intercourse which had pushed the role of conformity to the existing social structure and belief system could be defined as health information.

### 4.6.2 Removal of Spirits

The second aspect that is to be examined centres on the diffusion of health information among those that dealt with the identification and removal of *aitu*. As most illness in Samoa during this period were believed to have been caused by various spirits, these people were central figures in "medical" treatment.

As discussed above, *taulaitu* had the role of identifying the spirit involved and then communicating to the patient and their family the intentions of the spirit concerning prognosis. These priests in some cases were the high chiefs of the village, but generally a particular family claimed the privilege and professed to declare the will of the spirits. The office was normally hereditary (Goodman 1980:463). Those that had this, or were believed to have this ability to identify and communicate the wishes of *aitu* guarded their knowledge zealously. This "gift" maintained their position and power within the society and they were very reluctant to divulge information on matters of spirit removal or communication. Therefore they played a very small part in health information diffusion in pre-contact Samoa.

### 4.6.3 The Diffusion of Indigenous Health Knowledge

There was however, greater information diffusion among the *fofös* in Samoa in the pre-contact period. Information on medicinal plants and herbs, surgery and massage techniques was diffused through two main means; ceremonial journeys and from healer to patient.
Ceremonial journeys (malaga), involving both groups and individuals, were a feature of pre-contact Samoan society. These journeys to other villages were normally undertaken by the high chiefs, tulafale's, (talking chiefs), and official parties of varying sizes. Visits were embarked on for various reasons, such as a marriage feast in another district, a faletaautu (courting party) sent to secure a chief's daughter as a wife, to return an earlier visit of another village, or to seek political support for a cause (Schoeffel 1986a:328).

A malaga, travelling by land or sea, often covered great distances, stopping over in many villages enroute to their ultimate destination. In a time when Samoa lacked modern communications the malaga was a major means for passing on information and maintaining links between territorial and island divisions. Although they acted as a trade substitute, by facilitating the redistribution of surplus food and specialist products, more than anything they provided the opportunity for feasting, dancing, games, oratory, political machinations, ceremonies, courtship and social enjoyment (ibid:328-329).

They also offered the opportunity for fofōs to travel and meet their respective counterparts in other villages. Malaga's facilitated interaction beyond the local setting for the traditional healers and allowed them the opportunity to give and receive information on plants and herbs, surgery and massage. As the party travelled it picked up information and diffused it around Samoa (Keesing 1956:80-81).

In the local village setting most information was passed on within the extended family network. Most people went to their own aiga fofō who they knew personally and trusted. Information on the medicinal uses of plants or certain massage techniques was given as part of the healer — patient relationship. Both the travelling parties and the diffusion of information at the local level through the fofōs, however, were not a major part in the Samoan "health information system" due to the belief that illness was caused by spirits more than any biological explanation.
4.7 Important Characteristics of Communication Model

The Samoan proverb: *E pala ma'a, 'ae pala 'upu,* (Stones rot but words last forever), points to the cultural significance of the spoken word in Samoan society. It alludes to the richness and pleasure of good discussion, pride in the ability to talk well and the Samoan's skill in oratory. Samoa had, and has still, a talking culture, where oratory is regarded as an art form. The most important channel for information diffusion was therefore the spoken world. The importance of oral communication is clearly seen in the division of *matai* titles into high chiefs (*ali'i*) and talking chiefs (Thomas 1980b:1).

The *tulafale* was the official medium through which the decisions of the *ali'i* were made known and information from above was channelled. Important matters to be communicated had to be couched in oratorical terms which contained artistic allusion to the past and poetic reference to the deeds of the ancestors in the appropriate language. Each high chief had a *tulafale* to act as their mouthpiece and Buck (1965:166) noted;

*a class of hereditary chiefs...created such a mass of observances in etiquette, precedence and a special chief's language that the high chiefs were unable to do without them*.

As well as the importance of a class of titles based on oral communication all mythology, traditions, history, customs and ritual in pre-contact Samoa were taught by word of mouth. The individual had to learn by ear and pass on information by speaking (ibid:165). Also when a society depends on memory it employed; "every device of the demagogue and the poet: rhyme, rhythm, melody, structure, repetition" (Riesman 1960:110). All information and knowledge was therefore, passed on between individuals through interpersonal communication. This was through informal discussion, formal speeches, poetry or song. There was no form of mass communication, with *malagas* providing the only opportunity for information diffusion on a wider spatial scale.
Every act of communication takes place in a context. This may be social, political, economic or environmental in nature and effects and influences all aspects of the communication process. As has been discussed throughout this chapter, the most important element in the pre-contact communication system is the social-political context that the diffusion of health information took place in. It shaped the whole process, dictating not only people's actions, but also their beliefs and values on health, and therefore health information. Because of the way that sickness was believed to be caused, and the way it differed from that of western medical belief, the definition of health information was also significantly different. Thus, the context of health information must be clearly understood before a full understanding of the process of information diffusion is obtained.

4.8 Conclusion

Health in pre-contact Samoa was not about the absence of sickness, nor was it a fall from a state of complete well-being that would normally be defined as health in a modern, western sense. It was defined in far wider terms. The two most important elements in this belief were that sickness was an affair of the complete social group, not merely the individual, and it was tied up with the relationship between humans and the spirit world.

Sickness was believed to be part of the relationship with the entire world — physical, social and spiritual. The most important element in this belief was the idea that sickness was caused by a disruption in the equilibrium of this system. Health was viewed as the absence of spiritual and social tension, and was obtained and sustained through the maintenance of equilibrium between, and within, these different spheres. It was not obtained by specific health related sets of knowledge, but by addressing ways to control tension in the system.
The potential for tension in the social and spiritual order centered on challenges to the existing social order. The two most important elements of this were the way that society was maintained and reproduced through links with the past and, secondly, the way in Samoan society was rigidly structured with each person having clearly defined roles and an exact position in the social order. The major component of "health" information diffusion therefore, was social intercourse which stressed the role of conformity and deference to those with inherited rank and status. This was how equilibrium was seen to be maintained. The belief was that if everybody fulfilled the roles expected of them and acted in the ways prescribed then tension, and thus the potential for illness, disease or death, would be significantly reduced. Thus health information diffusion centered around these principles.

Another way the health information could have been diffused was through the taulaîtutu. They had the role of identifying the spirit involved in illness and, once diagnosis was made, communicating to the patient and their family the intentions of the spirit concerning prognosis. However, the ability to identify and communicate the wishes of an aitu was guarded zealously and taulaîtutu were very reluctant to divulge information on matters of spirit removal or communication as it maintained their position and power within the society. Therefore they played a very small part in health information diffusion in pre-contact Samoa.

Although the availability of the supernatural paradigm meant that the development of a secular, biological paradigm was limited, there was use of medicinal herbs and plants, surgery and massage in pre-contact Samoa. Information and knowledge on these matters were diffused through malagas on a wider spatial scale, and through the fofò — patient relationship at the local scale. However, due to the belief that illness was caused by spirits more than any biological explanation, this information diffusion was limited.

The causes, diagnosis and treatments of sickness and disease in pre-contact Samoa supported religious beliefs and the existing social system. The treatment of illness promoted mutual support within the family, reinforced the relative rank of both the living and the dead, and provided a therapeutic interlude in which transgressions could be confessed and grievances aired in a tension diffusion exercise. Health information diffusion played a significant role in these processes.
Chapter Five: The Colonial Period and Health Information Diffusion

"You introduce new things through these organisations, but soon it changes, It's all hierarchy...Always the hierarchy arranges things in Samoa. It always comes back to the basic system.

A Retired District Health Nurse (pers. comm. cited in Thomas 1986a:85)
5.1 Introduction

Significant European contact in Western Samoa began in the 1830s when missionaries arrived in the islands to spread the christian gospel. Western missionary influence introduced a medical system which was based on a completely different understanding of the causation of disease than had existed in pre-contact Samoa (Connell 1980:3). However before an examination of the communication of health information in colonial Western Samoa, it is first necessary to consider how Western medical belief became incorporated into Samoan society. This will be the first agenda of this chapter.

Colonial intervention increased throughout the nineteenth century until, at the turn of the century, the Samoas were partitioned in an arrangement designed to rationalise European nations' interests in the Pacific. The islands in the east group came under the formal protection of the United States and became known as American Samoa, while those in the west came under the protection of Germany and became known as German — later Western — Samoa. At the outbreak of the First World War New Zealand military forces occupied Western Samoa and the islands were subsequently placed, by the League of Nations, under New Zealand control (Macpherson 1988:1-2).

One of the initial focuses, for a number of reasons, of the New Zealand colonial administration in Western Samoa was to improve Samoan health standards. To achieve this aim a system of women's health committees were set up by the New Zealand administration and health-care workers were appointed. These committees embodied the central principles of primary health care and were the main mechanism for both curative and preventive health-care delivery in colonial Western Samoa.

One of the central roles of the women's committees was the communication of health information. This chapter examines the dissemination of this information through the committees by analysing their introduction and acceptance, and how their role has changed over time.
5.2 Changing Definitions of Health

The various factors that contributed to epidemiological stability in pre-contact Samoa have been outlined in Chapter Four. The Samoans devised a paradigm which focused on the supernatural for explanations of, and responses to, the prevalent illnesses. When they responded in ways which the paradigm prescribed, its explanatory power was confirmed and its legitimacy consolidated. Until contact with significant numbers of outsiders began in the early nineteenth century they had no reason to suspect that the paradigm might in any way, be inadequate. Contact with Europeans however, rapidly transformed this situation. European contact introduced a new range of infectious diseases, new ways of explaining illness and new techniques for its management.

This section examines the incorporation of Western medical belief into Samoa. To help explain this process the similarities between existing and introduced medical belief, the reluctance of the missionaries to partake in wholesale destruction of existing beliefs and practices, the growth and popularity of mission dispensaries and the social, economic and political consequences of introduced disease are all examined.

5.2.1 Missionaries and Health

The new medical paradigm which the missionaries brought with them to Samoa was a relatively crude version of that which underpinned the Western medicine of the day, and it must be noted that the missionaries were chosen more "...for their evangelical zeal than for their familiarity with Western medical belief or practice" (Macpherson and Macpherson 1990:60). Missionary medicine lacked the conceptual and technical elaboration of the Western medical paradigm of the day and was probably, in most cases, a misleading reflection of it. However, it was associated with the Europeans and in the absence of contradiction, became the new paradigm for many Samoans.
Although they were significant as the initial carriers of Western medical belief, the first generation of missionaries had an ambivalent perception of medicine, a perception that was scarcely more 'scientific' than the ancient Samoan view of health and ill health (Lange 1988:62). Gunson (1978:248) provides a succinct summary of these perceptions and beliefs:

"The attitude taken to disease was a typical projection of Calvinist thought. Disease was an agency of the providence of God, a judgement on the sins of the people and the necessary consequence of their immoral state...The way to heal this disease was not to apply physical remedies but first to heal the spiritual state of the people, to effect salvation"

(cited in Macpherson and Macpherson 1990:61).

For the Samoans the distinctions between the introduced and existing medical beliefs were blurred by apparent similarities in certain fundamental areas (Gilson 1970:103). While the "similarities" may have been more apparent than real, their influence on Samoan perception was clear. At the centre of each was a supernatural agency, or agencies, which dominated the lives of the mortals and had the power to produce and remove illnesses in human populations. These deities had also delegated part of their power to mediums who took human forms and who were able to convey the deities' demands to humans. Finally, the Holy Scriptures, as the central statements of the introduced faith, demonstrated that the likelihood of a successful cure was more closely related to the strength of the adherent's faith than to human intervention, and thus corresponded to existing Samoan belief.

Another factor which acted to reduce the distinctions between the introduced and existing medical beliefs, was the behaviour of the missionaries when responding to acute illnesses. As the missionaries typically lived in the midst of their congregation and regularly had Samoans working in their households, their reaction to illness were readily visible. Their limited repertoire of medical skills meant that as illnesses became progressively worse the missionaries became increasingly dependent on their God for intervention. When, as was often the case, professional medical aid was not available, missionaries turned more and more to prayer. Certain appeals, common in such prayers, such as forgiving past sin, removing illness or sparing further suffering, were not unlike those Samoans made to their deities in similar circumstances. The increasing importance placed on prayer often coincided with the suspension of treatment and an apparently passive acceptance of the inevitability of death (Macpherson and Macpherson 1990:62).
The similarities between the introduced and existing medical paradigms created a situation conducive to the integration of Western medical belief into Samoan society as the distance between the bodies of knowledge did not seem, for Samoans at least, to be that great. Coupled with these apparent similarities between existing and introduced medical belief was the reluctance, on the part of the missionaries, to suppress native practices or beliefs.

The first European missionary, John Williams of the London Missionary Society (LMS), was persuaded by his Samoan advisor to avoid antagonising the Samoans by condemning their customs and practices. He discouraged only warfare and 'obscene' traditional dances and songs. The same was true of of the Reverend Peter Turner who arrived in Samoa in 1835 to spread the Methodist faith. Gilson (1970:47) noted that;

"like Williams, Turner was easy on sin and for the same reason. Actually, his forbearance was greater...He was also more flexible in his attitude to Samoan ideas and customs at the congregational level"

(cited in Macpherson and Macpherson 1990:46).

By allowing a continuation of existing Samoan practices and beliefs the missionaries did not place the Samoans in a situation of having to choose between existing and introduced beliefs. In terms of medical belief this provided a catalyst for the gradual acceptance of western medical practices and medicines.

Missionaries, as the first group to introduce western medicines, had only a limited range of these at their disposal. These included mercury, castor oil and arsenic compounds. Samoans, when introduced to such formulas, were widely interested in them. Turner (1884), Stair (1897), Murray (1863), Lundie (1846) and Powell (1868) all reported steady demand for their medicines (Macpherson and Macpherson 1990:65). By the 1880s Turner recalled treating between 20 and 50 cases a day and noted that;

"European medicines are eagerly sought after; so much so that every missionary is obliged to have a dispensary, and to set apart a certain hour every day to give advice and medicine to the sick"

(Turner 1884:140).
Although these medicines may have been utilised by the Samoans in much the same way as the various indigenous medicinal herbs and plants that were in use before contact, they did show that certain aspects of Western medicine were useful and superior to Samoan treatments of the same ailment. They also introduced the notion that there were different ways to treat sickness and disease. Traditionally, when certain complaints did not respond to indigenous treatment, they were diagnosed as being caused by *aitu* but it now became apparent that they could be cured by the taking or application of medicines.

The diffusion of Western medical belief into the existing paradigm was made easier therefore, through the apparent similarities of the medical belief systems which reduced the distance between the introduced and existing paradigms. Also by allowing the continuation of pre-contact beliefs and practices, the missionaries did not place the Samoans in a situation of having to choose between the two systems. In terms of medical belief, this allowed the gradual introduction of more scientific western medical practices. The popularity of the Western medicines supplied through the missions, also introduced the notion that there were different ways to diagnose and treat sickness and disease.

The pace of the diffusion of Western medical belief into Samoan society was increased due the introduction, by European contact, of a new range of infectious diseases. The exposure of large numbers of Samoans to these new diseases produced a situation in which certain inadequacies of the pre-contact paradigm became obvious and in which pressure for its modification emerged.

### 5.2.2 Epidemics

The pre-contact paradigm might have survived a single, early, traumatic epidemic which could have been explained as a visitation of a vengeful God, but a series of new diseases must have placed the paradigm under considerable pressure. The very isolation which had produced epidemiological stability had also prevented the development of immunity to these illnesses and ensured that their introduction would have dramatic physical, social and cognitive consequences (Macpherson and Macpherson 1990:55).
The first episode of introduced disease involved the pioneer missionary John Williams and his party on their 1830 visit. He reported, without any apparent concern, that after coming to anchor they had sent most of their party ashore, including all the sick passengers (Williams 1838:330-331 cited in ibid). The illness, which was later stated to be influenza, must have been severe because shortly afterwards Williams wrote that one of the party members had died. The influenza spread quickly among the Samoans with whom contact had been made and was attributed, by the Samoans, to that contact. It was not to be forgotten because, as Turner noted:

"Ever since there have been returns of the disease almost annually...It lasts for about a month, and passes off as fine weather and steady tradewinds set in. In many cases it is fatal to old people and those who have been previously weakened by pulmonary diseases" (1884:138-139).

The loss of the elderly outlined by Turner clearly had a significant impact on the social organisation of the pre-literate gerontocracy. The elderly in Samoan society were held to possess the knowledge on which the society's stable existence was thought to depend. For example, knowledge of succession to all chiefly titles, genealogy and land ownership, and of agreements about these matters was crucial to orderly social life. The sudden loss of the guardians of this knowledge left open the possibilities of social, economic and political instability. Furthermore since socio-political power was concentrated in the hands of the older people who held chiefly titles, their deaths kindled struggles for those titles left vacant, resulting in further instability during the contests and for some time after. The social and psychological consequences of losses of the elderly, and of the instability which followed, could reasonably be expected to stimulate an interest in the causes of these illnesses and the means of avoiding, or at least controlling them (Macpherson and Macpherson 1990:56).

The second recorded episode on introduced disease was the introduction of whooping cough in 1849 which spread through Samoa over a period of months. It was contracted by both adults and children, although Turner (1884:139) noted that most of the deaths were among the younger members of Samoan society. In this case the social and psychological impact may have been less significant for Samoan social organisation than was the case with influenza, however the incident demonstrated once again the potency of introduced disease, and on yet another section of the population. As the Samoans were "always fond of their children and would have done anything for them when ill" (ibid:135), there is good reason to suppose that this episode would have stimulated further interest in the causes and management of yet another unfamiliar disease.
The Samoan's vulnerability to introduced diseases was further highlighted by a continuing record of epidemics. In 1851, an American vessel introduced mumps, while in 1879 typhus was brought into Samoa by the crew of the German warship Bismarck. Influenza returned in 1891 while, in 1893, measles was first introduced into Samoa. In later years several illnesses returned sometimes in combination, dysentery and whooping cough struck in 1907 and in 1911 measles and dysentery hit the Samoan population. In 1915 measles returned alone (McArthur 1967). Figure 5.1 shows the declining Samoan population between 1830 and 1920 and the epidemics which may have contributed to population loss.

Table 5.1: Western Samoan Population and Epidemic Occurrence (1839-1920)
(Source: Adapted from Thomas 1990:8 and Western Samoan Department of Statistics 1979)

<table>
<thead>
<tr>
<th>Year</th>
<th>Introduced Epidemic</th>
<th>Population</th>
<th>Annual Growth (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1830</td>
<td>Influenza</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>1837</td>
<td>Influenza</td>
<td>---</td>
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<tr>
<td>1839</td>
<td>Influenza</td>
<td>46,000</td>
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<tr>
<td>1846</td>
<td>Influenza</td>
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<tr>
<td>1848</td>
<td>Influenza</td>
<td>33,000</td>
<td>-9.2</td>
</tr>
<tr>
<td>1849</td>
<td>Whooping Cough</td>
<td>32,000</td>
<td>-9.9</td>
</tr>
<tr>
<td>1851</td>
<td>Mumps</td>
<td>---</td>
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<tr>
<td>1853</td>
<td></td>
<td>29,237</td>
<td>-8.2</td>
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<td>1863</td>
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<td>29,236</td>
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<td>1869</td>
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<td>1893</td>
<td>Measles</td>
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<td>1899</td>
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<tr>
<td>1900</td>
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<td>32,815</td>
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<td>32,612</td>
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<tr>
<td>1907</td>
<td>Dysentry/ Whooping Cough</td>
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<tr>
<td>1911</td>
<td>Measles/ Dysentery</td>
<td>35,554</td>
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<tr>
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<td>Measles</td>
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<tr>
<td>1917</td>
<td></td>
<td>35,404</td>
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The most significant and tragic episode however, occurred in 1918 when the influenza pandemic arrived in Western Samoa. In November of that year the S.S Talune arrived in Apia from New Zealand, carrying passengers with influenza. They were permitted to land in Samoa and due to the highly mobile nature of Samoan society the disease quickly spread. In a little over six weeks a quarter of the population had died: Western Samoa lost 22% of its population within a matter of weeks, including 30% of all adult men, 22% of all women and 10% of all the children (Tomkins 1992:185).
The old paradigm, which evolved in a context where such diseases were not present, could not explain nor manage the new illnesses. The pre-contact paradigm could suggest intervention for individual cases and even localised outbreaks of illness, but with the epidemics described, large numbers of people were affected without regard for the conduct of their victims or boundaries of their dieties jurisdictions (MacPherson and MacPherson 1990: 58).

The social, political and psychological disruption caused by these epidemics, in particular the influenza pandemic, provided a situation conducive to a wider adoption of Western medical belief in Samoa. Epidemics struck down the elderly guardians of the traditions which underpinned the pre-contact paradigm with obvious consequences in a gerontocracy. The loss of such people provided both the motive, and the necessary condition, for the emergence of a modified paradigm. These episodes generated the interest necessary for the reconceptualisation of illness and its management (ibid).

There was not however, an abandonment of Samoan medical beliefs in favour of the introduced paradigm. Three reasons explain why a complete rejection of traditional ways did not occur: Contradictions in fundamental areas of belief and practice, so marked that the existing and introduced paradigm's could not have been held simultaneously, would have had to become apparent to the Samoans for the paradigm's abandonment. As has been shown, this was not the case in Samoa. Secondly, if European residents and visitors had enjoyed immunity to the diseases which swept through Samoa, the Samoans might have been forced to acknowledge the superiority of the introduced paradigm. This was not however the case, as from the time of John Williams' arrival, the Samoans saw a procession of European visitors in poor health. Many arrived in poor health, some left in search of better health while others died in Samoa. Finally, the Samoan belief system would have had to permit the abandonment of the pre-contact paradigm. As has been discussed in Chapter Five, the existing paradigm believed that illness was inextricably connected with other beliefs about the world. Beliefs about illness were only part of a more complex set of beliefs which constituted the Samoan world view and could not be discarded without serious consequences for the integrity of that view. Even if events which followed contact exposed some of the limitations of pre-contact medical belief and practice, this alone would not have been sufficient to lead to its abandonment.
The Samoans thus, did not abandon their existing paradigm completely and instead began to augment it, trying to explain their new epidemiological circumstances. They concentrated on the use of herbs and plants and internal medicine, although they still maintained that the spirit world played a part in the causes and diagnosis of illness and disease. Through increased contact with Fiji, Tenga and Tahiti and with the Europeans present in Samoa, a number of herbs and plants were added to the Samoan pharmacopoeia. As has been previously stated, the practice of using plants and herbs for medicinal purposes was far more advanced and successful in these countries than in Samoa during this time (Thomas 1990:10). Apart from direct borrowings from Western medicine, as it became apparent that some of these practices were obviously more effective than existing ones, contact with European medicine may have influenced the expansion process in other ways. Some European missionaries were experimenting with the medicinal properties of local plants and herbs, and it is conceivable that their efforts might have persuaded the Samoans to extend their own experimentation with local plants (Macpherson and Macpherson 1990:71-72).

5.2.3 Summary of Changing Definitions of Health

Contact with Europeans introduced Samoans to a new range of infectious diseases, new ways of explaining illness and new techniques for its management. Initially, through the apparent similarities between the missionary views on disease and existing belief, the Samoans believed that there was very little difference between the paradigms. This perception reduced the distance between the two bodies of knowledge and allowed a greater diffusion of ideas. Also by enabling the continuation of pre-contact beliefs and practices, the missionaries did not place the Samoans in a position of having to choose between existing and introduced beliefs. This allowed the gradual introduction of more scientific Western medical practices into existing belief.

The growth and popularity of mission dispensaries, and the way they introduced Western ideas on the diagnosis and treatment of disease also played a significant part in the diffusion process. The use of Western medicines introduced the notion that there were different ways to treat sickness and disease. Traditionally, when certain complaints, did not respond to treatment, they were diagnosed as being caused by aitu. It now become apparent that there were alternative explanations.
The pace of the diffusion process was increased due the introduction of a new range of infectious diseases and epidemics. The social, political and psychological disruption caused by these epidemics, in particular the influenza pandemic, provided a situation conducive to a wider adoption of Western medical belief. Also the loss of the guardians of the traditions, which underpinned the pre-contact paradigm, removed the obstacles to the diffusion process.

All of these factors played a part in the introduction of Western medical belief into Samoan society. This section has provided the background necessary to now investigate the health information system established by colonial powers.

5.3 The New Zealand Administration and Health

Epidemic after epidemic had killed not only new generations of Samoan children, but an increasing proportion of adults as well. As the first colonial power, the German regime had placed little significance on the improvement of the Samoan's health during their control of the islands. Any resources spent on health were concentrated on the building and maintenance of the hospital at Motootua in Apia, mainly for European use (Hoadley 1980:444). The introduction of epidemics and the neglect of health by the German administration meant that the general standard of Samoan health was perceived to be deteriorating by Europeans and the indigenous population alike;

"the Samoans are not as robust as they were formerly, and thousands of them are physically incapable of throwing off even comparatively slight attempts of sickness (sic)"


By the time New Zealand was awarded the colonial mandate for control of Western Samoa, the health of this nation was a top priority. Several reasons for the health focus of New Zealand's colonial regime can be identified. Firstly, there has been considerable debate on the New Zealand administration's role in allowing the influenza epidemic in 1918 into Western Samoa (refer Tomkins 1992).
For the majority of Samoans, however, the explanation was simple, the colonial regime was at fault. With both the extreme death toll and the close proximity of its disease-free neighbour (American Samoa was successfully quarantined during the pandemic), Western Samoa had the potential for political and social unrest following the epidemic (Tomkins 1992:185). By focusing on health-care the New Zealand administration was trying to quell the growing tide of unrest, especially among the rural population of Western Samoa.

Another factor in the administration's focus on health was the desire by the New Zealand government to prove its ability to play a part on the international scene. Western Samoa was one of the first overseas countries that New Zealand had administrative control over and for a growing and maturing country it provided an opportunity to prove its new-found status as a country capable of playing a part in the colonial scene. Extra pressure to 'perform' as a colonial power was exerted when nearby American Samoa was successfully quarantined from the influenza pandemic.

It could be argued, therefore, that health was a major concern of the New Zealand administration more because of its own political needs than the health requirements of the Samoan population. Another illustration of this point was New Zealand's need to meet its responsibilities laid down by the League of Nations Mandates Committee. This body demanded an annual report on the social well-being of the Samoans. The New Zealand administration therefore, had to prove that it was actively involved in the social development of Western Samoa. Improvements in health standards could constitute sufficient proof.

Population decline and the deterioration in standards of health, the effects and introduction of the influenza pandemic and the desire of the New Zealand administration to meet the responsibilities of a mandated colonial power all ensured, therefore, that the initial focus of the colonial administration was on improving health. The next section considers how this desire to improve health standards was manifested in health policy and action.
5.3.1 Direction of New Zealand’s Colonial Health Policy

The first task of the New Zealand administration, before implementing any programmes or policies on health-care, was to ascertain the main health problems and the causes for the perceived deterioration in Samoan health standards. A team of international specialists was brought to Western Samoa to aid in this task. Although the consequent reports pointed out the high prevalence of yaws, hookworm, filariasis and eye disease, the major causes of low population growth and ill health, however, were seen to be high infant mortality and a lack of hygiene (Trail 1920; Kendall 1920; Ritchie 1920; Makgill 1922; O’Connor 1922 and Lambert 1924). This view was reinforced by the Acting Chief Medical Officer who reported in 1920 that as much as 75 percent of the disease in Samoa was attributable to the absence of any sanitary system. Although it was recognised that the Samoans were extremely clean in their personal habits, they were reported to be; “practically ignorant of the laws of ordinary hygiene” (Kendall 1920:3).

Following the recommendations of these reports the Administrator in Western Samoa requested that the New Zealand government appoint a Chief Medical Officer (CMO) with interests in public health. In 1923 the post was filled by Dr T. Russell Ritchie who had been one of the initial advisors on strategies to improve Samoan health. Through working with the Department of Health in Wellington Ritchie had become familiar with the concepts of primary health-care, preventive medicine and community self-help (Thomas 1986a:49). The New Zealand government at the time placed great emphasis upon primary health-care in its domestic policy and had advanced maternal and child health (MCH) programmes for both European and Maori communities. Such policy was familiar to Ritchie and the other pioneer medical officers posted to Western Samoa (Schoeffer 1984:209).

During the time that Ritchie held his position Dr Regina Flood Keyes was engaged in voluntary health work among women and children in Vaiala, an urban village near Apia (refer Figure 5.1 for location). Keyes was an American medical practitioner who devoted her time to teaching Samoan women the principles of health, hygiene, and child-care. Keyes (1927:15) stated that women were anxious to learn and that whenever she held a clinic she always had 100 percent attendance (cited in Schoeffer 1984:209). She is reported to have had a strong, decisive personality, and coupled with her status, and that of her husband (he was American vice-consul to Western Samoa), was held in high regard among the Samoan women she worked with. Late in 1923, Dr Mabel Christie was appointed to the newly established post of Child Welfare Officer within the Western Samoan Department of Health.
5.4 The Introduction and Growth of the Women's Committees (1923-1940)

Together Ritchie, Keyes and Christie devised a community health experiment based upon a combination of New Zealand health models and Keyes's experience with Samoan village women. The system was firmly grounded on the ideology of equality of access and community participation and was based on groups of village women which were to become known as women's committees (komiti tumama) who were to be responsible for overseeing and policing health matters within the village. The village based groups were to be supported by a team of doctors and nurses who would provide regular medical checks, lectures on health matters and practical teaching. This teaching would involve lessons in first aid, infant care, infant nutrition, household hygiene and village sanitation (Thomas 1986a:50-51).

That the system of village health committees was established when it was and according to a particular model, was the result of historical coincidence. The successful establishment of the committees required not only specific events, but people concerned with preventive rather than curative medicine. The idea of women's health committees required acceptance by both the New Zealand administration and the Samoan people, and needed people both interested in, and experienced in MCH. More importantly, it needed female medical personnel who could deal with the health problems of women without embarrassing them. Ideally the establishment of the Samoan women's committees needed a woman doctor with high status, trained in and concerned with preventive medicine, who also had some experience with and sympathy for Samoan women. That both Keyes and Christie were working in health in Western Samoa is quite extraordinary, as New Zealand at this time had less than one female doctor in 200 (Thomas 1986a:47).

Ritchie, Keyes and Christie set up an experimental project incorporating 24 villages, four plantations and two mission stations along the North-West coast of Upolu between Apia and Falefa (Figure 5.1). These villages were chosen due to their proximity to Apia and were visited fortnightly by Keyes and her assistants.
Figure 5.1: Location of Experimental Women's Health Committees — 1923
(Source: Thomas 1986a:51).

5.4.1 Introduction and Acceptance

The establishment of these experimental committees and their expansion throughout Western Samoa was dependent upon a number of factors. These included the way the colonial administration was careful to follow Samoan etiquette and custom during the introduction of committees, the effects of the influenza pandemic on social organisation, internal pressures on village matali, and the status attached by both Europeans and Samoans to this new undertaking.

To conform to the etiquette of fa'aSamoa the establishment of the experimental health groups was discussed by the Western health personnel with the various village fonos before it was mentioned to the women. By stressing the need for self-help and Samoan assistance in matters of health, Samoan pride and dignity were maintained and the chances of acceptance increased.

Not only did the influenza pandemic play a part in the diffusion of Western medical belief into Samoa, it also provided a situation conducive to the establishment of village health committees. As has already been discussed, it had a particularly serious impact on the elderly, with 45% of all matali in Western Samoa being killed (Macpherson and Macpherson 1991:56).
A much younger village leadership, therefore, existed after the pandemic and because of this Keesing (1934:385) observed the influenza pandemic was; "a great blow to conservatism", as it was likely that the many new matai were probably more receptive to new ideas and initiatives than had been their predecessors. The new matai were not only receiving pressure to introduce the women's committees from high ranking Europeans, but there was also pressure from within their villages. It was realised that traditional health measures were ineffective against the new diseases and a felt need for help was apparent. Keyes (1927:15) reported recurring appeals from the village women at her clinics to help prevent the death of their children (cited in Macpherson and Macpherson 1990:51-52).

Initial visits to villages were undertaken by Keyes and, frequently, by the Administrator of Western Samoa himself. The backing, and highly visible support of the highest ranking European in the country gave the new undertaking not only status but also legitimacy. Such visits were surrounded by a great amount of ceremony involving the whole district in a talo pa'aia (ceremonial presentation of food). Everyone in the district knew of the visits and the reasons for them. News of the committees and the Administrator's involvement, quickly spread throughout the country, and by the end of the year similar committees were demanded by villages throughout Western Samoa.

By 1926, only three years after the introduction of the first experimental committee, nearly every village in Western Samoa had a women's committee. They were recognised by colonial administration as an extremely important extension of the health service and the importance attached to the committees can be seen by a government administrative chart drawn up at the time (Figure 5.2). There was also significant resources both in time and money, poured into training support staff for the women's committees. By 1926, 49 Samoan District Health Nurses (DHN) were either in the districts or were being trained and; "Apia Hospital was well equipped to train Native girls as nurses..." (Western Samoan Medical Department 1927:3 cited in Thomas 1986a:63).
On the Samoan side one of the reasons for their success was the perception that the committees conferred status. In the highly competitive, status conscious society that Samoa was, and still is, the status involved in such a prestigious undertaking was important and each village wanted to be involved. The women's committee members felt that they belonged to an organisation that conferred prestige both inside and outside the local polity. The committees also provided Samoan women previously unequalled opportunities for power and prestige, a fact immediately recognised and seized with enthusiasm by them. The committees extended the range of positions available for women and their control of certain areas of social organisation (Schoeffel 1984:21). For all village women, therefore, the committee meetings provided new spheres of action.

On a more practical level, the expansion of the women's committees was made possible through the growth of the Samoan rural health service. By 1926, besides the main hospital in Apia, 14 dispensaries and two district hospitals had been built (Figure 5.3) giving the new DHNs a base from which to work. By 1927 the health budget was 19.4 percent of the total budget of Western Samoa (amounting to £25,912), and access to health-care and information improved as more staff were trained and more dispensaries were opened in outlying districts.
Figure 5.3: Western Samoan Health Divisions and Health Facilities — 1923
(Source: Adapted from Thomas 1990:2)

The establishment and expansion of the women's committees was, therefore, a function of a number of different factors. The way the colonial administration followed the etiquette of fa'a Samoa, the effects of the influenza pandemic on the structure of the village fonos, internal pressures on village matai and the status attached to the new undertaking all contributed to their acceptance in Western Samoa. The opportunities for power and prestige afforded to the women of Western Samoa by the women's committees, also played a significant role in the rapid acceptance of this new health institution.

5.4.2 Initial Structure and Roles of the Women's Committees

To understand how health information was diffused through the initial form of the women's committees it is important to first understand how they were run and what tasks they performed. The original pattern for the women's health committees laid down by Ritchie, Christie and Keyes, was based on that of a formal European committee, although there was considerable flexibility allowing for Samoan input. The procedures were based on a set of regulations which were clearly authoritarian. These procedures demanded the active participation of all women with children under two years of age and gave the small executive committee authority to order all women to attend the clinics and to observe health-related regulations (Thomas 1986a:55).
Given the role of status and rank in every Samoan interaction it might be expected that the highest ranking women of the village would have held the executive positions. This was not the case, however, at least not initially. The president was chosen by the Department of Health or District Medical Officer (DMO) and was invariably a woman with no traditional political affiliation within the village — normally the pastors' wife. They were chosen because they were usually the most educated of the rural women and also as outsiders, they were politically neutral, avoiding the possibility of disruptive contention over leadership between rival descent groups (Schoeffel 1984:210 and Thomas 1986a:48).

By 1926 committee activities and meeting procedures had become standardised. The most important event was the monthly MCH clinics. The early clinics were held in the meeting house of the leading matai or pastor, thus giving the event status and legitimacy. The clinics integrated the ceremonies that Samoan etiquette called for, with formal health procedures. The meetings began with an official opening, normally followed by a short health talk on infant feeding, care of children or sanitation and special instruction was given on any disease prevalent at the time. All cases of illness were reported to the medical officer together with action taken. Babies were then weighed and measured and advice given to the mothers. Those too ill to attend the clinic were visited at home. The committee executive was given lessons in first aid and the use of simple medicines. The meetings closed with speeches, prayers and the presentation of food. These procedures became firmly established, and the inclusion of both Samoan and European procedures suggests that Keyes, Christie and Ritchie were aware of the importance of incorporating Samoan cultural values within the committee structure. As will be shown later, this flexibility was an important factor in the maintenance of the committee (Thomas 1986a:55).

The original tasks of each committee were to organise cutting grass and weeds within specific distances of dwelling houses and the collection and removal of rubbish in order to reduce breeding grounds for flies and mosquitos. Each committee had sub-committees which made tours of the village to check such things as: whether houses were properly thatched and their blinds in good condition; whether household areas were free of weeds and rubbish; whether each women had adequate cooking utensils, sheets, towels, mats and mosquito nets for her family; whether each household possessed a proper latrine; and so on. Offenders were fined by the committee. Other sub-committees performed tasks such as guarding village bathing and drinking water supplies, ensuring their protection (Schoeffel 1984:211).
The value of competition and the strong Samoan need for esteem was not lost on health personnel and was frequently deliberately stimulated within the committees to help improve Samoan health standards.

"The child's weight is publicly announced, and if there is any gain the mother is praised. If any loss...an investigation is made at once...the mother if at fault is admonished...An effort is made to create a spirit of emulation in the village..."

(Keyes NZHR A-4 1927:17 cited in ibid:56).

To raise health standards, competition was also fostered between villages. Ritchie, in his regular visits to various women's committees attempted to encourage national pride as well as inter-village competition in health matters.

"villages must get to work immediately or they will show themselves to be backward villages in which people will be considered lazy and too ignorant to look after their own health"


The women's committees initially, therefore, performed two main roles in the attempt to improve village health. The first centered on various tasks within the village to help raise sanitation and hygiene standards. The second, and more important, was the monthly health committee meetings which were attended by the district health nurse, and also regularly by the DMO. These meetings involved both preventive and curative aspects of health-care, ranging from the weighing and measuring of babies to lessons in first aid. One of the main effects of the committees, however, was the diffusion of health information.

5.4.3 Health Information Delivered in Initial Women's Committees

As was stated in the introduction, the DHN, through the women's committees was the main channel by which health information was diffused to rural villages. This section examines the types of information being diffused and the ways in which it was communicated in women's committees during the initial phase of their existence between 1923 and 1942.
Given the perceptions of Samoan health held by Europeans at the time and the attitudes of expatriates, health information was handled in an unusually delicate manner and with an awareness that;

"the suggestion that their sorrows come because of dirty villages will be resented, they do not wish to hear that their own carelessness and insanitary habits breed flies which carry disease..."


The information given was positive and practical, and was mainly curative rather than preventive. Christie (1926:21) stated that the aim of the committees was to have; "children's ailments treated on their first appearance, when very little treatment is necessary" (cited in Thomas 1986:59). The practical nature of this information was of considerable importance in both maintaining interest in the committee and in patterning the type of interaction that took place between medical personnel and village women.

The leading cause of infant mortality in Western Samoa, as perceived by the Europeans, was "improper" feeding. Information on "proper" feeding was, therefore, given some emphasis. In common with other medical personnel Keyes, Downs and Christie lamented the lack of cow's milk and patent baby-food, and found the Samoan practice of, "boiled green bananas, baked taro and ripe bananas masticated by the mother (mama) then fed to the baby", distasteful (Keyes NZHR A-4 1927:20 cited in Thomas 1986a:60). For weaning they recommended instead cow's milk supplements, mashed pawpaw, the flesh of the green coconut, boiled arrowroot and coconut-cream (Thomas 1986a:60).

Advice of a more specialised nature was given to the committee's executive when they were given lessons in first aid and the use of simple medicines from the first aid kit supplied to every women's committees. The control of these kits and practical demonstrations provided the executive with exclusive rights to new and powerful knowledge and to psychologically powerful material goods. The executive maintained firm control of both the knowledge and the equipment.

Committee meetings became the occasion for the treatment of yaws, eye-diseases and other infections. The rapid effects of new drugs, such as arsenic compound in the treatment of yaws, was considered by medical personnel to not only enhance the appeal of the committees and Western medicine but indirectly to provide legitimacy for other health information (refer Ritchie 1925:3). Villagers flocked to the clinics for treatment and information.
Whereas in pre-contact Samoa, health information was diffused within villages or between districts, the women's committees enabled a greater spatial diffusion of health information. Samoan nurses were trained with the aid of New Zealand textbooks, training methods and personnel. This meant that health information that originated in New Zealand flowed to the Department of Health in Apia and was then diffused into rural Western Samoa through the DHNs. This meant that the nutritional advice given to Samoan women at this time was in line with the most up-to-date New Zealand infant methods which included bottle supplements, regular feeding and the preparation of infant formula.

Within the women's committees most health information was disseminated by the DHN through a short health talk. These talks concentrated on raising infant health standards and improving sanitation, as these areas were the main focus of the New Zealand administration. These talks utilized the traditional Samoan channel of oral communication. However, these talks were also supported by the most modern visual aids of the time. Coloured pamphlets and posters were printed in Samoan and in 1926, with financial assistance from overseas, Ritchie acquired two magic lanterns and a film projector, six sets of slides and supporting charts, which contained information on hookworm, filariasis, the danger of flies and nutrition. These were widely shown in the committees throughout the country. Although it is unknown how effective the magic lantern shows were in increasing Samoan understanding of the relationship between mosquitoes and filariasis, or food and health, they were extremely popular and must have added to the excitement and prestige of the committees (Thomas 1986a:62).

Use was made also of the government newspaper O le Savali (which literally means "The Emissary") in health information diffusion. One of the committees' rules was that the Savali was to be read every month by all the women of the village. Keesing (1934:414) estimated that by the end of the 19th century 99 per cent of the adult Samoan population was literate. The newspaper was printed in Samoan and contained health-related articles directed at the women's committees. Topics included "Care of the Breastfed Baby in its First Twelve Months", "Common Diseases of the Samoans and Their Treatment", "Feeding and Hygiene of the Samoan Mother During Pregnancy", "Cleanliness of the villages" and "The Medicines Used by the Women's Committees and Their Application" (Monoghan 1955:23).
The status of the people, both Samoan and European, disseminating health information in the women's committees was important in explaining the initial success of the committees. In the early days of organised health services throughout the colonial world, administrators used traditional systems as a path into the indigenous communities. The traditional leading families were the initial targets for resocialisation, through religion and education. The individuals thus converted and trained, became part of the new health service institutions (Finau 1988:133). As most of the young women chosen for nursing training were from Papauta Girls School run by the London Missionary Society, and attended by daughters of high-ranking chiefs and pastors, the early Samoan nurses had considerable status in their own right. They also had direct links with those considered to have powers to ascertain the causes of illness (Thomas 1990:12).

Very little, if any, discussion took place between the providers of health information and treatment (the DHN and DMO) and the village women who attended the women's committee meetings. The meetings were formal in nature and traditional teaching methods of lecturing, albeit with some visual aids, were used to get the message across. Questioning or asking for clarification of certain points from the DHN or DMO was not socially appropriate behaviour.

The health information diffused in the early women's committees was therefore, practical in nature and concentrated on raising infant health standards and improving village sanitation. The DHN was the main mechanism through which this information was diffused and they used short health talks and limited visual aids to achieve this. However, from the start of the women's committees education and information diffusion took second place to the curative aspects of committee work.

5.4.4 Mau and the Women's Committees

Towards the end of 1926 agitation among the mixed-race population, (afakasi), of Samoa against the New Zealand administration over legal access to land, employment and political power, gained widespread support and later spread to rural villages. This protest group became known as the Mau movement (see Field (1984) for further details on the Mau). In 1929 a clash between Mau demonstrators and the New Zealand constabulary in Apia resulted in the death of eleven Samoans, including one of the leading title-holders of the country Tapua Tamasese Lealofi III.
A period of non-cooperation with government followed and the "native" supporters of the Mau included opposition to health and medical activities in their anti-government programme. During 1929;
"the Mau banned all registration of births and deaths...unfortunately they have also caused all women's committees under the child welfare schemes to cease to function, and, worse still, owing to their actions nearly all sanitary control in the various villages has been lost...little has been accomplished this year."

Lambert wrote that, throughout Samoa, latrines were torn down by the indignant population and, "fields and village stank with a foulness which defied the administration while it killed the Samoans" (1941:226 cited in Thomas 1986a:69).

In 1929, Ritchie resigned due to ill health and Christie and Keyes both left Samoa, as did many other expatriate health personnel. The primary health-care system they had taken so much personal effort to establish, "seemed to have collapsed and could be written off as a failure" (Thomas 1986a:69).

5.4.5 Re-establishment of the Women's Committees

When the Mau protests were over, and after time for reflection, there was a local initiative to re-establish the women's committees. Keesing (1934:385) noted that;
"Today one often hears even the Mau chiefs regret the fact that the health of the people is going back...Indeed, some Mau villages have instituted health committees of their own." (cited in Thomas 1986a:70).

The re-establishment of the women's committees depended, as with their initial introduction, on the work of dedicated individuals who were unusual for their place and time. In 1930 Dr Iuelu Kuresa returned to Western Samoa from the Medical School in Suva, Fiji, after completing a refresher course in public health. Kuresa was a brilliant scholar and had won honours in medicine, surgery and public health. With his sister Momoi, the first Samoan nurse to be trained in New Zealand, he became the motivating force behind the successful re-establishment of the women's committees. His ability to combine scientific knowledge with a deep understanding of Samoan culture, values and medical beliefs together with the enthusiastic support of the new CMO, Dr Turbott, led to the successful re-establishment of the women's committees. (Thomas 1986a:69).
Turbott and Kuresa set out to re-establish the women's committees and restore confidence in the rural health service. They began their mission by touring Western Samoa;

"In nine months Upolu was circled once completely...Savai'i was twice completely circled on foot...the sick were seen, the chiefs and orators spoken with until committees-operation was assured, the women's committees stimulated...and generally an atmosphere of trust and helpfulness established between the CMO and the villagers"

(Turbott to Secretary to the Administration, January 20, 1936 cited in Thomas 1986a:70).

Turbott reorganised the rural health structure, changed the duties of the DMOs to a preventative rather than a curative role and ordered them out into the field to visit people in their own villages. Due to the work of Kuresa and Turbott it was reported that in 1936, "women's committees were formed in 111 villages and others are in the process of formation" (NZHR A-4 1936:22 cited in Thomas 1986a:71). The combined work of Turbott and Kuresa gave the health service new impetus. The experience of the Mau not only brought about greater Samoan appreciation of the health work the women's committees had been doing, but had welded the committees into strong activist groups both inside and outside their villages. Following the Mau, more emphasis was placed in nursing training, on maternal and child welfare training while rural health services and the self-help approach were strengthened (Thomas 1986a:72).

Samoan women returned to their health-related roles with enthusiasm. Miss North, the Acting Matron, reported visiting large and well-formed committees in both Savai'i and Upolu with over 100 women at each (North 1936:6 cited in Thomas 1986a:72). The year 1938 marked the consolidation of the new health service and the administration noted that;

"a welcome indication of the effect of intensified instruction are frequent requests through the women's committees for cooperation of the administration in erecting conveniences...All women's committees render excellent service and by close cooperation with the medical assist in the promulgation of sanitary education"

5.5 Expansion and Transformation (1940-1962)

Between 1940 and 1962 the women's committees played such an important role in primary health-care they came to be known, through a comment by the Director of Health, as the "backbone of the service" (Lonie 1951:6). During this period there were three specific changes in committee structure which were crucial to their continuity and the ways in which information flowed through them. The committees embarked on extensive and expensive new health-related activities, membership was expanded from an elite minority to include all village women and committee organisational and interaction structures were adapted to conform more closely to the ranked hierarchy of the male fono. It is unlikely that these changes would have occurred in the way they did without changes in the national political economy, and the resulting move from European to Samoan political control, the economic expansion occurring in Western Samoa during this time or without the continued encouragement and support of the Samoan Matron, Momoi Kuresa.

In 1947, agitation for political independence culminated in the passing of the Samoa Amendment Act of 1947 and political processes were set in motion which would lead to Samoan independence. The Act effectively shifted economic and political control from expatriate to Samoan hands and gave them ultimate responsibility for Department of Health policy (Fox and Cumberland 1962:176). This was accompanied by economic expansion and the 1940s were marked by an increased involvement in the cash economy, greater participation in urban wage labour and a move from village subsistence agriculture to greater reliance on cash cropping. Many of the new committees' activities would not have been possible without economic expansion and the rapid move towards a monetised village economy. Nor would they have been possible without the new spirit of self-confidence that came with political self-determination.

"by 1949 many districts had "come alive" in the medical sense. They were now actively demanding a health service developed on an advanced scale, but at the same time they insisted upon district participation"

Samoa medical personnel began to replace European health workers and, following 1947, the initiative for solving health problems was largely the responsibility of the Samoan people. To assist village participation in health the government introduced a scheme of shared funding for health development projects. In this the districts and the Samoan government each paid half the cost of the buildings, while the New Zealand government paid the extra cost of the equipment. In addition the New Zealand cabinet allocated £100,000 from the profits of the New Zealand Reparation Estates as its contribution towards hospital equipment (Powles 1951:4 cited in Thomas 1986a:76). This boost to the rural health service provided the women's committees with the opportunity to expand their health-related responsibilities.

5.5.1 Changes in Committee Activities

In the 1940s the women's committees, encouraged by Momoi Kuresa, built their own committee houses, which they organised as village hospitals, dispensaries and maternity wards. The "hospital fale", as they were known, were staffed by the committees' executives and were relatively well equipped. The existence of a well-built committee house sited in prestigious locations, provided an excellent health facility, a source of village and personal pride and was a, "visible manifestation of female solidarity and organisation" (Thomas 1986a:76).

They also reflected increased village prosperity. Both the building and the equipment were financed by the women who raised funds from weaving bees, dramas, dances and through the sale of agricultural produce. The committee houses were a major achievement for very small groups of village women who had limited access to, and experience in, dealing with cash.

To maintain the committees' health services and to carry out treatments ordered by the doctors, committee members were given expanded training in basic nursing, primary health-care and maternity work. Women organised a roster system to ensure a sustained first aid and nursing service. The women's committees assumed responsibility for raising funds for district hospitals and dispensaries, for preparing accommodation and meals for medical staff and maintaining hospital buildings and grounds. The executive from each village committee formed a district committee to oversee these activities and met monthly with the DMO to discuss the work to be done, to roster duties and to determine the contribution of each village committee in cash, goods and labour (NZHR 1950:41 cited in Thomas 1986a:79).
There was however, a limit to the amount of work that committees could undertake without allowing non-members greater participation in meetings and decision-making. The need for a larger, more cohesive and willing workforce led to the first major change in committee structure.

5.5.2 Changes in Committee Membership and Structure

By the late 1940s the small elite committee had given way to one which allowed member status to all women. As the committee was a prestigious organisation most women were anxious to be involved and the satisfaction of officially belonging ensured a reliable workforce. Expanded membership allowed the achievement of more ambitious goals and, in response to the government scheme of shared funding for development projects, the women's committees became involved in improving district medical services.

The second major change in committee structure was a direct consequence of the first and of the new attitudes towards European authority and the reorganisation of the Department of Health. The increases in committee size led to greater committee responsibilities and the accumulation of greater economic resources in the hands of the small executive, headed by the president. In most villages, as was discussed earlier, the executive were the wives of pastors or government officials selected by the Department of Health without aiga connections in the village. With the increased power and importance of the committees this caused disquiet amongst village leaders (Thomas 1986a:79). To overcome the conflict this concentration of power engendered, the committee executive was expanded to include the wives of the highest ranking men of the village. The position of president remained a problem.

Women now considered it inappropriate to be represented at district-level meetings by a president who did not belong to the village. Thus, during the late 1940s the wives of leading village chiefs replaced the pastor's wives as presidents of almost all committees. This would not have occurred prior to the passing of the Samoan Amendment Act when the New Zealand administration exerted control over the Department of Health and committee leadership:

"In the past the president was not the wife of the high chief...the president was selected by the district nurse or the DMO. But then the high chief's wives wanted to be president. They wanted power and to be sitting high. So they told the nurse. What could she do? The palagi had gone and that was the fa'aSamoa"

(Retired District Nursing Supervisor, pers. comm. cited in Thomas 1986a:80).
The change was seen by Samoan women as conformity to *fa'aSamoa*, allowing those of highest rank and status to provide leadership for village organisations (Schoeffel 1980:456). The pastor's wife was not only relieved of her position on the executive, but in many villages was excluded completely from committee meetings. Wives of Samoan government officials were also excluded if they were not affines nor cognates of the village (Thomas 1986a:81).

Although the committee executive retained authority to make and enforce decisions, these structural changes changed the locus of committee authority. In the past authority had derived from government through the Department of Health, but with the wife of the leading chief as president and the executive positions filled by the wives of the highest ranking men, it was now based on the village male authority structure.

### 5.5.3 Health Information Diffusion (1940-1962)

This adaptation of the women's committees structure to follow *fa'aSamoa*, brought about changes in the relative status of women, in the organisation of committee activities and in the way both committee meetings and the monthly clinics were conducted. A new committee interaction structure evolved, based on what was considered correct behaviour, given new power relations between women, and the introduction of new committee activities. By the mid-1950s this structure had become accepted as traditional and remains relatively unchanged in rural villages today (Thomas 1986a:82). All of these changes impacted on the communication of health information through the women's committees.

Although Samoan rules of etiquette still governed the way the activities were conducted, the seating order in committee meetings now followed that of the *fono* and determined who spoke and when, who participated and how. Visitors, including the district nurse, sat at the front of the house in the position of honoured guest, with the executive to one side in the places their husbands occupied in the *fono*. The other wives of titled men sat in a group beside them and the *tama'ita'i* on the opposite side of the house, indicating their different status. The wives of the untitled men sat at the back of the house, the position of least importance and furthest away from the DHN when she spoke on health matters (ibid:83).
The decline in European control and a reduction in regular European supervision also led to an increase in the time spent on Samoan ceremonies. The official part of the meetings was now;
"conducted with the same dignity and formality as meetings of the fono...the meetings begin with prayers and each speaker uses polite and chiefly language. Strict priority of rank and status is observed with regard to who speaks first...(and)...who replies" (Schoeffel 1980:65).

As the amount of time available for the monthly clinic meetings was the same as previously, the extra time spent on traditional Samoan ceremonies, such as the welcome and farewell speeches and the ceremonial presentation of food, reduced the time available by the DHN to communicate health information. Also DMOs and DHNs were on longer in a position to demand that the committees fulfilled health-related activities determined in Apia and sanctioned by the government. Regulations and committee activities were now decided upon and enforced by the committee executive, backed by the legitimate authority of their husbands if necessary (Davidson 1967:283 cited in Thomas 1986a:84).

There was however, an extra avenue for information diffusion that did not exist in the initial women's committees — the village tours of inspection. These were known as the asiasiga and consisted of two types. In the first, the district nurse, accompanied by a village sub-committee, toured the village to check on the removal of mosquitoes, flies and bacterial vectors, the condition of thatched roofs and the cleanliness of household compounds, latrines and water sources. These tours provided the DHN with the opportunity to talk about inadequate sanitation and mosquito control as the sub-committees walked around and visited.

The second type of asiasiga was introduced in the 1930s as a means of improving domestic standards of living and involved the women's committee nominating a category and quantity of new household goods to be displayed by members for inspection by committee leaders and the district nurse. This resembled other Samoan traditions of displaying new property or goods, and utilised competition between Samoan families for prestige to ensure that each household was equipped with proper bedding, utensils and so on (Schoeffel 1984:211).
During this period health information disseminated through the committees continued to be supported by posters, slides, films and newspaper. A mobile clinic regularly toured the women's committees and showed poster displays and films on sanitation, hygiene and infant nutrition. These existing channels were also supported by the newly established radio station.

The Western Samoan administration established its broadcasting station in 1948 and, as a gift of the New Zealand government, installed in practically every village a battery-driven radio receiving set. These sets were usually placed in the house of the leading ali'i in the village and they were so fixed that only the local station could be received (Keesing 1956:168). The radio station was quickly used to support health education, "there has been a series of two health lectures weekly in Samoan and one in English over the new broadcast system and a "Women's Committee Hour" is planned in addition."


Although it was expected that radio would be an effective instrument for information diffusion, as Samoa was, "an oral milieu where persons are accustomed to speaking and listening rather than reading and writing", a comprehensive radio survey undertaken in 1950-51 proved otherwise, especially in relation to health programmes, "Why should we listen to a woman we do not know, telling us to do this and that to our babies, children or food? We have the nurse of our own...How do these strangers know what is suitable for our village?"

(Keesing 1956:171).

Radio, therefore did not appear to have been widely accepted by Western Samoan women as a mechanism for health information diffusion. They still preferred to look to their own local officials and 'experts' for practical guidance and wanted individuals that they knew personally and trusted to help them to make adaptations to their own local conditions. The introduction of radio did however, increase the number of channels that were available for the communication of health information.
In terms of the types of health information delivered in the women's committees during this latter period, Holmes (1954:234) states that in the women's committees, "medical education has emphasized hygiene to the detriment of infant's nutrition" (cited in Thomas 1986a:87). In terms of the nutritional information being disseminated there was continued European inability to consider cultural preferences other than their own in the content of information. The virtues of cow's milk were given greater emphasis than in the past and health officials remained convinced that milk was the solution to all Pacific Island infants' nutritional ills.

"If cows-milk is available...these (nutritional) difficulties can be overcome easily. The beautiful, undisturbed development of white children in Europe, North America, Australia and New Zealand can prove this point"


The European health workers failed to take into account the limited availability of fresh milk in Western Samoa and the specific difficulties of raising cows in a Samoan social context (refer Maiava 1993), the benefits involved in breast milk and existing Samoan weaning practices.

5.6 Conclusion

One of the main concerns of the New Zealand colonial administration in Western Samoa was to improve health standards, specifically to reduce the high infant mortality rate and to improve village sanitation and hygiene. To this end a system of village level women's health committees was set up to provide primary health care and to disseminate health information. The introduction and acceptance of the women's committees into Western Samoa was specific to time, place and people and their precise form was influenced by historical events as well as by internal and external structures and values. It is unlikely that such coincidences could be predicted or could be replicated.

By 1940 committees had been established in 192 villages. Members organised monthly clinics which were attended by all village women and were visited by a Samoan DHN trained in maternal and child care, occasionally accompanied by a DMO. The early clinics integrated the ceremonies that Samoan etiquette called for, with formal health procedures and had both a preventive and curative role. Many villages had also set aside a fa'ale for the reception and care of the mildly sick who were attended to by members of the committee.
The health information diffused in these early clinics was highly practical in nature and concentrated on improving village sanitation and the "proper" feeding of infants to ensure an increase in infant health standards. The DHN was the main mechanism through which this information was diffused, and they used short health talks and limited visual aids to get their messages across. From the start of the women's committees however, education and information diffusion took second place to the curative aspects of committee work.

The years between 1940 and independence in 1962, were years of expansion and transformation and provide an example of how the social, political and economic context shapes the communication process. In this later period the women's committees expanded their membership and activities and underwent structural and procedural transformation. They developed into Samoan institutions that were closely integrated into village social, political and economic structures. This transformation resulted from a process of continual dynamic interaction among: i) innovations initiated in the committees, including changes in women's roles and relationships and their use of space and time; ii) between village structure and cultural values; and iii) national political and economic policies.

By the time of independence, the way in which meetings were conducted, and the structure of both committee membership and leadership had become adapted to new forms. The committees, like the Christian church, had become an amalgamation of European and Samoan structures. Regardless of their European foundation the committees were considered traditional Samoan institutions to which all women felt they belonged, and the women's committees' new activities, new authority and interaction patterns had adjusted accordingly.

The way health information was disseminated in the women's committees during this later period had changed since the initial women's committees were set up. Committees now followed fa'aSamoa, with its emphasis on ceremony, and this limited the time available for the communication of health information and meant that the wives of the untitled men had reduced access to the information that was communicated. It seems that during this period the medium itself, the system of women's committees, not the message it was established to disseminate, was of greatest importance to Samoan society (Thomas 1986a:96).
Chapter Six: Contemporary Health Information Diffusion

Jules Winnifield: "You remember Antown Rockamara, half black — half Samoan... They used to call him 'Tony Rocky Horror'?"

Vincent Vega: "Yeah maybe, fat right?"

Jules Winnifield: "I wouldn't go so far as to call the brother fat, I mean he's got a weight problem, what's...(he)... going to do, he's Samoan"

Pulp Fiction
6.1 Introduction

The contemporary health information communication system is the focus of this chapter. It will be shown in this introductory section, that Western Samoa has undergone an epidemiological transition. This has resulted in the emergence of new health problems. Diabetes and HIV/AIDS are now the two most pressing Samoan health issues. This chapter will explore the types of health information communicated to Western Samoan's on these two illnesses. The mechanisms through which such information is delivered is however the focus of this chapter. Each agency involved in the delivery of health information will be discussed. A case study undertaken in a village in Western Samoa will be used to conclude the effectiveness of each communication mechanism.

6.1.1 Epidemiological Transition

The introductory quote, from the hit movie Pulp Fiction, identifies an example (obesity) of one major area of concern for the present day Western Samoan government in relation to health, non-communicable diseases (NCDs). In the colonial period the focus was on information concerning a reduction in the rates of infant mortality and improvements in sanitation and hygiene. These areas of concern, and the channels used to diffuse information about them, changed little from the 1920s to the middle of the 1980s in Western Samoa. This focus has now changed and the Western Samoan government, through its Department of Health, is now concentrating on reducing the incidence of NCDs and on preventing the introduction and spread of HIV/AIDS in Western Samoa. This change in focus has been determined by changes in the causes of both morbidity and mortality in Western Samoa and the detrimental impacts, world wide, that HIV/AIDS has had since its identification in the early 1980s. NCDs such as diabetes, hypertension and cancer have replaced infectious diseases as the main health problems in Western Samoa. This process of change has been labelled, in the literature, as the 'epidemiological transition.'

Epidemiological transition theory proposes that, as populations 'modernise' and age, the causes of death and illness also change. This change is characterised by a shift from the dominance of infectious diseases as the main causes of illness and death, to the more chronic or regenerative, sometimes apparently 'human-made', non-communicable diseases (NCDs) such as cancer, diabetes, heart disease and cerebrovascular disease (Phillips and Verhasselt 1992:132). This process has occurred in a significant number of countries in the Pacific where NCDs have now become the most significant causes of
death (refer Taylor et al. 1989; Jones 1993 and Glasgow 1987). Heart disease alone accounts for about 25 percent of all deaths in Fiji, Tonga and Nauru, and for more than 30 percent of deaths in the Cook Islands, American Samoa and French Polynesia (Serjeantson 1990:17).

Table 6.1 clearly shows that Western Samoa has gone through this transition. Prior to 1921, the main causes of death were infectious diseases such as influenza, tuberculosis or measles.

In present day Western Samoa the main cause of both morbidity and mortality is heart disease, cerebrovascular diseases and cancer. All NCDs. As an example, in 1992 six of the ten main causes of hospital mortality were nutrition related diseases (Health Planning, Information and Research Unit 1992).

**Table 6.1: Changing Patterns of Morbidity and Mortality in Western Samoa**
(Source: Adapted from Thomas 1990:1)

<table>
<thead>
<tr>
<th>Population at end of period</th>
<th>Prior to 1921</th>
<th>1921-1970</th>
<th>1970+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infant Mortality (per 1000 live births)</td>
<td>35,522</td>
<td>146,000</td>
<td>161,298*</td>
</tr>
<tr>
<td>Life Expectancy (in years)</td>
<td>200</td>
<td>200 to 42</td>
<td>42 to 24</td>
</tr>
<tr>
<td>Leading Causes of Mortality</td>
<td>Females 54-63</td>
<td>Males 51-61</td>
<td>Females 63-65 Males 61-63</td>
</tr>
<tr>
<td>Influenza</td>
<td>Gastro-enteral disease</td>
<td>Heart Disease</td>
<td>Pneumonia</td>
</tr>
<tr>
<td>Measles</td>
<td>Infections</td>
<td>Cerebrovascular diseases</td>
<td></td>
</tr>
<tr>
<td>Whooping Cough</td>
<td>Influenza</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pneumonia</td>
<td>Pneumonia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>Tuberculosis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gastro-enteral disease</td>
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<td></td>
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<tr>
<td>Diarrhoea</td>
<td>Septicaemia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leading Causes of Morbidity</td>
<td>Filariasis</td>
<td>Influenza</td>
<td>Influenza</td>
</tr>
<tr>
<td>Infections</td>
<td>Measles</td>
<td>Gastro-enteritis</td>
<td></td>
</tr>
<tr>
<td>Skin disease</td>
<td>Dysentery</td>
<td>Diabetes mellitus</td>
<td></td>
</tr>
<tr>
<td>Eye disease</td>
<td>Bronchitis</td>
<td>Hypertension</td>
<td></td>
</tr>
<tr>
<td>Accidents/ warfare</td>
<td>Skin disease</td>
<td>Pneumonia</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gastro-enteritis</td>
<td>Skin infections</td>
<td></td>
</tr>
</tbody>
</table>

* 1991 Census Figure
The incidence of NCDs, over the last 25 years has also rapidly increased among the Western Samoan population. Zimmet and Dowse (1991) found that obesity, a significant indicator in most NCDs, rose from 17.2 to 31 percent in the male urban population and from 14.6 to 22.4 percent of the urban female population in Western Samoa between 1978 and 1991.

Table 6.2 shows the changes in the rates of hypertension, obesity and diabetes in both the female and male sections, and the urban and rural populations of Western Samoa.

Table 6.2: Comparison of Prevalence of Hypertension and Obesity and Diabetes and Percentage Change in Each Survey Area (1978 and 1991)

<table>
<thead>
<tr>
<th></th>
<th>Poutasi*</th>
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<tbody>
<tr>
<td><strong>Males</strong></td>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Hypertension</td>
<td>2.2</td>
<td>3.0</td>
<td>+36</td>
<td>6.2</td>
<td>7.3</td>
<td>+18</td>
<td>12.7</td>
<td>15.1</td>
<td>+19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obesity</td>
<td>7.4</td>
<td>20.0</td>
<td>+170</td>
<td>3.3</td>
<td>15.9</td>
<td>+382</td>
<td>17.2</td>
<td>31.0</td>
<td>+80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diabetes</td>
<td>0.7</td>
<td>6.4</td>
<td>+814</td>
<td>3.4</td>
<td>9.0</td>
<td>+165</td>
<td>10.0</td>
<td>11.9</td>
<td>+19</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Females</strong></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hypertension</td>
<td>6.9</td>
<td>7.6</td>
<td>+10</td>
<td>7.1</td>
<td>4.5</td>
<td>-37</td>
<td>19.5</td>
<td>16.0</td>
<td>-18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obesity</td>
<td>7.7</td>
<td>14.0</td>
<td>+82</td>
<td>3.2</td>
<td>13.9</td>
<td>+334</td>
<td>14.6</td>
<td>22.4</td>
<td>+53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diabetes</td>
<td>5.5</td>
<td>6.0</td>
<td>+9</td>
<td>6.0</td>
<td>9.4</td>
<td>+57</td>
<td>10.3</td>
<td>18.0</td>
<td>+75</td>
<td></td>
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</tr>
</tbody>
</table>

1 Systolic BP > 160 mmHg or on hypertensive medication
2 Weight > 100kg
3 Diabetes - 2 hour (post 75g glucose) plasma glucose > 11.1 mmol/l
* or subject on insulin or oral hypoglycaemic therapy
* Poutasi is a rural village in Upolu
** Tuasivi is a rural village in Savai'i

As stated earlier, the epidemiological transition is caused, at least in part, by the process of modernisation. This process has been occurring in Western Samoa since independence in 1962, and especially over the last twenty years.
6.1.2 Modernisation and Health

Modernisation in Western Samoa has been partly a product of government inspired economic development programmes funded by foreign aid, and by the remittance economy created by the growing tide of Samoan emigrants who remit money to their families in Samoa (Schoeffel 1984:212). One of the results of this process has been the massive increase in the consumption of imported, processed foods. More money is now spent on imported food than is earned from all Western Samoan exports put together (refer Table 6.3).

<table>
<thead>
<tr>
<th>Table 6.3: Western Samoan Food Imports (1979-1990)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979</td>
</tr>
<tr>
<td>Food imports (WS $millions)(^1)</td>
</tr>
<tr>
<td>Food imports as a % of total imports (^2)</td>
</tr>
<tr>
<td>Food imports as a % of total exports (^3)</td>
</tr>
</tbody>
</table>

\(^1\) Return of the Trade, Commerce and Shipping of Western Samoa for Calendar Year 1990, Customs Department, Western Samoa

\(^2\) Annual Statistical Abstract 1989, Statistics Department, Western Samoa

\(^3\) Data Compiled by the Food Policy and Nutrition Division, FAO, from FAO and Other Sources. ESN Nutrition Country Profile, FAO, 1989

Table 6.4 shows the types of food products, in both quantity and value, that were imported in 1990. It shows the large quantity of foods with a high fat content (i.e. mutton flaps, turkey tails and tinned fish) that were imported into Western Samoa.
Table 6.4: Major Food Items Imported into Western Samoa by Quantity and Value (1990)  
(Source: Customs Department Annual Report 1990)

<table>
<thead>
<tr>
<th>Food Items</th>
<th>Quantity mt (thousand)</th>
<th>Value WS $million</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Protein foods</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tinned fish</td>
<td>14.9</td>
<td>6.1</td>
</tr>
<tr>
<td>Mutton flaps</td>
<td>11.4</td>
<td>2.9</td>
</tr>
<tr>
<td>Turkey tails/ chicken backs</td>
<td>5.9</td>
<td>1.4</td>
</tr>
<tr>
<td>Poultry</td>
<td>1.5</td>
<td>0.9</td>
</tr>
<tr>
<td>Turkey Wings</td>
<td>2.3</td>
<td>0.8</td>
</tr>
<tr>
<td>Milk (all types)</td>
<td>2.8</td>
<td>1.6</td>
</tr>
<tr>
<td><strong>Energy foods</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rice</td>
<td>25.4</td>
<td>3.7</td>
</tr>
<tr>
<td>Flour (total)</td>
<td>34.5</td>
<td>2.8</td>
</tr>
<tr>
<td>Sugar</td>
<td>12.0</td>
<td>3.8</td>
</tr>
<tr>
<td>Butter</td>
<td>0.6</td>
<td>0.7</td>
</tr>
<tr>
<td>Prepared cereal foods</td>
<td>2.2</td>
<td>1.5</td>
</tr>
<tr>
<td>eg noodles/biscuits/etc</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Along with the increased consumption of imported food products there has also been a corresponding decline in locally caught or produced food (i.e. taro, bananas, coconuts, taamu and fish). Figure 6.1 shows the decline in one indicator of locally produced food, inshore fish catches at the Apia Fish Market between 1985 and 1991.

![Graph showing decline in fish catches](image)

*Figure 6.1: Estimates of Total Inshore Fish Landings at Apia Fish Market (1985-1991)  
(Source: National Food and Nutrition Council 1992: 20)*
The increase of imported food and the corresponding decline in locally produced food has seen significant changes in the diet of the Samoans. The traditional staple diet was taro, breadfruit and seafoods. Pork and other special dishes were eaten intermittently as feast food. Until the 1960s, this diet was standard rural fare — imported foods such as canned fish, spaghetti and corned beef were supplementary luxuries. Flour was similarly treated as a luxury ingredient for making cakes, although sugar, canned milk, cordial, coffee and tea had become standard consumer items. Today, while most rural Samoans follow a more traditional diet than do the urban residents of Apia, imported foods are beginning to take a hold in the rural areas. Table 6.5 shows that more traditional foods are eaten in the village (i.e. taro, palusami, pork, coconut cream and fresh fish) compared to the significance of imported foods in urban diets (i.e. mutton, pancakes, bread, beef and rice).

Table 6.5: The Ten Most Frequently Selected Foods and Drinks by Rural and Urban Men (1984)  
(Source: National Food and Nutrition Council 1992: 24)

<table>
<thead>
<tr>
<th>Village</th>
<th>Food</th>
<th>%*</th>
<th>Sedentary urban</th>
<th>Food</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Taro</td>
<td>39</td>
<td>Taro</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Palusami**</td>
<td>9</td>
<td>Sweet drink</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pork</td>
<td>6</td>
<td>Mutton</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sweet drink</td>
<td>6</td>
<td>Palusami</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Alcohol</td>
<td>6</td>
<td>Pancake</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tinned fish</td>
<td>6</td>
<td>Bread</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Drinking nuts</td>
<td>5</td>
<td>Banana</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Coconut cream</td>
<td>5</td>
<td>Pork</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fresh fish</td>
<td>4</td>
<td>Beef</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pastry</td>
<td>3</td>
<td>Rice</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

* Percentage contribution to total food intake  
** Palusami is a traditional food made from taro leaves baked with coconut cream

Mala-Toelupe (1991) reports that the increased consumption of imported foods, over locally produced ones in Western Samoa, is because they are; readily available, cheaper, have status value, demand less time for preparation, and do not demand as much labour and resources for production. She found that the nutrient value of the food played little part in its selection (89-90).

These dietary changes, associated with modernisation, have led to an excessive calorie intake, resulting in increases in the rate of obesity, diabetes and hypertension (refer Table 6.2). The traditional diet in Western Samoa was high in fibre, rich in starch, but low in protein. Large quantities of the staple food needed to be consumed to obtain the daily requirements of protein.
When manufactured food is substituted for traditional foodstuffs, there is a dramatic increase in the calorie density (that is, calorie/weight ratio) of the diet. Thus, if the weight of the processed food consumed is equivalent to that of foodstuffs in a traditional diet, there is a marked increase in calorie intake. Further, because manufactured food is low in fibre, larger amounts have to be eaten to reach the same feeling of satiety achieved with traditional foodstuffs. For these reasons, people undergoing a rapid change in the nature of their diet, from unprocessed to processed food, accumulate excess calories (Serjeantson 1990:8).

This excess calorie intake can be further exacerbated by reduced calorie requirements, because modernisation of the diet is often accompanied by other socioeconomic changes, such as reduced physical activity. Baker and Greksa (1982) found that changes associated with modernisation had significant negative impact on the aerobic capacity of adult males living in American Samoa. Their study found that the aerobic capacity of the Samoans studied was very low and indicative of very low levels of physical fitness. As the process of modernisation has also seen changes in the population’s lifestyle, especially the move to a more sedentary lifestyle, the situation has arisen where increased calorie intake is taking place at the same time as there is decreased physical activity (Baker and Hanna 1981:27).

Thus, since independence Western Samoa has gone through an epidemiological transition, with a shift from infectious diseases as the main causes of illness and death to the prevalence of NCDs. Over the last 25 years the rates of these NCDs, and indicators such as obesity, have risen sharply and by 1992 six of the ten leading causes of hospital mortality were nutrition related diseases. Modernisation, the driving force in the epidemiological transition, in Western Samoa has seen the increased importation of processed foods and a corresponding decline in locally caught and produced foods.

This process has generated a dramatic change in the diets of the majority of Samoans, especially in urban areas, and the increased consumption of foods which are high in fat, sugar and salt and low in fibre, vitamins and minerals. These dietary changes, coupled with reduced physical activity, have produced increasing incidences of diabetes mellitus, cardiovascular diseases and gout (ibid).
6.1.3 Official Western Samoan Response to NCDs

The Western Samoan government has recognised the threat and potential costs, both in social and economic terms, that NCDs are now posing. The Draft National Plan for Nutrition states that; "...it is the development of obesity and NCDs...that now constitute the gravest threat to the health of the people of Samoa" (National Food and Nutrition Council 1994:2). They have therefore made the reduction of NCDs one of their main priorities. One of the "Specific Objectives" of the National Food and Nutrition Council is; "To stabilise and/or reduce the incidence of diet-related chronic disorders e.g diabetes, hypertension, obesity, heart disease and dental disease"

(National Food and Nutrition Council 1992:3)

Unlike the infectious diseases that characterised the previous eras, NCDs are incurable and most do not respond rapidly to treatment. All require long-term, intensive drug regimes and self-management (Thomas 1990:15). Their prevention is only possible by adopting certain behaviours (i.e eating the right amounts of certain foods and taking regular exercise), or avoiding other activities (i.e excessive alcohol consumption). The dissemination of health information, to educate the population about the risks involved in certain behaviours and the benefits involved in others, is therefore one of the most important ways to reduce the rates of NCDs.

The Western Samoan government is now beginning to recognise the potential benefits of educating and informing the population about NCDs. In the Draft National Plan of action for nutrition (1994) one of the objectives was to foster; "Increasing nutrition knowledge and awareness of the public and policy makers through the provision of information..." and also to promote; "...desirable food behaviours and nutritional practices through the provision of information" (National Food and Nutrition Council 1994:4).

One of the major areas of concern for the Western Samoan government therefore, is a reduction in the rates and incidence of NCDs as they are now the main cause of both morbidity and mortality in their country. The dissemination of health information about NCDs plays an important role in the reduction of their incidence, a fact recognised by the Western Samoan government. Although there are common and similar epidemiological facts about NCDs, it is difficult to discuss them in isolation. The number and variety of NCDs prevalent in Western Samoa makes it impractical to study the information diffused on all of them. This chapter, therefore intends to examine the information delivered and the communication system used for the diffusion of one NCD in particular in Western Samoa — diabetes mellitus.
6.2 Diabetes Mellitus

Diabetes mellitus is a condition in which the body is unable to metabolise sugars efficiently, resulting in high levels of plasma glucose concentrations. Patients with diabetes usually fall into one of two clinical groups. The less common form of diabetes is termed Insulin Dependent Diabetes Mellitus (IDDM), or 'juvenile onset', and is characterised by an early age of onset and an absolute requirement of exogenous insulin. The more common form of diabetes, termed Non-Insulin Dependent Diabetes Mellitus (NIDDM) or 'maturity onset', has an age of onset usually greater than forty years (Serjeantson 1990:1). NIDDM is the far more common form of diabetes in Western Samoa and in the Pacific generally (Mala-Toelupe 1991:17).

Diabetes mellitus has both acute and chronic complications. They are of variable speed of onset and severity, often adversely affect the individual's quality of life and can result in premature disability and death. The complications of untreated NIDDM include susceptibility to infections, with danger of gangrene to the feet and toes, resulting in amputation. Another serious complication is retinopathy, with accompanying, impaired vision, and this condition has arisen in nearly one third of NIDDM patients in the Western Pacific (Zimmet et al. 1984 cited in Serjeantson 1990:3).

Factors contributing to the onset of NIDDM include both inherited (genetic) factors, and environmental factors. In terms of genetic factors, it has been found that Polynesians may have a genetic predisposition to NIDDM (Zimmet and Whitehouse 1978; Raper et al. 1984 and Serjeantson et al. 1983). The environmental variables that correlate with the onset of NIDDM include diet, both in terms of the amount eaten (quantitative effect) and the type of food eaten (qualitative effect). Other factors are obesity including, not only the degree of over-weight, but also the distribution of body fat and a sedentary lifestyle (Serjeantson 1990:8). NIDDM, although having a genetic basis, is, thus, predominately caused by environmental factors, such as the amount and type of food eaten and levels of physical activity. It, therefore, contains the major elements of most NCDs.
6.2.1 Diabetes in Western Samoa

NIDDM has only recently been seen as a health problem among the Samoan population as a number of factors combined to prevent incidences of diabetes in pre-contact Samoa. First, although there were periodic times of feast these alternated with times of famine, due to severe drought or cyclone damage. Any obesity was probably not sustained for long periods and certainly did not reach the degree and prevalence of obesity seen today (Bindon and Baker 1985:68). Second, the traditional diet was also high in fibre and low in sugar and fats. Third the physical regime in pre-contact Samoa had a significant impact on the population's health. The need to cultivate crops in difficult terrain at a distance from villages, the harvesting of tree crops and fishing in open seas all meant that the process of food production was arduous. Finally, the division of labour ensured that the burden of production was shared amongst a significant proportion of the population. All of these traditional factors of lean body weight, low-fat and low-sugar diet and physical activity combined to prevent the occurrence of diabetes in pre-modern times. (Serjeantson 1990:14).

Since it has become prevalent in Western Samoa, diabetes has become a major health problem in terms of both morbidity and mortality and resource costs. Table 6.2 has shown the increasing rates of diabetes in Western Samoa between 1978 and 1991, with Zimmet et al. (1978) finding that about 12 per cent of the adult population of Western Samoa were diabetics, while Mala-Toelupe (1991) argues that this rate may have significantly increased since that time. Not only is the incidence of diabetes increasing, but the resource cost of its treatment is also increasing. In 1991 approximately 25 per cent of all beds in the Western Samoan National Hospital (WSNH) were occupied by diabetic patients hospitalised for treatment of complications, with an average stay of three to four months. Also, in that same year, 15 Samoan diabetics were sent to New Zealand for treatment, at a cost of WS$11,000 (NZ$7,200) per patient (Mala-Toelupe 1991:14-15).

Diabetes in Western Samoa is therefore, a health problem of significant magnitude and it will continue to have negative implications for the social, cultural and economic development of Western Samoa. It is likely that, unless action is taken, the prevalence of NIDDM in the Western Samoan population will continue to rise due to the increased prevalence of putative risk factors such as obesity, lack of regular physical exercise and inappropriate diet (ibid:17).
The government of Western Samoa has recognised the danger that diabetes poses and has, as one of its specific objectives in its Draft National Plan for Action for Nutrition, "prevent the development of diabetes in at risk individuals and the community at large and halt the rise in the incidence of diabetes in the community" (National Food and Nutrition Council 1994:4). Diabetes is, therefore, a major area of concern for the Western Samoan government and the diffusion of information on diabetes is one of the most pressing issues for the Department of Health. Having addressed NCDs in Western Samoa, this chapter progresses to examine the second major area for concern for the Western Samoan Department of Health — HIV/AIDS.

6.3 HIV/AIDS

In the early 1980s, Human Immuno-Deficiency Virus (HIV) infection and Acquired Immune Deficiency Syndrome (AIDS) were recognised as potentially the most devastating infectious disease epidemic of the twentieth century. AIDS is caused by the retrovirus HIV which attacks and weakens part of the body's immune system leaving the victim vulnerable to a variety of life-threatening infections and cancers. HIV infection is, currently, incurable and, in all reported cases, fatal. (WHO 1993b:3).

Reliable authorities speak of millions of anticipated deaths from AIDS, and figures bear comparison with estimates of the likely casualties of nuclear war (Panos Dossier 1988:47). Figure 6.2 shows the reported AIDS cases and estimated HIV infection by the world's regions in 1993, with an estimated 14 million people worldwide HIV positive. However, the total numbers of AIDS cases worldwide is difficult to determine because of varying degrees of reliability in reporting and collecting data.

In addition, the interval between HIV infection and development of AIDS is estimated to be anywhere in the vicinity of 7 to 10 years, meaning that people who are HIV positive may not realise their situation until the onset of AIDS related conditions, making estimation of expected AIDS cases difficult (Famighetti 1995:842).
Figure 6.2: Reported AIDS Cases and Estimated HIV Infection by Region (1993)
(Source: Adapted from Famighetti 1995:842)

The number of HIV/AIDS cases is increasing worldwide (refer Mann 1988) and this increase has also been seen in the countries of the Pacific. WHO reported HIV/AIDS cases in the Western Pacific rose from 451 in 1986 to over 4000 by 1992 (refer Figure 6.3). HIV/AIDS has, therefore, become an pandemic which has brought devastating effects to nearly every corner of the globe.
6.3.1 HIV/AIDS and Western Samoa

HIV/AIDS has had a very minor impact in Western Samoa so far. There have been only two reported cases of HIV/AIDS, with both victims contracting the disease overseas and returning home to die. It is, therefore, not the actual number of HIV infections or AIDS sufferers in Western Samoa which is the main concern, but the disease's potential effect on the Samoan population.

The potential economic and social cost of HIV/AIDS in Western Samoa are immense. In other countries, specifically in Central Africa, HIV/AIDS has decimated the 20 to 40 years age group which contains the main contributors to the economy and future generations, through wage employment or agricultural production as well as family formation and reproduction. In a report for World Aids Day 1994, the Western Samoa Health Department identified certain factors which make the introduction and spread of HIV/AIDS increasingly likely:

"(1) increasing numbers of teenage pregnancies with the affected age group becoming younger every year;
(2) an increasing number of young Samoans being infected with sexually transmitted diseases (STD's);
(3) an increasing number of Samoan homosexuals and bisexuals, a well known at-risk behavioural group;"
(4) the government's development policy to encourage tourism which will bring to Samoa probable HIV infected and AIDS victims;
(5) increasing contact with the Asian countries where the WHO has reported the most alarming increases in HIV infected and AIDS people" (Mala-Toelupe 1995:1).

As with NCDs, HIV/AIDS does not have a cure, but it differs from NCDs in that it cannot be treated and, in all reported cases, results in premature death. Thus, the only way to prevent the spread of HIV/AIDS is through educating the public, and to do this they must be supplied with information about the disease and its prevention. Again this fact is recognised by the Western Samoan government, as the Medium Term Plan for AIDS (WHO 1994b:1) states that the;

"...only way to prevent the spread of HIV/AIDS is to inform and educate the public on its dangers and measures to avoid catching and spreading the disease"

Western Samoa began its national programme for the prevention of HIV/AIDS in 1987 when a National Advisory Monitoring Committee (NAMC) was established by a Cabinet mandate. The NAMC (which later became known as the National AIDS Coordinating Council, NACC) provided the framework by which all HIV infections and AIDS prevention and control activities in Western Samoa were undertaken. The NAMC helped to develop the Western Samoan National AIDS Programme (NAP), with the Department of Health's Technical Advisory Committee (TAC) implementing its activities (WHO 1994b:1).

A Short Term Plan (STP) was written by the WHO and the Western Samoan government and ran between 1987 and 1990. The STP resulted from a series of consultations and interactions between various Western Samoan government departments and a special WHO mission which toured the Pacific in 1987. The STP was reviewed in July 1990 and the Medium Term Plan (MTP) was finally implemented in September 1991. It ran from 1991 to the end of 1993 when it was replaced by the second Medium Term Plan (MTP II) which runs through until the end of 1996 (WHO 1993d:1).

6.4 Types of Health Information

This section examines the specific information about diabetes and HIV/AIDS that is currently being diffused in Western Samoa. Two main sources were used to investigate this information. The bulk of the research was based on materials that are currently
being used for health information in Western Samoa (i.e. posters, pamphlets, training materials) with other data obtained from government policy documents such as the Draft National Plan of Action for Nutrition and the AIDS MTP II.

6.4.1 Diabetes

An examination of the "Home Economics (NCD) Students Booklet", produced by the Education Department's Curriculum Development Unit in collaboration with the Health Education Unit (HEU) and the Nutrition Centre, the Draft National Plan of Action for Nutrition and posters and pamphlets produced by the HEU, indicated three main areas of focus for diabetes information in Western Samoa. These are; the signs and symptoms of diabetes; the risk factors involved in contracting the disease and ways to prevent diabetes. Table 6.4 shows these areas of concern and the specific information being diffused about each.

6.4.2 HIV/AIDS

A large number of sources were examined to help identify what the main areas of concern regarding HIV/AIDS were in Western Samoa. These included three pamphlets that were in circulation in Western Samoa at the time of this research (refer Appendix Two). The first was a South Pacific Commission (SPC) pamphlet, in English, entitled "Understanding AIDS", the HEU pamphlet called "Keep Samoa from AIDS", aimed at visitors and those Samoans returning home - it has one side written in Samoan the other in English), and a pamphlet produced in American Samoa and distributed in Western Samoa (when supplies of the local one ran out) entitled "AIDS Information for Residents of American Samoa". A WHO Booklet, "Basic Information on AIDS", which was used to train and educate Western Samoan health personnel about HIV/AIDS, was also consulted, as well as posters produced by the HEU and government policy documents on HIV/AIDS such as the MTP II.

After consulting these sources it was ascertained that HIV/AIDS information concentrates on three main areas; the methods of HIV transmission; preventive measures; and actions, situations and places where HIV transmission can not take place. Table 6.6, as well as showing the types of diabetes information, also lists the information on HIV/AIDS that is being diffused.
Table 6.6: Main Focus of Diabetes and HIV/AIDS Information in Western Samoa

<table>
<thead>
<tr>
<th>Main Focus</th>
<th>Information to be Diffused</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signs and Symptoms of Diabetes</td>
<td>Ichy body, all over&lt;br&gt;Lazy, tired easily&lt;br&gt;Body weakness&lt;br&gt;Thickened lips and tongue&lt;br&gt;Cold sweats&lt;br&gt;Palpitations&lt;br&gt;Headaches&lt;br&gt;Always hungry&lt;br&gt;Pale&lt;br&gt;Poor vision and blurry eyesight&lt;br&gt;Feeling thirsty, drinking large quantities of water and passing urine often&lt;br&gt;Sores and cuts that take a long time to heal&lt;br&gt;Numbness, tingling and weakness of the limbs</td>
<td>Home Economics (NCD) Booklet&lt;br&gt;HEU Pamphlet on Hypoglycaemia</td>
</tr>
<tr>
<td>Diabetes Prevention Methods</td>
<td>Maintaining a healthy body weight&lt;br&gt;Regular exercise&lt;br&gt;Eating a high fibre diet low in fat, sugary and salty foods&lt;br&gt;Reduction in alcohol consumption</td>
<td>Home Economics (NCD) Booklet&lt;br&gt;HEU Pamphlet on Hypoglycaemia&lt;br&gt;HEU Posters&lt;br&gt;Draft National Plan of Action for Nutrition</td>
</tr>
<tr>
<td>Methods of HIV Transmission</td>
<td>Sexual Contact&lt;br&gt;Infected Blood&lt;br&gt;From infected mother to her baby&lt;br&gt;Shared-use of HIV contaminated needles</td>
<td>SPC Pamphlet&lt;br&gt;WHO Training Booklet&lt;br&gt;HEU HIV/AIDS Pamphlet&lt;br&gt;American Samoan Produced Pamphlet&lt;br&gt;MTP II</td>
</tr>
<tr>
<td>HIV/AIDS Prevention Methods</td>
<td>Condom use&lt;br&gt;Reduction in the number of sexual partners or abstaining from sex&lt;br&gt;Not having sex with people who have a lot of sexual partners&lt;br&gt;Not having sex with intravenous drug users&lt;br&gt;Not sharing needles and/or syringes&lt;br&gt;Safe and screened blood products&lt;br&gt;Not exposing oneself to semen or vaginal secrections</td>
<td>SPC Pamphlet&lt;br&gt;WHO Training Booklet&lt;br&gt;HEU Poster</td>
</tr>
<tr>
<td>Actions and Places Which HIV Can Not Be Spread</td>
<td>Toilet seats&lt;br&gt;Telephones&lt;br&gt;Sharing eating or drinking utensils&lt;br&gt;Shaking hands&lt;br&gt;Hugging&lt;br&gt;Kissing&lt;br&gt;Coughing and sneezing&lt;br&gt;Insects&lt;br&gt;Swimming pools&lt;br&gt;Casual contact&lt;br&gt;Living or working with someone who is HIV positive</td>
<td>SPC Pamphlet&lt;br&gt;WHO Training Booklet&lt;br&gt;American Samoan Produced Pamphlet&lt;br&gt;HEU Poster</td>
</tr>
</tbody>
</table>

The main information about diabetes is therefore, its signs and symptoms; the risk factors involved in contracting the disease and the ways to prevent it.

For HIV/AIDS the focus is on; the methods of HIV transmission, preventive measures for avoiding contracting HIV/AIDS and actions, situations and places that HIV transmission does not take place. It is these specific pieces of information that this
chapter will examine. To start investigating the way in which these pieces of information are diffused to rural Western Samoa, an examination of the main mechanism of information dissemination in the Department of Health — the Health Education Unit (HEU) — is required.

6.5 The Health Education Unit (HEU)

The HEU of the Western Samoan Department of Health was set up in 1980 following the recommendations of a team of foreign researchers studying diabetes in Samoa. The researchers, Zimmet et al. (1978), stressed the need for "education and re-education at a national level", as this was perceived to be more effective than relying on therapy and treatment for the cases where the disease was established (cited in Mala-Toelupe 1991:31-32). The recommendations further asserted that the problem needed to be addressed at a community level in order to reverse the trend towards a society where modernisation was leading to health problems previously rare in the country. In response to these recommendations the Western Samoan government set up the HEU with its main aim to function, "as a supportive mechanism to all other services of the Health Department" (Health Department of Western Samoa 1980:6).

According to the Head of the HEU, Palanitina Mala-Toelupe, the first five years of the HEU were, "basically trial and error, with a limited number of staff and a lack of clear objectives and goals" (pers. comm. 1995). The HEU began with a small staff of one health educator, one graphic artist and a volunteer. During the initial setting up period its focus was mainly on MCH with also some work on Family Planning, as the bulk of their funding came from the United Nations Family Planning Association. The HEU's focus was therefore determined by funding from outside Western Samoa, not in response to the problems identified by the Western Samoan's themselves.

Over time the HEU expanded primarily because of the Western Samoan governments decision to focus on the training and education of the HEU staff members. To this end Palanitina Mala-Toelupe completed a Masters degree in Health Personnel Education from the University of New South Wales in 1991, while another staff member, Sakaria Taituave, gained a Diploma of Environmental Health from the Fiji Medical School. As the staff, through this training, became more professional and knowledgeable in the different strategies for health education, the HEU became more focussed and developed a set of objectives and policies.
The HEU now operates in three main capacities; it provides an educational programme service, awareness campaigns and public communication strategies; it develops and produces health information, education and communication materials (IECs) to further support the above services; and it provides technical input to both the formal and informal training of health professionals and community leaders. In line with this commitment to training, it also co-ordinates and implements research work related to common problematic health issues (Health Education Unit 1992a:1).

One of the main roles of the HEU is therefore, to act as the principal link between the various sections of the Health Department and the general public on health education, information and promotional issues. Health Educator, Andrew Peterue, said that the HEU's role is to work with various organisations and to provide support, staff or IECs in health campaigns. For example, he said that if the Nutrition Centre of the Department of Health wanted to run a campaign about, say, healthy eating, they would approach the HEU with a proposal. The HEU would then decide the most appropriate strategies and implement the programme with the assistance of the Nutrition Centre staff (pers. comm. 1995).

It is the HEU, therefore, which is the main mechanism for health information diffusion in Western Samoa. The Unit makes use of a wide range of channels with which to disseminate this information, and it is these channels which this chapter now examines. Chapter Five highlighted the role of women's committees in health information diffusion during the colonial period. The discussion of the contemporary situation should therefore begin with the same institution.
6.5.1 Contemporary Women's Committees

There has been little change in the structure and role of the women's committees since the 1950s. They still have responsibility for: staffing and maintaining the local health centres; certain aspects of village sanitation; and encouraging attendance at the monthly clinic meetings that still occur. During these meetings the DHN performs MCH, acts as a referral mechanism to more advanced levels of health-care (such as the District or National Hospital), gives practical demonstrations and performs health information diffusion. In relation to the diffusion of information there are significant difference between diabetes and HIV/AIDS.

Information about diabetes is provided to the DHN through either their formal training or from HEU organised training workshops. In these workshops, "Everything is covered, from the clinical to the social...the whole thing" (pers. comm. Andrew Petereu 1995). However, due to the fact that the Western Samoan health service is under-staffed and because of the heavy workload placed on DHNs, there is very little opportunity for further training apart from these workshops.

The HEU is also the main source of the Information Education and Communication materials (IECs) supplied to the DHN for use in the villages. These are used by the DHNs as either an aid to their health talks or, when available, to supply to rural women. In terms of the DHNs health talk, it appears that things have changed little since the introduction of the women's committees in the 1920s. There are however, a number of new mechanisms that provide information about diabetes to the women's committees.

In the initial phase, it was only the DHN and DMO who attended the women's committees to diffuse health information, but now staff members from both the Nutrition Centre and the HEU also attend certain women's committees on a regular basis. In relation to diabetes these visits mainly involve the dissemination of information on the prevention of the disease (i.e healthy eating, exercise promotion). Plate 6.1 shows a HEU staff member providing health information on the identification and reduction of obesity in a women's committee meeting. He is using a "Height/Weight" Chart to show the women what their optimum weight should be for their height, and, if this identified them as overweight, provided information on actions that could be taken to reduce their weight.
Plate 6.1: HEU Information Diffusion in a Women's Committee

The Nutrition Centre staff also play a major role in diffusing health information to the women's committees. Table 6.7 shows that in both 1991 and 1992 over 600 women's committee members were reached with nutritional information, a large proportion of which received information relevant to the prevention of diabetes (Nutrition Centre Annual Report 1993:9).

Table 6.7: Number, Location and Average Attendance at Nutrition Centre Nutritional Talks (1993)
(Source: Nutrition Centre Annual Report 1993:9)

<table>
<thead>
<tr>
<th>Location</th>
<th>Number of Talks</th>
<th>Average No. of People</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women's Committees</td>
<td>15</td>
<td>35</td>
</tr>
<tr>
<td>Antenatal Clinic</td>
<td>51</td>
<td>59</td>
</tr>
<tr>
<td>Malnutrition Clinic</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Hospital Wards</td>
<td>56</td>
<td>43</td>
</tr>
</tbody>
</table>

For information concerning HIV/AIDS the HEU uses workshops run by their own staff to reach women's committee members rather than using the DHN. Chief Health Educator, Palanitina Mala-Toelupe stated that, "It is unfair to make the DHN as the main carrier of AIDS information, as they have too many responsibilities already and lack the time for training" (pers. comm. 1995).
These workshops are the first major diversion, apart from radio, away from the traditional form of health information communication in Western Samoa — from the DHN to the women's committees. The workshops differ in that: they bring a number of village women's committees together in one setting; they only happen on a very occasional basis; and the health information diffused in them is carried by outside 'experts' rather than by the local DHN.

6.5.2 HEU Workshops as a Diffusion Tool

Workshops organised by the HEU for women's committees normally occur only to mark special occasions such as World AIDS or World Health Day. Table 6.8 shows the number of participants and the types of workshops attended in 1991 and 1992. HIV/AIDS Workshops were attended by 860 women in 1991 and almost 1000 in 1992. Although the exact figures for workshops on diabetes is not shown, the largest attendance by women's committees members was on workshops dealing with adverse lifestyle prevention, and therefore concerned with ways to prevent diabetes.

Table 6.8: Health Awareness and Promotion Through HEU Workshops (1993)

<table>
<thead>
<tr>
<th>Workshop/Training By Health Issues</th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1991</td>
</tr>
<tr>
<td>Adverse Lifestyle Prevention</td>
<td></td>
</tr>
<tr>
<td>- anti-tobacco</td>
<td>2300</td>
</tr>
<tr>
<td>- exercise</td>
<td></td>
</tr>
<tr>
<td>- obesity prevention</td>
<td></td>
</tr>
<tr>
<td>- diabetes</td>
<td></td>
</tr>
<tr>
<td>- drug and alcohol prevention</td>
<td></td>
</tr>
<tr>
<td>Suicide</td>
<td>45</td>
</tr>
<tr>
<td>Family Health</td>
<td>50</td>
</tr>
<tr>
<td>Occupational Health</td>
<td>0</td>
</tr>
<tr>
<td>Hypertension</td>
<td>420</td>
</tr>
<tr>
<td>General Health Promotions</td>
<td>30</td>
</tr>
<tr>
<td>HIV/AIDS</td>
<td>860</td>
</tr>
<tr>
<td>Dermatology</td>
<td>0</td>
</tr>
</tbody>
</table>

An example of a HEU run workshop on HIV/AIDS involving women's committees was obtained from a report written by Chief Health Educator, Palanitina Mala-Toelupe. The workshop was organised by the Faleata West District women's committee to mark the 1991 World AIDS Day. A DHN accompanied Palanitina Mala-Toelupe, as she was well known to the village women and was, therefore, trusted and accepted by them. Approximately 17 women's committees were represented at the workshops with three participants from each of the committees attending. The workshop plank was included in the subsequent report;
"(1) Brief Background overview of the trend of health problems affecting the Samoans from post European times up to the present;
(2) Initial emergence of STDs and then AIDS;
(3) AIDS clarified;
(4) Brief clarification of immune system and its relation to AIDS;
(5) Signs/symptoms/process of the disease;
(6) Treatment, if there's any;
(7) Major emphasis on PREVENTION;
(8) Group work to determine appropriate traditional methods for dissemination of AIDS information;
(9) Group work — each group had a method to explore;
(10) Group presentations
(11) Analysis/Evaluation"

(Mala-Toelupe 1991b:1).

This plan incorporates all the main elements of the types of information on HIV/AIDS that are disseminated in Western Samoa (i.e what HIV and AIDS are, the methods of HIV transmission and ways to prevent this transmission). The information was disseminated through lectures, group discussions and the use of IECs such as posters and pamphlets. A similar plan of action for a women's committees workshop on HIV/AIDS was also stated in another HEU report (HEU 1992:1).

Group discussions are a new method for the dissemination of health information in Western Samoa, as previously it was diffused through a very formal lecture procedure which had very little audience participation. Mala-Toelupe outlines a number of reasons why group discussions are extremely useful in disseminating health information in Western Samoa: they enhance the participation of everybody; they make learning enjoyable and therefore, guarantee attainment; they provide the participants with an opportunity to build on what they already know; and group learning is non threatening to those members who are less assertive and very shy (Mala-Toelupe 1991b:2). It also contains elements of traditional Samoan custom, such as the way decisions are made in the fono. The HEU also uses IECs to diffuse health information.
6.5.3 Information Education Communication Materials (IECs)

Although there was very little funding for the design, production and distribution of IECs during the first five years of the HEU, it has now begun to produce a significant number (Mala-Toelupe pers. comm. 1995). These are distributed through DHNs, workshops, Non-Governmental Organisations (NGOs), the National and District hospitals and directly by the HEU. Table 6.9 shows the posters, pamphlets and calendars produced by the HEU in 1991 and 1992.

<table>
<thead>
<tr>
<th></th>
<th>Posters</th>
<th></th>
<th></th>
<th>Pamphlets</th>
<th></th>
<th></th>
<th>Calendars</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti Tobacco</td>
<td>4500</td>
<td>1750</td>
<td>500</td>
<td>6500</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercise</td>
<td>3000</td>
<td>2000</td>
<td>3500</td>
<td>6500</td>
<td>3000</td>
<td>4725</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obesity Prevention</td>
<td>1000</td>
<td>2000</td>
<td>3000</td>
<td>4725</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diabetes</td>
<td>1000</td>
<td>500</td>
<td>500</td>
<td>600</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hypertension</td>
<td>200</td>
<td>200</td>
<td>1000</td>
<td>3125</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heart Disease</td>
<td>0</td>
<td>2000</td>
<td>600</td>
<td>1450</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Planning</td>
<td>1000</td>
<td>500</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIV/AIDS</td>
<td>3000</td>
<td>2000</td>
<td>3030</td>
<td>6500</td>
<td>3000</td>
<td>1500</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>13700</strong></td>
<td><strong>10950</strong></td>
<td><strong>12100</strong></td>
<td><strong>29400</strong></td>
<td><strong>6000</strong></td>
<td><strong>6225</strong></td>
<td><strong>null</strong></td>
<td><strong>null</strong></td>
<td><strong>null</strong></td>
</tr>
</tbody>
</table>

Fourteen percent of all pamphlets and 20 percent of all the posters produced and distributed by the HEU were concerned with HIV/AIDS in 1991 and 1992. Material specifically on diabetes accounted for only four percent of all the pamphlets produced and five percent of all posters. Although little was produced specifically on diabetes it must be remembered that information on exercise, obesity prevention and heart disease also relate to diabetes, meaning that in total 61 percent of all pamphlets and 47 percent of all the posters produced during this time period were related to diabetes.
Plates 6.2 to 6.4 give examples of some of the posters that are used in Western Samoa to disseminate information on NCDs, and therefore, deal with information concerning the prevention of diabetes.

Plate 6.2 highlights the three main food groups that should be consumed for healthy living and to avoid illness. The first panel ("Puipuia Mai Fa'ama'i") deals with fruits and vegetables such as pumpkin, peas, tomatoes, mangos, pineapples and oranges. The second panel ("Fa'atupu Tino") concentrates on food for a healthy body such as sea food, meat, nuts, milk and eggs. The last panel ("Malosi Galue") shows foods which help the body to function strongly such as banana, taro, bread, rice and coconut cream.

Plate 6.2: HEU Produced Poster "Ai Se Mea'ai Mai Vasega E Tolu I Aso Uma" (The Three Major Food Groups)

This poster was produced by the HEU and the Nutrition Centre and was funded through aid from the Canadian Government. The poster is in Samoan and although relatively simplistic in design it depicts foods that are consumed in the average Samoan diet and gets the message across effectively.
Plate 6.3 shows a poster produced by the SPC and distributed throughout the Pacific in the various vernacular languages. It tries to convey the message that the consumption of local food will improve health and lead to long life, and by doing this it tries to discourage, although this is not specifically stated, the use of imported foods.

As the poster is circulated throughout the Pacific there are some food items displayed which are not consumed in large quantities, or at all in the average Samoan diet (i.e. carrots, kumara and peppers). The addition of these food items may lessen the impact of the poster as the perception may be that, "The poster is not dealing with Western Samoa so why should we follow it". However, the abundance of food items in the poster that are consumed in Western Samoa (i.e taro, fresh fish, breadfruit, pawpaw and bananas), and the small amount of space taken up by the items which are not, the impact of these differences should play a very minor part in the message's effectiveness.

Plate 6.3: SPC Produced Poster "E Sili Lava Taumafa Samoa Mo Lou Soifua Maloloina" (It is Best to Eat Samoan Food For a Long Life)
Plate 6.4 illustrates the only poster seen during the research period in Western Samoa, that dealt specifically with diabetes. It shows a number of activities that impact on the incidence of diabetes, high blood pressure and obesity. From top left, it says that, "Walking is good for the body", "Eat Samoan foods", "Reduce the intake of salt and sugar in/on foods", "Do not smoke" and "Boil food rather than frying".

Plate 6.4: HEU Produced Poster "Puipuia Mai Le Mai Suka, Mai Fatu, Ma Le Toto Maualuga I Auala Nei" (Being Careful of Diabetes, Obesity and High Blood Pressure)
It therefore, incorporates all the elements of NCD prevention; exercise, consumption of local foods, reduction in salt and sugar in the diet, the halting of smoking and shows healthy ways to cook foods to decrease fat consumption and increase nutritional value. As it was designed and produced in Western Samoa by the HEU, it shows specific Samoan activities, props and situations. For example, the type of bus pictured in the first scene could be described as a Samoan landmark and the person and hands shown are obviously Samoan. Also the food products depicted in the poster are the most commonly consumed food items in Samoa (i.e. pineapples, seafood, taro and chicken).

In terms of posters available for the dissemination of information on HIV/AIDS in Western Samoa, two examples were found during this research programme. Plates 6.5 and 6.6 were both designed, produced and distributed by the HEU.

Plate 6.5: HEU Produced Poster "Puipui Samoa — Mai Le AIDS" (Protect Samoa From AIDS — Best to Stick to One Partner)

This poster concentrates specifically on fidelity as a means of preventing HIV transmission, and uses traditional Samoan characters and props such as Samoan designed lavalavas and the traditional Samoan tattoo (pe'a). Whereas Plate 6.5 deals with the prevention of HIV/AIDS, Plate 6.6 illustrates methods of transmission.
Plate 6.6: HEU Produced Poster "Auala E Feavea'i Ai Siama O Le AIDS" (Methods of HIV Transmission)

The different ways that HIV is transmitted are shown, (from top to bottom): sexual intercourse with an infected partner; reusing needles that contain HIV such as syringes and tattoo needles; donating HIV infected blood to a recipient; and from an infected mother to a baby. As with Plate 6.5 the poster uses specifically Samoan material to get its message across. Along with posters used for diabetes and HIV/AIDS information diffusion in Western Samoa there are a number of other IECs presently in circulation.
Appendix Two presents examples of two pamphlets produced by the HEU, one dealing with HIV/AIDS while the other concentrates on diabetes (looking specifically at hypoglycaemia). The one entitled "Keep Samoa Free of AIDS" is written in English on one side and Samoan on the other. It was produced in 1988 before Western Samoa had had any reported HIV/AIDS cases and shows the methods of HIV transmission. It is aimed at tourists and those returning home stating that,

"Since HIV has not been detected yet in Western Samoa, the only way of getting the virus into the country is for an infected overseas visitor to have sexual contact with a local person.

OR

A local person who went overseas, got infected with the virus and brought it back home.

Please be a responsible person, help stop the spread of "AIDS" into Western Samoa."

The pamphlet about diabetes does not concentrate on ways to prevent the disease, but is aimed at those people who have already been diagnosed as diabetics and tries to educate and inform them about the signs, symptoms and dangers of hypoglycaemia (low blood sugar level). It is therefore, used more in the National and District Hospitals to supply to diabetic patients than through DHNs in women's committees or workshops.

The IECs designed by the HEU go through one of two processes when they are designed and pre-tested. Health Educator Andrew Petereu said that the first involves collaboration with other sections of the Department of Health (i.e Nutrition Centre, Diabetes Clinic or HIV/AIDS Clinic) to decide on the format and content of the IEC. It is then shown to another group within the health department for their response. If this is favourable it is made up and printed. The other process involves the use of community groups in both the design and pre-testing of the IEC. The HEU occasionally includes poster competitions in workshops with women's committees or other organisations as, not only ways to disseminate information, but also to provide the HEU materials that could be made into IECs. Andrew Petereu stated that these posters or banners were taken to other community groups who were asked, "what does this tell you, what does this mean?" and the HEU,"... just keeps repeating this process with different groups until we get it right" (pers. comm. 1995). These two processes make sure that the message intended to be communicated reaches its target, and does not have a distorted meaning.
Another IEC used by the HEU is a booklet produced by the SPC called Pacific Wise. It is made up of a series of cartoons, designed and drawn by people from all around the Pacific, dealing with HIV/AIDS and STDs. One of the cartoons is drawn by a Western Samoan and depicts a Samoan story (it is called "Taro Patch") to get across the messages on STDs, and through this HIV/AIDS (refer Appendix Three). Although these appear to be a very effective mechanism for information dissemination on HIV/AIDS and STDs in Western Samoa, as they depict Samoan and Pacific scenes and situations, are fun to read and are easily understood with both writing and pictures, their effectiveness is seriously hindered by their shortage. They are not widely distributed and the cost of production will continue to lessen their potential impact in getting HIV/AIDS information across in Western Samoa.

6.6 The Use of the Media in Health Information Diffusion

The mass media has been credited with great potential in the dissemination of health information (Rahim 1993:36). Its use for this purpose by the HEU in Western Samoa is outlined in the following section.

6.6.1 Radio

Ever since the establishment of the government broadcasting service in 1948, there has been the expectation that radio has the potential to be an effective instrument for information diffusion in Western Samoa. As discussed in Chapter Five, traditional Samoan society was an oral culture, where oratory was regarded as an art form. The Samoan people were, and are still, accustomed to speaking and listening rather than reading and writing. Coupled with this is the fact that there are now high rates of radio ownership in Western Samoa, Annandale et al. (1981) estimated that 90 percent of all Samoan families have access to, or own, a radio, while Thomas (1986c) puts the figure closer to 92 percent. These figures indicate 100 percent access given the communal nature of Samoan society.
Table 6.10 shows the different radio stations that currently exist in Western Samoa and their characteristics. The HEU has made extensive use of the government-owned radio station 2AP with an hour long radio programme on health issues broadcast on a Wednesday night and recorded each week. The format previously consisted of interviews between HEU staff and various parties concerned with health (i.e DHNs, the National AIDS Co-ordinator, Nutrition Centre staff) but has recently changed to allow for more input, in terms of its format, by HEU staff (Andrew Petereu pers. comm 1995).

<table>
<thead>
<tr>
<th>Name of Station</th>
<th>Language</th>
<th>Type</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>2AP</td>
<td>English/Samoan</td>
<td>Government Owned</td>
<td>6a.m to 12p.m</td>
</tr>
<tr>
<td>FM 98.1</td>
<td>English/Samoan</td>
<td>Commercial</td>
<td>6a.m to 12p.m</td>
</tr>
<tr>
<td>Radio Graceland</td>
<td>Samoan</td>
<td>Commercial/Christian</td>
<td>6a.m to 12p.m</td>
</tr>
</tbody>
</table>

Aside from these hour long radio talks, the HEU also runs advertising campaigns on health issues, made up of thirty second radio spots. Table 6.11 shows how many of these campaigns are taken up with information concerning diabetes-related information and HIV/AIDS information.

Table 6.11: Number and Percentage of Total Radio Spots and Radio Talks Recorded by the HEU on NCDs and HIV/AIDS (1991-1992)

<table>
<thead>
<tr>
<th>Type of Programme</th>
<th>1991 No.</th>
<th>1992 No.</th>
<th>%age of Total</th>
<th>1991 No.</th>
<th>1992 No.</th>
<th>%age of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exercise</td>
<td>4</td>
<td>5</td>
<td>2</td>
<td>468</td>
<td>468</td>
<td>9.67</td>
</tr>
<tr>
<td>Obesity prevention</td>
<td>8</td>
<td>10</td>
<td>8</td>
<td>468</td>
<td>468</td>
<td>9.67</td>
</tr>
<tr>
<td>Diabetes</td>
<td>8</td>
<td>10</td>
<td>8</td>
<td>468</td>
<td>629</td>
<td>13</td>
</tr>
<tr>
<td>AIDS Prevention</td>
<td>6</td>
<td>7.5</td>
<td>6</td>
<td>2236</td>
<td>936</td>
<td>19.35</td>
</tr>
</tbody>
</table>

These figures show that information specifically on diabetes for example, disseminated through the HEU radio programmes, accounts for 13 percent of all radio spots in 1991 and 1992. HIV/AIDS information in HEU radio talks accounted for 24.7 percent of the total in 1991 and 1992.
The largest radio campaign the HEU has run so far, occurred in 1993 following the outbreak of typhoid in Savai'i. The SPC approached the Unit and offered whatever assistance it could to help stop the spread of the disease and to educate the public about its dangers. The HEU requested the services of noted SPC radio specialist, Yaminiasi Gaunovou and resources from the SPC to make a series of radio spots on typhoid. As the campaign was being put together it became obvious that the HEU wanted to use his skills and the SPC's money to produce more than just radio spots on typhoid.

When the campaign finally went to air it consisted of 35 radio spots dealing with not only typhoid, but also healthy living, local food consumption, typhoid, immunisation, exercise, alcohol/smoking, obesity, diabetes and AIDS (refer Appendix Four for full details). Figure 6.4 divides the radio spots up by their type showing that, although the funding was specifically for typhoid information, it accounted for a mere 25 percent of the total radio spots produced while NCDs made up for nearly half and information on HIV/AIDS for 20 percent.

![Pie chart showing distribution of radio spots](chart.png)

**Figure 6.4: Type of SPC Funded Radio Messages Produced by the HEU (Percentage) (1993)**
(Source: Health Education Unit 1995)

The radio advertisements produced for this campaign featured three Manu Samoan (the national rugby team) players doing voice-overs. The use of high profile sportsmen provided status and prestige to the campaign and would have made it particularly popular amongst the younger inhabitants.

Apart from specific funding, such as that from the SPC, radio use by the HEU only occurs as part of its weekly radio show. Although it is hindered by the lack of production equipment and trained radio staff, the biggest barrier to the HEU in using radio is the fact that has to pay full commercial advertising rates when using the government-owned 2AP.
6.6.2 Newspapers

There is very limited use of newspapers in Western Samoa for the dissemination of health information as Table 6.12 shows. In 1991 newspapers were only used five times to disseminate health information, although this did increase to eleven by 1992.

Table 6.12: Newspaper Use By the HEU (1991-1992)
(Source: Annual Report of the Health Department 1994:113)

<table>
<thead>
<tr>
<th>Type of Information Diffused</th>
<th>1991</th>
<th>1992</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exercise</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Obesity prevention</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Diabetes</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>AIDS Prevention</td>
<td>1</td>
<td>8</td>
</tr>
</tbody>
</table>

The majority of newspaper use by the HEU is not shown in the above Table and consists of a weekly column on health issues in the "Samoan Sports Pages", a newspaper, as the name implies, dealing with local and overseas sports news. The column used to be written each week by a staff member of the HEU, but the HEU has now provided the newspaper with a book relating to health issues, from which a different topic is chosen each week (Andrew Petereu pers. comm.). These mainly deal with issues concerning with NCDs and their prevention. Figure 6.5 gives an example of one of these columns, with this one dealing specifically with losing weight and its benefits.
HEALTH NOTE

It all comes down to your weight

Anything is better than sitting around and being idle. As the saying goes; if you can stand don't sit.

Many people approaching their middle ages and thereabouts suddenly become aware of their weight and figure which they had long ago neglected. At this age, they have realised that losing weight is a strenuous effort and most people do not succeed.

The lesson learnt here is, don't wait - lose weight now. If you are beginning to put on weight - now is the best time to lose. It is also much easier to lose weight at this stage than waiting until you can't fit your jeans or t-shirt anymore.

You don't have to run long distances, race against the clock, or take pills to swallow. Just go out for a brisk walk everyday, or take time to play social sports more often - and most importantly, Eat Right!

Condition yourself to skip 'in-between' meals and overeating. You can do this by staying away from the kitchen and keeping yourself occupied.

It doesn't happen immediately, but if you are patient with fruits and lots of water - you will lose weight and feel much better, even under strenuous exercises. Nothing beats the feeling of looking good. If you are middle-aged and very overweight consult your Doctor, especially if you have a medical condition.

Nothing sounds as special as a compliment on your weight!

Remember: Walking does wonders for your Health.

Exercise your Health!

Figure 6.5: HEU Newspaper Column "It all comes down to your weight"
(Source: Samoan Sports Pages 8-3-95)

Other newspapers circulated in Western Samoa are used for the diffusion of health information, however, it is very difficult to ascertain the quantity, frequency and circulation of the newspapers available. This is because there is no data available about them. A large number are printed on a very irregular basis (there may be months between editions) and also a number of them are printed for specific audiences or areas not for general public consumption, and are therefore difficult to obtain. Through discussion with the New Zealand High Commission and from enquiring what newspapers were read in Matatutu as part of the fieldwork exercise, it was ascertained that the main newspapers in Western Samoa are the "Samoan Observer", "Samoan Weekly", "Samoan Times", "Samoana", "Laosc" and the government run "Savali" (Bill Doobie pers comm. 1995).
In terms of the HEU, only the "Samoa Observer", "Savali", "Samoa Sports Pages" and the "Laoso" are used for health information diffusion. Use by the HEU of the media is determined by the availability of funding as it has to pay full commercial rates in both the private and government-owned papers. Andrew Peteren stated that the majority of newspaper use by the HEU occurs only on special occasions, such as World Tobacco or AIDS Day when funding from outside sources, such as the WHO, is available (pers. comm. 1995). Palanitina Mala-Toelupe said that extensive use was made, when it was published, of the more rural focused "Laoso". She described this newspaper as the "common-man’s paper" and said it was especially useful in reaching remote rural areas that do not have access to the larger papers such as the "Samoa Observer" (pers. comm. 1995). However, for the three months of this research, not one copy of the Laoso was printed and not one of the residents of Matatutu referred to it.

Of all the newspapers available in Western Samoa the "Savali" has the potential to be the most useful in diffusing health information. Its circulation size, distribution system and the fact that it is owned and run by the government all means that it has the potential to reach the largest number of people with health information. Although there are no recent exact figures on the circulation of the "Savali", comments made by various residents of Western Samoa say it has changed little in the last fifteen years, meaning Waqavonovono’s 1981 figure of a circulation number of 6,500 may still be close (1981:17). The "Savali", in theory, is distributed through the pulenu'u (village mayor) to every extended family in the village, ensuring that every Samoan has access to news supplied by the government. It is, however, rarely used by the HEU as it has to pay full commercial advertising rates (one government department paying another) and doubts have been raised about the effectiveness of the distribution system (Thomas 1986a:120).

Newspaper use by the HEU is therefore limited, due to the financial costs involved. Use is made of the "Samoa Sports Pages" through a weekly column, but other newspapers are only used when outside funding is available for specific activities such as World AIDS Day. The messages that are disseminated are either practical in nature, such as those in the article from the "Samoa Sports Pages", or advertise activities that are coming up such as poster or song contests or workshops run by the HEU.
6.6.3 Television and Video

Although television and VCR ownership has steadily increased in Western Samoa over the last fifteen years, they have been used little in the dissemination of health information. Poland et al. (1989:8) found that although per capita figures for television ownership are low (less than one per hundred viewers in 1983), use is very high, with one or two televisions or VCR's serving an entire village. The study also found that those with access to televisions or videos watch everyday, and a study by Thomas (1986a:75) found that viewing times for both televisions and videos in Western Samoa averaged upwards of forty hours a week.

A shortage of production hardware and even more important, a lack of trained production personnel, constrains the use of television and video for health information diffusion in Western Samoa. The HEU has only ever utilised Televise Samoa (the government-run television station) once, which was for a panel discussion on NCDs held in 1994. Palanitina Mala-Toelupe stated that it was a dream of the HEU "...to make our own video, but we just don't have the production resources and it's just too expensive" (pers. comm. 1995).

The HEU does have its own portable television monitor and VCR set, on which it shows a video about NCDs produced by the SPC. This is used in women's committees and at NCD workshops run by the HEU. Plate 6.1 (129) shows the Unit's monitor and VCR set up to show the video at a women's committee meeting. However, the power was off that day and more traditional teaching methods had to be used.

Although significant use is made by the HEU of the DHN through the women's committees, workshops aimed at women's committees members, IECs and the use of the media in health information diffusion, one of the main mechanisms used is through NGOs.
6.7 NGOs and Health Information Diffusion

NGOs play a significant role in health information diffusion in Western Samoa, especially in relation to information on HIV/AIDS. The fact that NGOs can play a significant part in the fight against AIDS in Western Samoa is recognised in the National AIDS Plan and other HIV/AIDS related policy documents,

"Samoa is committed to the prevention of HIV Infection and AIDS, at all levels. The NGOs input to this commitment is crucial"

(WHO 1993d:3).

The role of NGOs in HIV/AIDS work in Western Samoa has altered significantly recently due to a change in focus of the most recent plan for HIV/AIDS in Samoa. The approach of the MTP II differs from the earlier short and medium terms plans by its focus on special risk groups. The STP and MTP focussed on HIV/AIDS awareness in the general population and establishing systems for HIV screening and testing as well as ensuring a safe blood supply for the country (WHO 1994a:4). As Mala-Toelupe wrote in AIDS Education in Samoa: 1992 Experiences,

"The experiences between 1987-1990...taught us a lot of lessons which resulted in the adoption of a different approach in AIDS education. We tried very hard during the STP to do everything. In the end, we hardly got many things done"

(1992:1).

The MTP II has moved away from a general focus to concentrate on two main groups; Samoans travelling overseas or those dealing with visitors to Western Samoa, and those who are involved in high risk sexual behaviours (defined by the National AIDS Prevention and Control Programme as, "men who have sex with men" and "women who exchange sex for money") (WHO 1994a:12).

Since the focus is now on these two main groups, rather than a more general approach to HIV/AIDS information diffusion, there has been an increased use of NGOs to disseminate HIV/AIDS information. The HEU had played a significant role in this process, acting as the link between the Department of Health, the major body for funding of activities concerning HIV/AIDS in Western Samoa (WHO), and NGOs. It has used a number of mechanisms to reach NGOs for HIV/AIDS information diffusion. Table 6.13 shows the various WHO funded activities undertaken by the HEU in 1994 and 1995 concerning work with NGOs. It shows that the HEU concentrated on the use of, workshops with specific groups (i.e tourist workers or sports groups travelling overseas), the production of IECs and media campaigns.
For the full details on WHO spending and activities undertaken by WHO in Western Samoa in 1994-1995 refer to Appendix Four.

(Source: WHO 1994a:1)

<table>
<thead>
<tr>
<th>Targeted Group</th>
<th>Activity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travellers/Tourist</td>
<td>Workshops</td>
<td>Workshop for tourist industry personnel to educate them about STD/HIV infection</td>
</tr>
<tr>
<td>Workers</td>
<td>IECs and Media Use</td>
<td>Development of IECs material and media to support the South Pacific Arts Festival activities</td>
</tr>
<tr>
<td>High Risk Groups</td>
<td>Workshops</td>
<td>Development and Distribution of IEC materials for people who engage in high risk behaviours, to clinics, bars, nightclubs, GP's and Radio (to promote HIV testing)</td>
</tr>
<tr>
<td></td>
<td>IECs and Media Use</td>
<td>Provide annual seminar for men who have sex with men to inform and educate about safe practices to adopt</td>
</tr>
<tr>
<td>General NGO Activities</td>
<td>IECs and Media Use</td>
<td>Condom promotion, develop media spots, print materials and other strategies to increase the use of condoms</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HEU will provide seminars for NGOs outlining NAP goals, proposal preparation and measuring effectiveness</td>
</tr>
</tbody>
</table>

One of the major focuses of the HEU, both through targeting these groups and their more general programmes on HIV/AIDS, is on the training of trainers. The first major time this was attempted was a workshop in 1991 entitled "Training of Trainers on HIV/AIDS Workshop", and Chief Health Educator Palanitina Mala-Toelupe stated,

"It was a different approach which was aimed at a specific "re orientation process" of trainers. The training facilitated their leadership roles so that they would use their existing networks and infrastructures to educate and disseminate AIDS prevention and education"


The training of trainers by the HEU utilises specific groups (in the Western Samoa case, groups such as Fafafines Associations, Boys' Brigade, Youth Groups, Red Cross, YMCA), to disseminate health information. It offers the opportunity to reach specific audiences that would not otherwise be reached by other HEU activities, and also given the staff constraints placed on the HEU, it allows for a wider base of people with the appropriate information to pass on this knowledge. It would therefore, appear to be a valuable mechanism in the dissemination of health information in Western Samoa, and the Department of Health has began to recognise its potential;
"This method of health education was adopted, as not only the ideal in spreading healthy living by the community members themselves, but also to alleviate the large workload of the current limited staff of the HEU."

Church groups in Western Samoa are also used by the HEU to dissemination health information. As the church is an important force at both village and national level in Western Samoa and church groups are found in all villages, this channel offers considerable potential in the diffusion of health information. Health Educator Andrew Petereu said the HEU runs programmes in a number of Sunday schools mainly in Upolu when invited, but these only happen intermittently (pers. comm. 1995)

The workshops run by the HEU offer new avenues for feedback between the senders and receivers of health information. As the majority of workshops contain small group discussion this provides an excellent opportunity to get participants responses to the teaching methods used and material supplied. Also, through the use of role plays, songs and poster competitions, the effectiveness of the health information delivery system can be measured. If the workshop participants correctly use the information supplied in, say, a role play on ways to prevent HIV/AIDS transmission, then the message has obviously got through. If they do not then the methods of information diffusion need to be examined.

Apart from the HEU working through and with these groups, there are NGOs in Western Samoa who function independently of the Department of Health to disseminate information. The main group in this regard is the Western Samoa Family Health Association (WSFHA). The WSFHA is a member of the International Planned Parenthood Federation (IPPF), and is also affiliated to the Pacific Island Planned Parenthood Association. In terms of recent IPPF spending in Western Samoa US$60,000 (NZ$96,000 and WS$147,000) was spent in both 1993 and 1994 and this increased to US$80,000 (NZ$127,400 and WS$195,000) in 1995 (IPPF Annual Report 1992-1993:32).

The WSFHA is currently involved in four main programmes: providing counselling, birth control methods and clinical services to urban women at its Apia clinic; running a "Family Planning Promotion Campaign" in Savai'i; organising a "Youth A Mission" project that targets education of adolescents through youth groups and secondary schools; and a mobile clinic has been set up to provide educational and contraceptive delivery services for rural villages in Upolu (Wolman 1995:10-11).
As both the "Youth A Mission" and mobile clinic's were not set up until mid-1995 it was not possible to examine the methods they used to get HIV/AIDS information across, but their intention was to disseminate HIV/AIDS information in Western Samoa. In terms of HIV/AIDS information diffusion the "Family Planning Promotion Campaign" is the only mechanism that was able to be examined. The project involved a WSFHA team consisting of a doctor and two nurses undertaking a campaign of village visits on Savai'i. There they gave seminars on family planning presented through lectures, discussions and the use of video. The seminars were composed of three intertwined themes. The first component was related to human health, basic physiology, sexual development and the methods for family planning/birth control. The second section focused on education about HIV/AIDS and sexually transmitted diseases (STDs). This segment was a basic explanation of the physiology, transmission and ways of protecting oneself from these diseases. The final element of the seminar was the "whys" of family planning (ibid:10).

In these visits, and through their other work, the WSFHA disseminates IECs that they have themselves produced. Appendix Six shows a pamphlet on condoms produced by the WSFHA. The pamphlet explains what a condom is and that it should be worn during sex to avoid pregnancy and to avoid the transmission of STDs, including AIDS. It then goes on to give directions on how to put on a condom. As with the HEU, unless there is specific funding from the IPPF or other foreign sources the WSFHA does not have the resources to design any new IECs or to or print off extra copies of the ones they have. There distribution therefore, may be limited by this lack of resources.

NGOs therefore, have the potential to be one of the most effective mechanisms for the diffusion of health information in Western Samoa. They offer different communication channels than those used by the HEU to reach specific audiences that would not otherwise be reached. They also provide a cost effective health information dissemination workforce. Although they are widely utilised in HIV/AIDS information communication, NGOs are used little in terms of disseminating diabetes information.

6.7.1 Other Mechanisms - Schools

Although schools play a relatively minor role in the diffusion of health information in Western Samoa, their role bears scrutiny in order to determine how they disseminate information and if they offer further opportunities for growth in this role.
In Western Samoa education is offered from preschool to University level but is neither free nor compulsory. The Western Samoan government however, has recently announced its attention to introduce compulsory education in the near future. Health information is disseminated through two different mechanisms.

The Curriculum Development Unit of the Education Department, in collaboration with the HEU and the Nutrition Centre, has put together a booklet entitled, *Home Economics: Non-Communicable Diseases Students Booklet* which contains information on diabetes and other NCDs in Western Samoa. This is used as the main teaching resource on health education and is a very useful source of diabetes information aimed at school age children in Western Samoa.

Information on HIV/AIDS is however, limited due to difficulties getting acceptance for the AIDS curriculum. There is considerable opposition to teaching children about a disease that is spread by sexual contact, such as HIV/AIDS, in Western Samoa. The curriculum is currently under government review and it appears that this will be a long process, meaning HIV/AIDS information will not be disseminated in Western Samoa schools for a considerable amount of time.

The second mechanism that health information is diffused through schools in Western Samoa, are visits from staff of the HEU. It runs a number of programmes in schools, but these occur on an irregular basis and mainly happen for specific occasions, such as World Health Day). These programmes normally consist of a health lecture using IECs, but occasionally poster competitions or song contests are run as an educational tool (Andrew Petereu pers. comm. 1995)

### 6.7.2 Through Health Institutions

Health information is also diffused in Western Samoa orally from staff to patients at the various medical establishments, such as the WSNH and through District Hospitals. This however plays a small role in health information diffusion in Western Samoa.
6.8 Case Study: Health Information Diffusion at the Local Scale

The health information communication system in Western Samoa has so far been examined at a national level. This section focuses on the diffusion of health information at a local scale. The communication channels that are available for receiving health information in a specific village, Matatutu, Lefaga, will be shown.

Although there are considerable media resources available in Matatutu, there are significant differences in terms of their use. Because of the communal nature of Samoan society, not owning a particular media device (such as television) does not necessarily limit the opportunities to gain access to that device. More important than ownership therefore, is use. Figure 6.6 shows responses to questions concerning how often respondents used a particular media channel.

![Graph showing frequency of media use]

**Form of Media**

*Figure 6.6: Media Use in Matatutu*

These figures show that by far the most frequently used media channel is that of radio, confirming similar findings in Western Samoan villages by Thomas (1981a and 1986c) and Annandale et al. (1981). The vast majority of the questionnaire respondents listened to the radio every day (80%), with the government run 2AP the most popular station (83%). Only a very small percentage listened to the commercial FM station (7%). Most radio listening occurred in the evening (69%) or in the early morning
(24%), and very little occurs at other times of the day (7%). In terms of the programmes that are most enjoyed by the respondents: news (26%), sports programmes (17%) and music (17%) were by far the most popular, although programmes on health did rank fourth (10%). Although only 38 percent of the villagers interviewed owned their own television sets, more than 62 percent of them watched television at least twice a week, with a large percentage watching television daily (45%).

The least frequently used media device, by the questionnaire respondents, were newspapers. Only 35 percent of them read newspapers daily, although 82 percent did read a newspaper at least once a week. Figure 6.7 shows that the vast majority of those interviewed read the privately owned "Samoa Observer", compared to the less the limited readership of the free, government run "Savali". Most of these newspapers were obtained from Apia (66%) either by the respondent themselves or a member of their aiga.

![Pie Chart: Newspapers Read in the Village](image)

**Figure 6.7: Newspapers Read in the Village**

Apart from media devices that are available to receive health information, there are a number of other channels, which include the women's committees, male village organisations and workshops.

Table 6.14 examines the membership and attendance of the village women's committees by the female respondents. Of the fourteen women who were surveyed, only two did not attend the women's committees, one because of work commitments and the other due to the fact that she had just returned from living overseas and could not see any point in belonging. Although most respondents went to every committee meeting, their knowledge concerning diabetes and HIV/AIDS information differed.
Table 6.14: Women's Committee Membership and Attendance in Matatutu

<table>
<thead>
<tr>
<th>Women</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belong to Women's Committee?</td>
<td>86%</td>
<td>14%</td>
</tr>
<tr>
<td>If so, how often do you go?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>14%</td>
<td></td>
</tr>
<tr>
<td>Seldom</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Occasionally</td>
<td>8%</td>
<td></td>
</tr>
<tr>
<td>Every Second Meeting</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Every Meeting</td>
<td>67%</td>
<td></td>
</tr>
<tr>
<td>Learnt of HIV/AIDS from the Committee?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Yes</td>
<td>25%</td>
<td></td>
</tr>
<tr>
<td>Learnt of Diabetes from the Committee?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Yes</td>
<td>33%</td>
<td></td>
</tr>
<tr>
<td>67%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Most women said that they had not received information on HIV/AIDS or diabetes through the women's committee, although a third of the women replied that they had received diabetes information. This discrepancy may be due to a number of factors including: some women not paying attention in the committee meetings, the lack of effectiveness of the message delivered so that it is not remembered, women confusing health information that they had heard elsewhere with what was diffused in the women's committees and misunderstandings between the interpreter and the respondents in what diabetes was, or what it involved.

Although two leaders of different women's committees in the village were interviewed, no mention was made of any members being sent to any HEU run workshops. It therefore, appears that this channel of health information dissemination was not available in Matatutu.

In terms of the health information channels available to the male residents of Matatutu, Table 6.15 shows that the vast majority of the men interviewed belonged to at least one group in the village. The most popular of these was the village cricket (kirikiti) team, although the village fono, youth groups and choir were also well attended. Despite the availability of these channels little information on diabetes and HIV/AIDS was diffused through them. Very few of the men had learnt about HIV/AIDS at any of these groups, while information received on diabetes was non-existent.
Table 6.15: Male Organisations in Matatutu

<table>
<thead>
<tr>
<th>Men</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belong to any clubs or village organisation?</td>
<td>93%</td>
<td>7%</td>
</tr>
</tbody>
</table>

If yes, which ones?

<table>
<thead>
<tr>
<th>Cricket</th>
<th>Youth Group</th>
<th>Choir</th>
<th>Fono</th>
</tr>
</thead>
<tbody>
<tr>
<td>42%</td>
<td>31%</td>
<td>23%</td>
<td>31%</td>
</tr>
</tbody>
</table>

Learned of HIV/AIDS from any of these groups?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>14%</td>
<td>86%</td>
</tr>
</tbody>
</table>

Learned of Diabetes from any of these groups?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>100%</td>
</tr>
</tbody>
</table>

* total is greater than 100% since persons can belong more than one group

Workshops run by HEU staff and the National AIDS Coordinator, Dr Le Mamea 'Ata Matatumua concerning HIV/AIDS were held in Matatutu in 1992. They were held on consecutive Sundays, one for men and the next weeks for women, and were designed to introduce the village inhabitants to information on AIDS. It concentrated on the methods and ways to prevent the spread of HIV/AIDS. According to Dr Le Mamea a large number of the village residents attended and he viewed it as a success in getting HIV/AIDS information across (pers. comm. 1995). Although this event would have been of considerable importance by bringing large numbers of the village inhabitants together (a rare occurrence), only two and a half years after the workshops were held, no one resident mentioned the workshop as a source of HIV/AIDS information.

6.9 Concluding Remarks

The focus of this chapter has been on the two most pressing health problems currently facing Western Samoa: diabetes and HIV/AIDS. This chapter was structured utilising the communication model established as the framework for this thesis. It began by examining why these were selected as major areas of concern by the source of health information; the Western Samoan Department of Health. The types of information given on diabetes and HIV/AIDS, or the message, were explored in the second section of the chapter. Mechanisms of information diffusion, or channels, were then investigated. Finally, a case study undertaken in a village provided an analysis of the channels available for the reception of health information, or audience. The next chapter continues the investigation into the contemporary health communication system by providing a critical analysis of the barriers and distortions present.
Chapter Seven: Contemporary Health Knowledge: Barriers and Distortions

"I was told that God gives everyone a certain amount of power...and that if you do something wrong you get AIDS which takes away your power until there's none left...then you die"

Matatutu Questionnaire Respondent
7.1 Introduction

The previous chapter examined the contemporary health communication system that exists in Western Samoa to diffuse information on diabetes and HIV/AIDS. In the first section of this chapter a critical appraisal is undertaken of the system, establishing that the information diffused does not reach its intended audience. Some possible explanations for the failure of the communication system to increase the audiences' health knowledge will be explored in the second section of this chapter. It does this through examining the barriers and distortions, defined as 'any element that effects the message sent between the sender and that received by the audience/receivers.'

7.2 Health Information Knowledge

Two sources were used to examine the knowledge of Western Samoans concerning HIV/AIDS and diabetes and these form the basis for the two following sections. The first was a nationwide survey undertaken by the Health Department specifically on HIV/AIDS knowledge, while the second source was the Matautu case study results. Because of the lack of material available on the absorption of diabetes information the majority of this section will concentrate on HIV/AIDS knowledge.

7.2.1 HIV/AIDS Knowledge

The nationwide survey was part of the Health Department's "Multipurpose Survey" which attempted to gain information on the knowledge of Western Samoan's in a large number of health related areas. To date, the survey on HIV/AIDS is the only one to be published. The field work for the survey was carried out intermittently between September 1987 and August 1988, and data was collected from 29 Western Samoan villages giving an estimated sample size of 540 people.

Although the majority of the sample (75%) had heard about HIV/AIDS, there were significant differences between geographical locations, with greater knowledge in the more urban areas (only 65 percent of the respondents from Savai'i had heard of AIDS compared with 74 percent from rural Upolu and 85 percent from Apia). The majority of the respondents first heard about HIV/AIDS from the radio (84%), while workshops, television, other people, school, posters and church groups were also minor sources. Of those interviewed only fifty percent were aware that HIV/AIDS was a fatal disease.
Table 7.1 illustrates the respondents' knowledge of who might be at risk. The most frequently recorded group mentioned were sexually active people (30%), everybody (24%) and don't know (17%). Responses were similar for different areas, sexes and age groups.

Table 7.1: Nationwide Survey Results on Respondents Knowledge on Who Can Get HIV/AIDS
(Source: Health Department 1990:8)

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexually Active People</td>
<td>30</td>
</tr>
<tr>
<td>Anyone</td>
<td>24</td>
</tr>
<tr>
<td>Don't Know</td>
<td>23</td>
</tr>
<tr>
<td>Tourists</td>
<td>9</td>
</tr>
<tr>
<td>People Who Get Tatoos</td>
<td>6</td>
</tr>
<tr>
<td>Prostitutes</td>
<td>3</td>
</tr>
<tr>
<td>Drug Addicts</td>
<td>2</td>
</tr>
<tr>
<td>From Mothers to Babies</td>
<td>2</td>
</tr>
<tr>
<td>Blood Transfusions</td>
<td>2</td>
</tr>
<tr>
<td>Homosexuals</td>
<td>1</td>
</tr>
</tbody>
</table>

* The total of these figures exceeds 100 percent because respondents gave multiple answers

Most people, who had heard of AIDS, were unsure about how to protect themselves from the disease (49%). The importance of monogamy was recognised by only 28 percent of respondents, and of those who chose this response, the majority (59%) were women. Only 13 percent of teenagers, who had heard of AIDS, chose monogamy as compared with 41 percent of young adults and 33 percent of older adults. Avoiding casual sex was mentioned by 10 percent of the sample. Other protection strategies cited included: seeking treatment or advice from a doctor (10%), avoiding casual contact with those who have AIDS (9%) and by maintaining a healthy lifestyle (3%).

Similar results to those found by this nationwide survey on HIV/AIDS knowledge were found in the Matatutu case study. The number of respondents who had heard about HIV/AIDS increased to almost 97 percent, with the majority of respondents first hearing about the disease from: radio (24%), television (24%) and from overseas (17%) with newspapers (10%), workshops (7%), other family members (7%), school (3%) and workshops (3%) also mentioned.
Figure 7.1 shows that there was limited knowledge of what the terms HIV and AIDS stood for. This table also reveals that only 56 percent knew one or more ways to prevent HIV/AIDS, although knowledge on the way it is transmitted is more extensive (65% of the respondents knew two or more ways HIV is transmitted). Some of the responses to how HIV is transmitted, and HIV/AIDS can be prevented included, "people with AIDS inject food with their blood and the best way to avoid it is to make sure you watch what food is given to you", "The responsibility of protecting the village from AIDS lies with the matai...they should watch the village more closely", and "it's not our problem, the doctors and nurses should be worried, it's their job".

![Bar chart showing knowledge of HIV/AIDS definitions and transmission prevention](image)

**Figure 7.1:** Knowledge of the Definitions of HIV/AIDS and HIV/AIDS Transmission and Prevention

Another focus of the Western Samoan governments health policy is to dispel myths relating to the transmission of HIV/AIDS. Table 7.2 shows that this strategy has not been effective, for example 79 percent of all respondents believed that you can catch HIV/AIDS through insects.
Table 7.2: Knowledge on Activities That Don’t Cause HIV Infection

<table>
<thead>
<tr>
<th>Can you catch AIDS by;</th>
<th>Yes (%)</th>
<th>No (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sharing utensils</td>
<td>55</td>
<td>45</td>
</tr>
<tr>
<td>Through insects</td>
<td>79</td>
<td>21</td>
</tr>
<tr>
<td>Hugging/ kissing</td>
<td>62</td>
<td>38</td>
</tr>
<tr>
<td>Coughing/ sneezing</td>
<td>45</td>
<td>55</td>
</tr>
</tbody>
</table>

7.2.2 Diabetes Knowledge

In relation to information on diabetes, Figures 7.2 and 7.3 show the case study respondents knowledge on the signs and symptoms of diabetes and ways to prevent it. It appears from these figures that there is relatively better knowledge about diabetes in Matatutu than on HIV/AIDS. Nearly half the respondents (41%) knew over three signs or symptoms of diabetes while there was somewhat less knowledge on ways to prevent diabetes. 45 percent of the respondents knew one or less ways to prevent the disease, with only a very small percentage (7%) of the sample knowing four prevention activities.

![Figure 7.2: Knowledge on the Signs and Symptoms of Diabetes](image-url)
Figure 7.3: Knowledge of Ways to Prevent Diabetes

It is difficult however, to use these figures about diabetes knowledge with any degree of confidence due to the small sample used and the lack of any other studies that have been completed in Western Samoa. What it does provide is a specific case study on diabetes knowledge in a village, giving an indication of where the state of knowledge is at concerning diabetes in rural Western Samoa.

From the surveys completed by the Health Department and research undertaken in a rural village it has been shown that health knowledge of diabetes and HIV/AIDS in Western Samoa is limited. From the case study it was shown that, although nearly all the respondents had heard of HIV/AIDS (97%), only ten percent knew over two ways that the disease could be spread, and this dropped to only three percent when questioned on three ways to prevent the spread of HIV/AIDS. In terms of diabetes knowledge, 38 percent of the respondents knew one or less signs or symptoms of the disease and there was also limited knowledge on the ways to prevent diabetes (49% of the respondents knew one or less prevention activities). From these figures it could be reasonably concluded that health information diffused by the Western Samoan Health Department on diabetes and HIV/AIDS is not reaching its intended audience. The rest of this chapter is devoted to posing some possible explanations for this failure, examining the contemporary communication system.
7.3 The Health Education Unit: Barriers and Distortions

As stated in Chapter Six, the main mechanism for health information diffusion in Western Samoa is the Health Education Unit (HEU). The HEU faces a number of difficulties in fulfilling this role, including a lack of resources, recognition, staff, cooperation, clearly defined goals, and the use of inappropriate strategies. All of these difficulties impact on its ability to disseminate health information on diabetes and HIV/AIDS in Western Samoa.

Although the Department of Health has acknowledged that health education services are an important part of its overall health programmes (Health Department 1980 and 1984), these hopeful ideas have yet to fully materialise. The lack of clear objectives and policies for the HEU has hindered the HEUs ability to set up effective health education policies (ibid). Indeed Mala-Toelupe (1991:39) believes that the HEU is still striving to ascertain its role in the Health Department but she states that, "The problem is the lack of national policies on the direction of and on the overall functions of the unit."

The effects of this lack of policy direction has been compounded by the very small percentage, in terms of total Health Department spending, that the HEU receives. Table 7.3 shows the amount spent on the HEU between 1985 and 1990, with the Health Department providing little of its total budget to spending on the HEU.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>CURRENT BUDGET (WS$)</th>
<th>DEVELOPMENT BUDGET (WS$)</th>
<th>HEALTH EDUCATION BUDGET ALLOCATION (WS$)</th>
<th>HEU SPENDING AS PERCENT OF TOTAL HEALTH EXPENDITURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985</td>
<td>5797500</td>
<td>5962205</td>
<td>8550</td>
<td>.14</td>
</tr>
<tr>
<td>1986</td>
<td>6668365</td>
<td>6738260</td>
<td>4040</td>
<td>.06</td>
</tr>
<tr>
<td>1987</td>
<td>7140610</td>
<td>7363235</td>
<td>11090</td>
<td>.15</td>
</tr>
<tr>
<td>1988</td>
<td>7746820</td>
<td>8131080</td>
<td>12950</td>
<td>.16</td>
</tr>
<tr>
<td>1989</td>
<td>8111355</td>
<td>8698385</td>
<td>24060</td>
<td>.03</td>
</tr>
<tr>
<td>1990</td>
<td>9412915</td>
<td>753115</td>
<td>39272</td>
<td>.27</td>
</tr>
</tbody>
</table>
One consequence of this lack of funding has been the slow growth in staff recruitment and training, limiting the HEUs ability to function effectively. Since its establishment there has been an almost continual battle for more staff members, and by 1991 Chief Health Educator Palanitina Mala-Toelupe stated that, despite improvements, there was still a great need for more trained staff and that this shortage has, "resulted in a fragmented programme approach" (1991:40). She also states that one of the main reasons for the HEUs fragmented approach in activity implementation is the staff's limited knowledge of health education concepts and theoretical frameworks, areas of expertise that further training could have addressed.

For Mala-Toelupe (1991:140) the lack of funding, resources and clear objectives for the HEU brings out the idea that

"these services are yet to be perceived by the Health Department of Samoa as of important significance for the improvement of the health care system"

The perception exists therefore, that appropriate professional recognition of the HEU as a credible health service, has yet to be achieved. This has meant a lack of cooperation and coordination between it and other sections of the Health Department on health education and information diffusion. A leading Samoan health professional, Dr Viopapa Annandale, believes that co-operation between sections of the Health Department seldomly occurs as, "there is a tendency for each unit do their own thing in everything from training, management, information etc." (pers. comm. 1995). This lack of cooperation between the HEU and other sections of the Health Department reduces its effectiveness in delivering health information.

The initial focus of the HEU was to promote the use of condoms as a prevention mechanism for HIV/AIDS. However, within the boundaries of Samoan culture, the promotion of condom usage created two main difficulties. The first centered on the perception that condom usage was an invitation to partake widely in sexual intercourse. The second difficulty was that condoms were rejected by the male population of Western Samoa as they were seen to detract from the Samoan masculinity (Ah Ching 1987:99 and Calmar Annandale pers. comm. 1995). The targeting of condoms as a way to prevent HIV/AIDS transmission was therefore inappropriate and reduced the effectiveness of HIV/AIDS education.
The HEU therefore, is hindered in its role as a mechanism for health information dissemination by a lack of clear objectives and the use of inappropriate strategies. This failing is further compounded by a lack of financial resources, the result being limited staff recruitment and training. A combination of these factors results in the HEU being perceived as having limited professional prestige which further hinders its ability to deliver health information.

### 7.3.1 HEU Workshops: Barriers and Distortions

Workshops are a major tool that the HEU utilises in information diffusion. However, one of the main difficulties facing the HEU in trying to disseminate health information through workshops is the lack of attendance of those groups who are targeted. Health Educator Andrew Petereu cited an example of a series of HEU run workshops aimed at younger women's committee members. He said that the series of workshops were held over a period of a year and, although it was specifically aimed at different groups of young women each time, those that attended were mainly older women with the same women attending more than once (pers. comm. 1995).

He said that the workshops were viewed by these women as merely a chance to catch up with old acquaintances rather than as a potentially valuable mechanism for health information diffusion (pers. comm. 1995). He also stated that when asked by the HEU staff why younger members did not attend, the women would respond by saying that it wasn't appropriate for the young women of the committees to attend, as they did not have the experience, rank or status that was required for such national scale interactions (ibid).

### 7.3.2 HEUs Information, Education and Communication Materials (IECs): Barriers and Distortions

The major constraint to the use of IECs as information dissemination materials in Western Samoa is the lack of funding for their design, production and distribution. This has been a continual problem encountered by the HEU since its establishment and in its 1987 report it was stated that

"Although the Health Education Office had prepared a few IEC materials, there hasn't been any mass production done for any of the posters. Financial constraints remain a stumbling block...As much as we
remain a stumbling block...As much as we would like to upkeep the IEC distribution to the rest of the country, it just can't be done. There is never enough resources."

(Mala-Toelupe 1987:3)

Although more IECs have been produced over the last two to three years by the HEU (refer Table 6.9 on 132), there is still limited funding for their production, normally occurring only when outside funding is available (i.e. from WHO or the SPC). However, as Health Educator Andrew Petereu noted, when these supplies are exhausted the HEU does not have the resources to print any more (pers. comm. 1995). When IECs are available for distribution there are two main factors which also limit their ability to act as mechanisms for information diffusion: their distribution focus and the difficulties involved in message encoding.

When the HEU does have IECs, such as posters or pamphlets, to distribute the majority of these are centered at the WSNH in Apia or in District Hospitals (Mala-Toelupe pers comm. 1995). Very few of them are available for DHNs to use in their role as health information disseminators. Of all the IECs that were consulted during the research for this thesis, only the pamphlet concerning hypoglycemia (Appendix Two) was aimed at people who were already diagnosed with diabetes, the rest were preventative in nature. Having IECs that concentrate on disease prevention available only through hospitals would therefore, appear to reduce their ability to increase health knowledge and help in disease prevention.

The second major hindrance encountered by IECs, specifically concerning HIV/AIDS, is that the messages contained within them have to be carefully encoded due to the sensitive (sexual) nature of the information to be diffused and the cultural context that this act of communication occurs in. In Western Samoa there are two distinct types of language whose use depends on the context that communication takes place in. There is the informal, every-day language that, in terms of HIV/AIDS, has a single, specific word that exists for the body organs. The other type of language is more formal and is used in situations such as parliamentary discussion, church services, village meetings and press advertisements. In the informal language it would be acceptable in Samoan society for a male to mention the word penis amongst fellow male company, whom are known very well and in a joking manner. But to mention penis, in its strict translation, in a big gathering or in a village fono, is something that is just not done (Ah-Ching 1987:97 and UNESCO 1980:3).
This problem was addressed in early HIV/AIDS education in Western Samoa by using two or more words to describe the organ, instead of using the term that would be used in the informal language. So to talk of the organ penis in IECs or workshop discussions, words like *totoga sa* were used. *Totoga* means organ and *sa* means forbidden or holy, thus *totoga sa* means the forbidden or holy organ (i.e. the penis) (Ah-Ching 1987:97).

However, using devices such as this still made the communication of HIV/AIDS information difficult, as the subject of the disease being spread by sexual contact could not be directly broached. It had to be correctly worded to be polite and culturally appropriate. This meant that all those people involved in the production of IECs spent a large part of their time on the correct wording and establishing detailed pretesting programmes before IECs were deemed to be suitably worded and available for distribution (Andrew Petereu pers. comm. 1995). This meant that a large number of words had to be used to make sure that IECs were polite and yet conveyed the intended message. The result was a reduction in effectiveness in disseminating messages on HIV/AIDS due to their bombastic nature.

The HEU has tried to address these problems in the last two or three years. They have adopted an informal approach to language in health talks and IECs (Mala-Toelupe pers. comm. 1995). Plate 6.5 (page 136) gives an example of a poster on HIV/AIDS, where the word *feusaiga* (relationship) has been used to infer that AIDS can be transmitted through sexual contact, while avoiding having to use any words that describe the act. This approach also has its difficulties in that there is a fine line between using informal language to better get the message across and yet not offending the audience.

### 7.4 Women's Committees: Barriers and Distortions

The women's committees are another important component of the communication system set up to deliver health information in Western Samoa. However their ability to act in this role has been severely diminished since their introduction. This decline has been caused by a reduction in committee attendance and a reduction in the effectiveness of the DHNs as mechanisms of information diffusion.
A 1981 report on the role of women's committees considered that a number of problems existed. In particular it found that increasing numbers of women did not belong to the committees. Some of the reasons cited were that,

"the women were not allowed by their husbands to join because of political or other feuds with the husbands of members, because husbands thought there was too much socialising and gossiping going on; that women felt they could not adequately live up to the financial commitments involved; or that some people just didn't care about village work..."


Thomas (1986a) found similar results, but argued that other factors were involved in committee non-attendance such as that; some women cannot afford the time involved in participation, some women do not perceive any advantage at all in belonging (since health care services are given equally to all people whether women's committees members or not), and that some members of the public both as individuals and in a collective group tend to view the problem of health as belonging exclusively to the Department of Health and not a problem that is their concern (145).

The declining participation of village women in the committees (it was found that attendance in 1986 was one third of what it was in the mid-1970s) has resulted in reduced opportunities to receive both health care and health information. Thomas (1986a:283) also found that non-attendance was centred on those groups who are constrained from participation due to their position in the village or society, or due to their inability to meet the contributions required. This has meant that non-attending women are normally those of the lowest rank in the village and those who do not have access to a cash income. It is these women who are most in need of health information to enable them to make informed decisions about their health.

The reduction in the women's committees as a mechanism for health information diffusion, due to declining participation, has been further exacerbated by the difficulties encountered and created by DHNs. Compared to other countries in the Pacific, Western Samoa has a very low nurse to population ratio. In 1991 there was one nurse to every 726 people in Western Samoa, compared with one to 490 in Fiji and one to 526 in Tonga (Rotem and Dewdney 1991:196). The majority of these nurses are also centered in curative services in Districts Hospitals or at the WSNH in Apia, with only 18 percent of nurses classified as DHNs in 1991 (ibid). This has meant that those who do work provide primary health care delivery and the diffusion of health information in women's committees have a considerable workload.
As this workload has increased over time Mala-Toelupe (1991:135) found that the time that most nurses spend on providing health education and therefore, information has declined. In 1991 only 27.8 percent of her sample (of 32 DHNs working throughout Western Samoa) claimed to spend any more than ten minutes on providing health education while in the women's committees. The reasons given for this were that they were too busy (16.7%), just did not do it (31.5%) and some claimed they lacked the required knowledge (20.3%) (ibid:134).

Whilst DHNs claimed to be too busy and short staffed to partake in health education, there are other factors beyond their control. For instance, in most rural health institutions, the busiest time of work is the morning when the public come on the first bus from the villages. They are often dependent on receiving health services between when they arrive and when the next bus leaves, which in most cases, is the only bus to return home on. As a result there is a rush to get everyone served as soon as possible as to allow them to catch their transport home. Hence, health education is very rarely given a thought (1991:134-135).

In terms of the DHNs lacking the required knowledge to disseminate health information, the problem arises from a lack of formal training on health education and updated information on the issues of the day (such as diabetes and HIV/AIDS). The majority of formal training that nurses receive in Western Samoa is spent on curative aspects of nursing. Table 7.4 shows that activities relating to health information diffusion, and especially concerning nutritional information, play a very small part in the education of nurses in Western Samoa. These figures also show that in 1990 no educational activities on HIV/AIDS took place.

Table 7.4: Health Information Related Activities in Registered Nurse Training in Western Samoa (1990)
(Source: Western Samoa Nursing Curriculum 1990:13)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Number of Hours</th>
<th>Number of Hours as a Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Health Nursing</td>
<td>150</td>
<td>8.6</td>
</tr>
<tr>
<td>Health Education</td>
<td>30</td>
<td>1.7</td>
</tr>
<tr>
<td>Nutrition</td>
<td>90</td>
<td>5.2</td>
</tr>
<tr>
<td>Communication</td>
<td>60</td>
<td>3.4</td>
</tr>
</tbody>
</table>
Mala-Toelupe (1991:137-138) showed that a minority of the staff interviewed (37%) studied health education during their basic training, and there was also a lack of teaching concerning the construction of IECs (79% received no training). She argues that many health workers have a number of misconceptions about health education, and as a result the health workers tend to isolate health education from their respective health responsibilities (ibid:41). Health education is taught in isolation during the nurses formal training and, therefore not fully integrated into the training programme. There is also a need for a more collaborative approach so that the nursing curriculum components are derived from an intersectoral perspective, allowing nurses to gain a wider appreciation of their roles and the different roles of the Health Department.

Due to the resource constraints of the Health Department and the heavy workload placed on DHNs there is very little opportunity to reach the nurses with training programmes and new information. Mala-Toelupe (1991:133) found that 67 percent of the total staff said they were professionally handicapped from lack of update training.

"It is clear that the majority of the staff are starving for knowledge. 88.4% asserted the need for continuing education, 95.4% wanted health education to be adequately addressed in the continuing education programmes and 86% wanted the same to be done for diabetes mellitus."

Along with this lack of training for health workers Mala-Toelupe also found there is very little sharing of information between health professionals. Due to the difficulties outlined above concerning update training of DHNs it is not possible to train, in a short space of time, all the staff to an adequate level. The key therefore, is for professional sharing of information from those who have attended course to those that haven't. However, she found that 74.4% of the staff she interviewed claimed that there is no or little professional sharing of information amongst the staff (1991:133).

Another factor involved in the decline in DHNs being effective mechanisms for health information diffusion is their actions and attitude. Mala-Toelupe (1991:64) argues that Western Samoans generally perceive health professionals as role models and authorities in health matters. Conflict arises when health professionals do the opposite of what they preach, for example indulging in smoking, becoming obese or consuming excess alcohol. She claims these are not isolated factors for the Samoan health professionals.
Both Thomas (1986a:283) and Viopapa Annandale (pers. comm. 1995) argue that one of the reasons for the decline in the effectiveness of health information diffused by the attitudes of the DHNs towards the rural women. They claimed that many of the DHN are "high minded" and do not see their roles as one of servitude to the people. They describe this as "matai syndrome" and say that many village women are not responsive to the health care and health information delivered by the DHN because of their attitudes.

Women's committees, as outlined in this section, have become less effective mechanisms for the transmission of health information. Two main reasons were identified for this: First, attendance at women's committees is diminishing for a variety of reasons and second, the DHNs, who visit the women's committees in order to facilitate the transfer of health information, are becoming less effective in this role.

7.5 Media: Barriers and Distortions

Thomas (1986b:76) states that using the media effectively for health education is not easy. The use of media for disseminating health information in Western Samoa faces a number of difficulties which this section will discuss.

An overriding barrier to the effective communication of information to using media channels, specifically on HIV/AIDS information, can be identified. This limitation centres on the inappropriateness in Samoan culture in discussing any matters of a sexual nature where both males and females are present. Nearly half the case study (48%) respondents acknowledged that the greatest barrier to the communication of HIV/AIDS information in Western Samoa is the way that sex cannot be discussed in mixed gender groups. The most poignant example of this is in the family context. It is taboo in Samoan society to discuss sexual matters when both brothers and sisters are present. This means in practice the media loses its effectiveness in diffusing HIV/AIDS information because as a mass medium it cannot distinguish its audience and risks being culturally inappropriate. As a Matatutu respondent stated she had to censor what programmes her children listened to as "what they say is against Samoan culture...we just can't talk about our private parts".
The second major difficulty that faces media channels in diffusing health information in Western Samoa is the lack of available resources. Although the government operates radio and television stations and a newspaper company, the Health Department still has to pay full commercial rates to use these devices. For example, the HEU was charged nearly WS$600 (NZ$390) for two pages of health messages concerning the 1991 World AIDS Day by the government owned "Savali". As the majority of advertising for health is paid for by outside sources (i.e WHO), the Western Samoan government is able to use these health related funds in other areas. With the limited Health Department budget, this ensures that the media as a mechanism for health information dissemination in Western Samoa is not as effective as it can be.

A specific problem faced, when using radio as a mechanism for health information diffusion, involves the HEU staff's lack of knowledge on Samoan cultural norms relating to communication. To effectively communicate in Samoa, especially to those in rural areas, familiarity and confidence with these conventions is needed, and is not merely acquired simply by growing up as as a Samoan. The etiquette of communication is acquired slowly through observation in adulthood (Thomas 1986a:178). This presents a problem for the young HEU workers whose training takes many years, often spent in town's or overseas, when this etiquette is being learned by young Samoan adults. An example is one of the HEU staff members, who is used for the majority of radio work, attending University's in both New Zealand and Australia during these formative years. Certain HEU staff are therefore, disadvantaged because they lack familiarity with traditional conventions and language skills which are important in the effective communication of health information in Western Samoa.

In terms of using newspapers to disseminate health information, there is one major difficulty — distribution. Although in theory the government run "Savali" is supposed to be distributed through the Pulenu'u (village mayor) to every Samoan household, this seldom occurs. Indeed, only seven percent of Matatutu residents stated that they read the "Savali" (refer Figure 6.6, page 151).

Using the media for health information diffusion, is therefore, not without difficulties. Lack of resources and cultural etiquette form the basis for most of these problems.
7.6 NGOs: Barriers and Distortions

NGOs have the ability to play an important role in the diffusion of health information in Western Samoa. They are community based and have access to funds and resources from outside sources. However, the use of NGOs for the dissemination of health information in Western Samoa is fraught with problems.

Although numerous policy documents allude to the importance of NGOs in both diabetes and HIV/AIDS information diffusion in Western Samoa (i.e. WHO 1993d:2 and WHO 1994b:12), there is a marked difference between theory and practice. WHO (1993d:3) admitted that during the early phases of its HIV/AIDS work in Western Samoa, a problem existed in the use of NGOs,

"During the STP (Short Term Plan 1987-1990) period the Department of Health hardly utilized NGOs in the implementation of the NAP (National AIDS Programme)."

This view was reinforced through discussions with Calmar Annandale, Executive Director of the Western Samoa Family Health Association, when she stated that very little cooperation exists between NGOs and the Health Department.

Although Thomas (1986a) states that religious groups are one of the best placed NGOs for health education, a number of major difficulties exist. In the nationwide survey on HIV/AIDS knowledge only 58% of respondents chose church groups as an avenue for AIDS education. Further analysis showed that this was significantly related to age group. Of the teenage respondents, only four percent wanted to learn about AIDS at church, while this increases with age (56% of young adults and 75% of older adults chose the church as the most appropriate channel for HIV/AIDS information). Given that a large proportion of teenagers and young adults said that they did not want to learn about AIDS in church this mechanism's potential for health information diffusion is reduced.

Another potential barrier restricting the effectiveness of NGOs in the diffusion of health information is the differences in motivations and goals between these groups and the Health Department. An underlying agenda of many NGO organised workshops, a large proportion of which are funded by the WHO, is that they allow members from throughout Western Samoa to get together. The ulterior motives that drive many of these workshops reduces the effectiveness of the messages being diffused in them.

While NGOs represent a potentially powerful source from which health information could be diffused, this section has illustrated their limitations.
7.7 Other Mechanisms: Barriers and Distortions

This section outlines the remaining mechanisms that are used to disseminate health information within the Western Samoan context. The barriers and distortions which reduce the effectiveness of these mechanisms will also be explored.

7.7.1 Schools: Barriers and Distortions

Schools in Western Samoa present a potentially important forum where health information can be diffused. Indeed, the inclusion of information regarding HIV/AIDS in the school curriculum, is supported by eighty-five percent of those interviewed for the nationwide HIV/AIDS survey. Intermediate level children were selected as the most acceptable age to start teaching HIV/AIDS information (46% of the sample supported teaching before or at this age) or junior high (72% of the sample supported this) (AIDS Knowledge Survey:3).

However, young people expressed a preference not to learn about AIDS in small groups with males and females present. This means that the normal classroom setting may not be the best place to teach the children. Schools would have to arrange special segregated classes where children can feel more comfortable learning and asking questions. Such arrangements would create a drain on limited teaching resources.

Further, Table 7.5 shows that attendance at Western Samoan schools dramatically drops off over the age of fifteen. This means that the most at risk group of young teens are actually not present, hence reducing the effectiveness of schools as agents of information diffusion.

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>% children enrolled</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-9</td>
<td>98.7</td>
</tr>
<tr>
<td>10-14</td>
<td>91.4</td>
</tr>
<tr>
<td>15-19</td>
<td>40.0</td>
</tr>
</tbody>
</table>

Table 7.5: School Attendance By Age Group (1993)  
(Source: National Food and Nutrition Council 1992:12)
Another difficulty in using schools as a mechanism for information diffusion on HIV/AIDS is the difficulties encountered in the adoption of a national HIV/AIDS school curriculum. There has been considerable, and at times heated, parliamentary debate concerning teaching school aged children about the disease. This has seen the implementation of the curriculum being delayed. This means that only visits from the HEU provide information on HIV/AIDS in Western Samoan schools.

7.8 Audience/Receivers: Barriers and Distortions

There are a number of issues which need to be addressed concerning the problem of why health information on HIV/AIDS is not being received or understood in Western Samoa.

7.8.1 Health Workers' Perception

A potential barrier in the communication of health information is differing perceptions of the most appropriate channels for this diffusion, between health professionals and audience members. Chief Health Educator, Palanitina Mala-Toelupe stated that traditional learning methods like role playing (fagogo), story telling and informal discussions (faaliga-o-manatu) are the most appropriate method for diffusing health information. However, results from the nationwide HIV/AIDS survey showed that the most popular channels for health communication were: radio (74%) and IECs (80%). Figure 7.4 shows that, for respondents in the case study, village workshops ((45%), the church (45%) and television (41%) were by far the most popular channels to receive HIV/AIDS information. By using more traditional methods, when the Western Samoan public perceive modern methods (i.e television and radio) as being more effective, then the HEU is not utilising the most effective mechanisms for health information diffusion in Western Samoa.
Figure 7.4: Case Study Results: The Preferred Channels for Information

7.8.2 Gender Issues

One particular area for concern in the diffusion of health information in Western Samoa is the lack of information that is targeted at, and received by men. Since the colonial health system set up the women's committees as the main mechanism for the delivery of health services and information, men have in some ways been excluded from the health system. This is particularly true when dealing with its preventive aspects.

Unfortunately the nationwide survey on HIV/AIDS did not break down the respondents knowledge by sex, but from the case study figures a difference between female and male knowledge on HIV/AIDS and diabetes becomes apparent. Results show that: women have greater knowledge in the methods of HIV transmission (70% of women knew over two methods compared to 61% of men), ways to prevent the spread of HIV/AIDS (57% of women knew at least two ways to prevention methods compared to only 33% of men) and on the signs and symptoms of diabetes (64% of women knew at least two signs while 52% of men did). In terms of preventing diabetes there was greater knowledge by males than by females (60% of men knew at least three ways of preventing diabetes compared to 50% of women).
A large number of the mechanisms set up to deliver health information are targeted specifically at women (i.e. women's committees, workshops involving women's groups), or are used mainly by women (such as the visits by the WSFHA) who Wolman (1995:21) observed were attended on the whole by women. Therefore, it is not surprising that, although there is only slight differences, the female residents of Matatutu have greater knowledge on HIV/AIDS and diabetes than do their male counterparts. As with the movement in the 1970s and 1980s which tried to place women "back into" the development process (refer Sen 1985, Maguire 1984 and Østergaard 1992), the difficulties involved in including men in the process of health information diffusion needs to be addressed.

### 7.8.3 HIV/AIDS Policy Focus

A potential barrier to the communication of information on HIV/AIDS, is the way the Health Department has targeted certain urban groups. These groups include those engaging in high risk sexual behaviour, people working in the tourist industry and sports groups travelling overseas. This focus may lead to a misperception amongst rural villagers that HIV/AIDS is only a problem for these specific groups. Non-targeted groups may perceive HIV/AIDS information as irrelevant to their circumstances, and therefore, may be apathetic towards its communication.

### 7.9 Cultural Context

As stated in Chapter Two, the context in which an act of communication occurs is one of the most important elements involved in the process. There are a number of contextual factors which shape the delivery and effectiveness of the contemporary health communication system in Western Samoa. These include the status attached to food in Samoan culture, the attitude of the church towards HIV/AIDS and the actions and perceptions of health workers, politicians and other opinion leaders in Western Samoa towards HIV/AIDS.
7.9.1 Social Status and Food in Western Samoa

Cultural attitudes towards the social status of food in Western Samoa shapes the way information on diet, as a means to reduce NCDs and diabetes, is received. The consumption of store-bought food is prestigious in the Samoan culture which attaches greater prestige to consumption than production (Schoeffel 1984:212). Samoan culture is very much founded on the concepts of reciprocity and redistribution, which are used to enhance social interactions and relationships. An important element in this is customs associated with food consumption and distribution. The availability of large quantities of quality food in any public occasion is a way to symbolise a family's resourcefulness and creates prestige and honour for both the extended family and the individual family members (Mala-Toelupe 1991:96). Consequently the diffusion of information on diet, as an aspect of NCD prevention and reduction, has to overcome entrenched social values and the established social milieu.

7.9.2 HIV/AIDS and Western Samoa

The most important social institution that exists in Western Samoa is the church. Its influence and power pervades every aspect of Samoan life and culture. Because of these facts, the church plays a significant part in the establishment of moral and social responses to HIV/AIDS. In this regard, it performs an important role in shaping the context that HIV/AIDS information diffusion occurs.

Internationally there has been considerable theological and moral debate on HIV/AIDS (Crimp and Rolston 1990:23). This debate has centered on a number of aspects of the disease; the sexual nature of its transmission, the high rates of homosexuals infected and the promotion of condoms as a method of prevention. The questions raised by these debates have impacted on the communication of HIV/AIDS information throughout the world, including Western Samoa.

In a Samoan context the conservative stance adopted by the church has complicated the diffusion of HIV/AIDS information. Their stance has restricted and opposed certain types of messages and channels available for HIV/AIDS information, particularly over issues such as condom use as a method of prevention, or the use of the media to disseminate health information on the sexual nature of the disease to all age groups and sexes.
Reverend Lotu Uele from the Congregational Christian Church of Samoa stated that many people inside the church believed that HIV/AIDS was "divine punishment" and that AIDS equals Sin.

The church's position has been articulated by various groups in Samoan society who wield considerable political and social influence. The actions and statements of these groups, as portrayed in the media, sets the context in which HIV/AIDS information diffusion takes place. The government owned "Savali", for example, ran a front page story on a HIV positive person who was holidaying in Western Samoa (refer Appendix Seven). Once it was ascertained that the person was HIV positive, extensive consultations between the Health Department, Police, Customs and the Prime Minister resulted in the individual being advised to leave the country. In another incident a Samoan politician gave a speech in Parliament advocating that people with AIDS returning to Samoa should be kept in isolation (Samoa Observer March 15, 1995). Opinion columns of the local papers frequently respond to educational advertisements on HIV/AIDS prevention by bemoaning the breakdown of individual morality and church values,

"If the government were to teach children traffic safety in the same way that AIDS prevention is being approached, they would teach our children the art of dodging vehicles rather than teaching them to stay off the road in the first place"

(ibid: February 26, 1995).

These examples of the Samoan media highlight ignorance of the disease and fear of those who are afflicted by it. These views shape and direct other segments of the population who look to the opinion leaders and the church for guidance and direction in their actions and beliefs. As information and knowledge on HIV/AIDS has only recently been introduced into Western Samoa, there are still significant sections of the population who are ignorant of its causes and methods of transmission. Messages in the media such as those contained above and the actions of the church have undermined the educational efforts of the Department of Health in terms of HIV/AIDS information diffusion.
7.10 Conclusion

Nation wide survey and case study results found the communication of health information on HIV/AIDS and diabetes was not effective in informing its audience. Reasons for this were established within the mechanisms of health information diffusion, the audience and cultural context in which the communication was occurring. Barriers to information diffusion were identified within HEU, women's committees, the media and NGOs as the mechanisms of health information communication in Western Samoa. Within health workers perceptions, gender roles and the policy process barriers were also found which resulted in audiences receiving distorted messages. Finally the cultural context within which the communication process was occurring was identified as another barrier; specifically, the cultural importance of food and attitudes towards HIV/AIDS. The implications of these identified barriers and distortions is the subject of further discussion in the following chapter.
Chapter Eight: Conclusions and Implications

Se'i fono le pa'a ma ona vae (Let the crab take counsel with its legs)

Samoan Proverb
8.1 Introduction

This chapter will be divided into two sections, each of which provides conclusions for the two research questions. The first section considers how the communication of health information in Western Samoa has changed over time, and in the second section the changes in the barriers to the communication process are discussed. A final section explores the implications of the research results.

8.2 Changing Patterns of Health Communication in Western Samoa

The patterns of health communication within the three time periods monitored (pre-contact, colonial and contemporary) will each be reviewed in this section. The changing patterns will be expounded and conclusions drawn.

8.2.1 The Communication of Health Information in Pre-Contact Samoa

The diffusion of health information in pre-contact Samoa was determined by the existing medical paradigm. In its holistic approach, health could not be separated from an individuals relationship with the wider world — be it physical, spiritual or social.

In this view health as a state of well-being (as seen in a traditional Western medical sense), was obtained through maintaining social and spiritual equilibrium. The spirit world played an important part in this process, and illness was seen as punishment by spirits (ai itu) for not adhering to cultural norms. The risk of illness therefore, deterred aberrant behaviour and maintained the prevalent social order.

Health information consisted of the transmission of cultural norms based on spiritual beliefs. Although the availability of this supernatural paradigm meant that the development of a secular, biological paradigm was limited, fofō (traditional healers) used medicines and plants for the treatment of illness and disease. They diffused this health information in a healer-to-patient relationship, and also on a wider spatial scale with malaga (ceremonial journeys). In addition, taualaitau (priests) were perceived to have close links with the spirit world. As these links maintained their social power, they diffused little of their knowledge.
In pre-contact Samoan medical belief, the diffusion of health care and information was characterised by a number of features. These included the close proximity between the senders and receivers of health care and health treatment. Health was viewed as a holistic concept that viewed illness as an affair of the entire social group. The major element of pre-contact health information communication patterns was therefore, community participation.

8.2.2 The Communication of Health Information in Colonial Western Samoa

Significant European contact in Western Samoa introduced a medical system which was based on a completely different understanding of the causation of disease and sickness. It offered Samoans alternative ways of explaining illness and new techniques for its management.

The Western medical belief stressed that health was an affair of the individual. If disease and sickness did occur they were caused by physical factors, that could be treated and cured by trained and skilled health professionals. In this belief, health professionals were seen to possess knowledge on the causes, symptoms and treatments of sickness; knowledge that the general population did not have. Western medical belief therefore, moved the responsibility for treating and managing sickness and the possession of health knowledge, from the individual (and the wider social group which they were part of), to an external source such as a doctor or nurse.

Coupled with the introduction of Western medical belief was the creation of an institutionalised health system. For the Western medical paradigm, the setting up of dispensaries, local health clinics and hospitals, allowed medical personnel to "deliver" health care to the population. Health therefore, became a commodity that health workers dispensed to the general public (who were labelled "patients"). One of the underlying assumptions in the provision of organised health services therefore, was that most individuals are unable to satisfy their own health needs. With the changing definitions of health, and the introduction of a professional and institutionalised health system, health was taken away as a personal commodity and its responsibility transferred from individuals and communities to the state.
The main mechanism for health information delivery during the New Zealand colonial period were the Western Samoan women's committees. The committees contained elements of the Western medical paradigm. They were built with the aim of dispensing health care through formal institutions. This created a separation between the providers and receivers of health care and health information. This separation was however, limited due to the women's committees containing a number of elements that are now articulated as notions of primary health care. Although they were introduced by an external source, they were based on the local scale (through village based groups), included community participation, and were based on equality of access. They also used existing cultural groups, norms and customs in relation to introducing health care systems and delivering health care and information. These characteristics aimed to encourage the local community to take responsibility to improve their own health.

Between the establishment of Women's Committees in 1923 and Independence in 1962, a number of significant changes occurred. These reforms can be attributed to the changing political and social climate of Western Samoa. The gradual transfer of political control from European to Samoan hands impacted on Women's Committees. From 1947 onwards, control of the health department passed into Samoan hands. This meant that the structure of women's committees was fundamentally altered to conform to fa'aSamoan.

Women's committees were initially effective as a mechanism for the diffusion of health information for a number of reasons:

i) the high rank and status of those that administered the women's committees;
ii) they provided new opportunities for attainment of status for women;
iii) the nature of their roles were specifically health related;
iv) they used new and novel information diffusion mechanisms.

Because of the political and social changes that occurred in the Western Samoan health system, the effectiveness of the women's committees in diffusing health information was reduced. The women's committees became ritualised and more time and resources were attributed towards Samoan custom and etiquette. For example, they adopted the seating arrangement of the male fono, resulting in the untitled women being furtherest away from the speaker. Further, the leadership changed to conform to the prescriptions of fa'asamoa, resulting in the leading matais wife becoming president.
The changes in health information diffusion that occurred within the colonial period were influenced heavily by the changing political and social context. Although the source, channels and receivers remained constant, the context within which these interactions occurred differed considerably. This is illustrated by the women's committees which were adapted from a European initiated mechanism to one that conformed to Samoan etiquette and custom.

8.2.3 The Communication of Health Information in Contemporary Western Samoa

Since Independence, there has been a significant change in mortality and morbidity rates in Western Samoa. This process has been labelled the epidemiological transition and is, in part, caused by the modernisation process that is occurring in Western Samoa. The contemporary communication system differs from prior systems due to the increased number of communication channels available for its dissemination.

As a consequence of this transition from communicable to non-communicable diseases as the leading causes of mortality and mobility, Zimet et al (1978) recommended the establishment of a specific mechanism within the Health Department for implementing and co-ordinating information diffusion. The HEU was introduced in 1980 to act as the principle mechanism for health information diffusion in Western Samoa. Although the women's committees were still used as a channel for health information, there has been a proliferation of health communication channels. Health education not only works through women's committees but also for example, through workshops, the use of IECs, the media and NGOs. These health education channels have also been utilised for the dissemination of information on HIV/AIDS and diabetes.

It was found, through a specific village case study, that although a number of HIV/AIDS and diabetes channels used for health information diffusion were available, others were not or were poorly utilised. From an analysis of this case study, and through a nationwide HIV/AIDS survey, it has been ascertained that the communication of HIV/AIDS and diabetes information in Western Samoa is ineffective in increasing the audience's health knowledge.
8.3 Barriers to Health Information Communication in Western Samoa

The previous section concluded that the current system of the communication of health information is ineffective in increasing the health knowledge of Western Samoans. This leads to an examination of the barriers and distortions within the health information system; the second research question. This section illustrates that the major barrier to the communication of health information in Western Samoa is increasing dislocation and separation between the senders and receivers of health information. This is shown by the following points.

The underlying assumption of Western medical belief is that health is a commodity that can be dispensed. Under this paradigm, health becomes separated from the individual and is obtained through external professional sources such as doctors and hospitals. This medical paradigm has been adopted over time, in Western Samoa.

The first established system of health care and information delivery in Western Samoa was through the women's committees. These contained elements of the modern notion of primary health care through, for example: community involvement, responsibility and equality of access. However, as the Western medical paradigm has become increasingly entrenched in Western Samoan health care, these principles that founded women's committees have been steadily eroded. Over a period of time this has resulted in increasing separation and dislocation of the sender and receiver of health information. For example, curative first aid and nursing work was removed from the administration of the women's committees. This was because professionals were deemed the only appropriate practitioners of any health service under the newly adopted Western medical paradigm. The removal of any health function from women's committees meant the community did not participate in health delivery. It was something to be dispensed by paid government professionals.

Furthermore, the professionalisation of intermediate public health roles also removed a sense of responsibility and incentive from the non-professionals who performed these roles. An example is the introduction of professional (male) sanitation officers who replaced the women's committees in performing village sanitation inspections. This gave rise to the notion that village sanitation was now a government responsibility.
The state orientation of health services has also affected the administration of rural hospitals and health centres. Since the 1930s, these have been maintained by the cooperative efforts of groups of district women's committees. However, as public health is increasingly seen as an externally located and professional task, voluntary community services have declined.

Another example of the dislocation of senders and receivers of health information can be found by examining the changing nature of DHNs. In the pre-1940 Western Samoan health care system, there was little spatial and cultural distance between the DHNs, the main mechanisms for health care delivery and health information diffusion, and the communities they served. They were perceived by women's committees as being part of their community, especially considering that many of them lived in the villages they worked in. They also had an excellent command of the elaborate and complex system of rules and conventions which governed communication between individuals and groups in Samoa. Many of the first DHNs also had considerable social status, being mainly daughters of high-ranking matai and pastors. They were therefore linked very close, both spatially and culturally to the groups that they served. The social dislocation that they faced by being of high rank, was actually of benefit in delivering health care and diffusing health information, by legitimising their authority.

As has already been shown in relation to the early success of the women's committees, the prestige, status and cultural proximity of the DHN appeared to be very important factors in the dissemination of health information in Western Samoa. The introduction of more complex medical procedures and the requirements for more efficient record keeping in the District Health Nursing (DHN) section required nursing staff with more advanced professional training. The supervisory positions once held by older nurses with extensive practical field experiences, but only limited professional training, began to be held by younger, more professionally trained nurses with limited field experience (Schoeffel 1984:214).

The older health nurses had status and prestige and also an excellent command of the elaborate and complex system of rules and conventions which governed communication between individuals and groups in Samoa society. The young professional health workers are disadvantaged because they lack these essential skills necessary to effectively deliver health information in a Western Samoan context (Schoeffel 1986:21).
The young professional health workers have also become increasingly dislocated from the communities they serve. They now receive significant overseas training that increases the cultural, social and professional distance between them, as senders, and the Samoan population, as receivers of health care and health information. When the nurses receive overseas medical training it concentrates mainly on the curative aspects of health care, focusing little on preventive health practices and measures. The medical training they receive is also based on different cultural assumptions, methods and values than are present in Western Samoa. They therefore return, often armed with health knowledge and methods of health care delivery that are, in many cases, alien to the culture and situation that they work in.

These examples have illustrated the increasing dislocation and separation between the sender and receivers of health care information in Western Samoa. This process is a result of the emergence of a new Western medical paradigm based on professional dispensing health care.

8.4 Implications of Separation

The potential for devastation from HIV/AIDS and NCDs (such as diabetes) is enormous. The nature of these ailments means that the diffusion of health information are the only ways to prevent the introduction of and reduce the spread of these diseases. Due to the resource constraints of the Western Samoan government, curative treatment on a large scale is not possible. The only economically, socially and morally viable option is the diffusion of health information.

Although Western Samoa officially espouses its commitment to the notion and ideals of primary health, in reality few of these principles are operationalised. If Western Samoa wants to achieve an improvement in health status, and therefore, one element of the development process, it must heed the ancient Samoan proverb:

Sei fono le pa'a ma ona vae
Let the crab take counsel with its legs
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Appendices
Appendix One: Questionnaire

(A) BACKGROUND

(1) What is your age?

<table>
<thead>
<tr>
<th></th>
<th>0-15</th>
<th>16-30</th>
<th>31-50</th>
<th>51+</th>
</tr>
</thead>
</table>

(2) Sex

☐ Male  ☐ Female

(3) Do you have any children?

☐ No  ☐ Yes  If "Yes", how many? __________

(4) Do you have a partner or are you single?

Married _______  Single _______  Widow/er _______

(5) How long did you spend at school?

<table>
<thead>
<tr>
<th></th>
<th>0-5</th>
<th>6-8</th>
<th>9-11</th>
<th>12-14</th>
<th>15+</th>
</tr>
</thead>
</table>

(6) What is your status in the village? ______________________________________________________

(7) What religion are you? _________________________________________________________________

(8) Do you have a regular income?

☐ No  ☐ Yes  If "Yes", from what? __________

(B) RADIO

(1) Do you have a radio in your household?

☐ No  ☐ Yes

(2) Is it working?

☐ No  ☐ Yes

(3) How often do you listen to it?

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Seldom</th>
<th>Once a week</th>
<th>Twice a week</th>
<th>Daily</th>
</tr>
</thead>
</table>
(4) What times of the day do you normally listen carefully?

<table>
<thead>
<tr>
<th>early a.m</th>
<th>morning</th>
<th>afternoon</th>
<th>early p.m</th>
<th>evening</th>
</tr>
</thead>
</table>

(5) What radio stations do you normally listen too?

(6) Which three radio programmes do you like the best?

1. 
2. 
3. 

(C) **TELEVISION**

(1) Do you have a television?

☐ No  ☐ Yes

(2) How many television sets are there in your village? 

(3) Whose houses have television sets? 

(4) How often do you watch television?

<table>
<thead>
<tr>
<th>Never</th>
<th>Seldom</th>
<th>Once a week</th>
<th>Twice a week</th>
<th>Daily</th>
</tr>
</thead>
</table>

(D) **NEWSPAPERS**

(1) How often do you read a newspaper?

<table>
<thead>
<tr>
<th>Never</th>
<th>Seldom</th>
<th>Once a week</th>
<th>Twice a week</th>
<th>Daily</th>
</tr>
</thead>
</table>

(2) Which papers do you read?

(3) Where do you get these newspapers from?
If Female Answer: (E) FEMALE QUESTIONS
If Male Answer (F) MALE QUESTIONS
If Child (G) CHILDREN QUESTIONS

(E) FEMALE QUESTIONS

(1) Do you belong to the women's committee?

☐ No  ☐ Yes

(2) If "Yes", how often do you go?

<table>
<thead>
<tr>
<th>Never</th>
<th>Seldom</th>
<th>Once a week</th>
<th>Twice a week</th>
<th>Daily</th>
</tr>
</thead>
</table>

(3) If "No" ("or seldom") what are your reasons for not going?

________________________________________________________________________

(4) Have you ever learnt, at the women's committee, about HIV/AIDS?

☐ No  ☐ Yes

(5) If "Yes", (a) when;
    (b) how was it presented?
        and; (c) by whom?

________________________________________________________________________

(6) Have you ever learnt, at the women's committee, about Diabetes?

☐ No  ☐ Yes

(7) If "Yes", (a) when;
    (b) how was it presented?
        and; (c) by whom?

________________________________________________________________________

(8) If you do not go to the women's committee, do you have any contact with the District Nurse?

☐ No  ☐ Yes

If "Yes", what contact?
(F) MALE QUESTIONS

(1) Do you belong to any male clubs or organisations within the village?
   □ No          □ Yes

(2) If "Yes", which ones?

______________________________________________________________________

(3) Have you ever heard or learnt about HIV/AIDS at any of these groups?
   □ No          □ Yes

(4) If "Yes", (a) when?,
   (b) how was it presented?;
   and; (c) by whom?

______________________________________________________________________

(5) Have you ever heard or learnt about Diabetes at any of these groups?
   □ No          □ Yes

(6) If "Yes", (a) when;
   (b) how was it presented?;
   and; (c) by whom?

______________________________________________________________________

(7) Do you have any contact with the District Nurse?
   □ No          □ Yes

(8) If "Yes", what contact?

______________________________________________________________________
(G) CHILDRENS QUESTIONS

(1) Have you ever heard about HIV/AIDS at school?
   [ ] No  [ ] Yes

(2) If "Yes", who taught you this and how did they do it?
   ____________________________________________
   ____________________________________________

(3) Have you ever heard or learnt about Diabetes at school?
   [ ] No  [ ] Yes

(4) If "yes", who taught you this and how did they do it?
   ____________________________________________
   ____________________________________________

(5) Do you belong to a Youth Group, boys or girls brigade or similar type of organisation?
   [ ] No  [ ] Yes

(6) Have you ever learnt about HIV/AIDS at any of these groups?
   [ ] No  [ ] Yes

(7) If "Yes", who taught you this and how did they do it?
   ____________________________________________
   ____________________________________________

(H) KNOWLEDGE

(1) Have you heard of HIV/AIDS?
   [ ] No  [ ] Yes

(2) Where did you hear or learn about HIV/AIDS?
   ____________________________________________

(3) What does the term HIV stand for?
   ____________________________________________

(4) What does the term AIDS stand for?
   ____________________________________________
(5) Can you name three ways HIV is transmitted?
   (a) __________________________________________
   (b) __________________________________________
   (c) __________________________________________

(6) Can you name three ways to stop the spread of HIV/AIDS?
   (1) __________________________________________
   (2) __________________________________________
   (3) __________________________________________

(7) Can you catch HIV/AIDS by;
   Sharing eating or drinking utensils with an infected person? □ No □ Yes
   Through Insects? □ No □ Yes
   Hugging or Kissing an Infected Person? □ No □ Yes
   Coughing or Sneezing? □ No □ Yes

(8) Can you name five noticeable signs or symptoms of diabetes?
   (1) __________________________________________
   (2) __________________________________________
   (3) __________________________________________
   (4) __________________________________________
   (5) __________________________________________

(9) Can you name four ways to prevent diabetes?
   (1) __________________________________________
   (2) __________________________________________
   (3) __________________________________________
   (4) __________________________________________

(1) GENERAL

(1) Do you think you know enough about HIV/AIDS?
   □ No □ Yes

(2) If "No", what do you think is the best way to get this information to you?
   __________________________________________

(3) Do you think you know enough about Diabetes?
   □ No □ Yes
(4) If "No", what do you think is the best way to get this information to you?


(5) How would you rate the District Nurse as a source of information giving?

<table>
<thead>
<tr>
<th>Poor</th>
<th>Fair</th>
<th>Average</th>
<th>Good</th>
<th>Excellent</th>
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</table>

(6) Can you see anyway to improve the flow of health information into your village?


(7) How would you rate the following in terms of their effectiveness in raising health awareness and teaching you about health information?

<table>
<thead>
<tr>
<th>Method</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<td>Radio</td>
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<td>Television</td>
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<td>Newspapers</td>
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<td>Posters</td>
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<td>Songs</td>
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<td>Role-playing and Plays</td>
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<tr>
<td>Sports Events</td>
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</tr>
</tbody>
</table>

(8) What do you see as the main difficulties in getting information about HIV/AIDS out to Samoans?


Thank you very much for you time
Important AIDS facts that all sexually active adults need to know.

AIDS is a sexually transmitted fatal disease.

The HIV virus which causes AIDS, is found in the blood, semen and vaginal mucus of an infected person. These fluids can transmit HIV infection when they are shared during sexual activity.

Your chances of getting any sexually transmitted disease increase when you have unprotected sex with multiple partners.

Persons most likely to get AIDS:

Men who:
- have sex with other men
- buy or sell sex
- use IV drugs & share needles
- have many sex partners

Women who:
- have sex with any of the above men
- use IV drugs & share needles


FACTS

1. You don't get AIDS from casual contact.
2. You don't get AIDS from sharing a drink.
3. You don't get AIDS from mosquitoes.
4. You don't get AIDS from a toilet seat.
5. You don't get AIDS from being in the same village or working with a person with AIDS.
6. You can get AIDS if you have sex with an infected person.
7. You can get AIDS if you share IV needles with an infected person.
8. You can be infected and not know it.

It's not who you are but how you behave that determines your risk of getting AIDS.

Protect yourself by not having sex.

Protect yourself by choosing a partner for life.

If you choose to have many sex partners, then choose to protect yourself by using a condom.
CURRENT INFORMATION

No "AIDS" cases have been detected in Western Samoa so far.

The virus "HIV" that causes "AIDS" is yet to be detected in Samoa through blood testing.

Blood testing done so far are mainly on screening of blood for transfusion.

TRANSMISSION OF THE "AIDS" VIRUS, "HIV"

The main ways of transmitting the virus are by:

1. Sexual Contact

2. Using infected blood for transfusion.

3. Shared-use of contaminated needles especially by drug abusers.

4. From mother to her baby during pregnancy, at delivery, or thereafter.

I.V. Drug abusers have not been officially detected in Western Samoa.

Therefore the main ways of transmitting the "AIDS" virus, HIV, in Samoa, would be by Sexual intercourse and by injecting contaminated needles.

Since no virus has been detected yet in Western Samoa, the only way of getting the Virus into the country is for an infected overseas visitor to have sexual contact with a local person.

OR

A local person who went overseas, got infected with the virus and brought it back home.

Please be a responsible person, help stop the spread of "AIDS" into Western Samoa. You can also help by just "Talking about "AIDS" " with our people.

Condoms can help. Use it properly when required.

Available at:
- Hospitals
- Pharmacy Stores in Apia.
- Family Health Association Clinic in Apia.
- Red Cross Office in Apia.

HAVE A NICE STAY
OUR BEAUTIFUL ISLANDS
Appendix Three: Health Information
Diffused Through Cartoons: "Taro Patch"

TOMA AND SIMI ARE BROTHERS. ONE DAY THEY HARVESTED THEIR CROPS FOR THE NEXT DAY SALES IN THE MARKET.

NEXT DAY

MARKET

SOON AFTER

YOU SIS.... YOU NEED TARO?

IT'S UP TO YOU-- IF YOU OFFER FREE-- I LIVE IN THE PUB.

STORY & ART WORK BY S.F. TIOFO - APIA W. SAMOA.
IF YOU COME WITH ME THIS EVENING, IT'S NO PROBLEM.

WHO WAS THAT LADY?

SHE TOLD ME SHE WOULD INVITE ME TO HER PLACE.

MARKET

YOU DECIDE... IF YOU GO OR NOT.

BUT I'M GOING HOME AFTER THIS.

LATER TOMA GOES TO HOTEL.

YOU GOT A CONDOM?

NO—I DON'T LIKE CONDOMS... NO FEELING.
AFTER ONE WEEK
ARRH!

BROTHER YOU INFECTED
WITH CONORRHOEA.

BETTER TO SEE DOCTOR

CONORRHOEA -!!
A COMMON STD
HERE IN THE PACIFIC...

USING A CONDOM CAN
STOP IT. SAY YES TO...
SAFE SEX

MALE TOILET

TOMA HAD TEST AT THE CLINIC.
SEXUALLY TRANSMITTED DISEASES (STD)

STD, like gonorrhoea, are diseases that are usually transmitted by sexual contact. STD can cause serious health problems if not properly treated, including not being able to have a baby (infertility), or miscarriages or stillbirths.

Because people, particularly women, often do not have any signs (symptoms) of having an STD until damage has been done to their bodies, IT IS VERY IMPORTANT THAT IF YOU FIND OUT THAT YOU HAVE AN STD, YOU MUST TELL THE PERSON OR PEOPLE YOU HAVE HAD SEX WITH RECENTLY, even if it very embarrassing. Your partner, or partners, will need to be checked and treated as well.
## Appendix Four: SPC Funded Radio Messages Produced by the HEU (1993)

<table>
<thead>
<tr>
<th>Track Number</th>
<th>Title</th>
<th>Subject</th>
<th>Voice Overs</th>
<th>Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&quot;Local Food is Best&quot;</td>
<td>Healthy Living</td>
<td>Shem Tafatu and School Children</td>
<td>Samoan</td>
</tr>
<tr>
<td>2</td>
<td>&quot;O Matou Foi Isi Manu Samoa&quot;</td>
<td>Local Foods</td>
<td>Brian Lima and School Children</td>
<td>Samoan</td>
</tr>
<tr>
<td>3</td>
<td>&quot;Children's Individual Voices&quot;</td>
<td>Typhoid Fever</td>
<td>HEU Staff</td>
<td>Samoan</td>
</tr>
<tr>
<td>4</td>
<td>&quot;Fai Sou Sao Mo Lou Atunuu&quot;</td>
<td>Typhoid Fever</td>
<td>HEU Staff</td>
<td>Samoan</td>
</tr>
<tr>
<td>5</td>
<td>&quot;Fai Sou Sa O Mo Lou Atunuu&quot;</td>
<td>Typhoid Fever</td>
<td>HEU Staff</td>
<td>Samoan</td>
</tr>
<tr>
<td>6</td>
<td>&quot;Food Handlers&quot;</td>
<td>Typhoid Fever</td>
<td>HEU Staff</td>
<td>Samoan</td>
</tr>
<tr>
<td>7</td>
<td>&quot;E Ono toe Pesia Oe&quot;</td>
<td>Typhoid Fever</td>
<td>HEU Staff</td>
<td>Samoan</td>
</tr>
<tr>
<td>8</td>
<td>&quot;Faleaiga Ma Faletalimalo&quot;</td>
<td>Typhoid Fever</td>
<td>HEU Staff</td>
<td>Samoan</td>
</tr>
<tr>
<td>9</td>
<td>&quot;O Lea Ea Le Fiva Taifo&quot;</td>
<td>Typhoid Fever</td>
<td>HEU Staff</td>
<td>Samoan</td>
</tr>
<tr>
<td>10</td>
<td>&quot;I Drink Clean Water&quot;</td>
<td>Typhoid Fever</td>
<td>Brian Lima and HEU Staff</td>
<td>English</td>
</tr>
<tr>
<td>11</td>
<td>&quot;I Drink Clean Water&quot;</td>
<td>Typhoid Fever</td>
<td>Brian Lima and HEU Staff</td>
<td>Samoan</td>
</tr>
<tr>
<td>12</td>
<td>&quot;Sei Faamatana&quot;</td>
<td>Immunisation</td>
<td>HEU Staff</td>
<td>Samoan</td>
</tr>
<tr>
<td>13</td>
<td>&quot;Poma T&quot;</td>
<td>Immunisation</td>
<td>HEU Staff</td>
<td>Samoan</td>
</tr>
<tr>
<td>14</td>
<td>&quot;Puipui Fanau Laiti&quot;</td>
<td>Immunisation</td>
<td>HEU Staff</td>
<td>Samoan</td>
</tr>
<tr>
<td>15</td>
<td>&quot;Samoans Are Strong Healthy People&quot;</td>
<td>Exercise</td>
<td>Shem Tafatu and HEU Staff</td>
<td>English</td>
</tr>
<tr>
<td>16</td>
<td>&quot;To Excel In Your Sport&quot;</td>
<td>Exercise</td>
<td>Yaminiasi Gaunovou &amp; Shem Tafatu</td>
<td>English</td>
</tr>
<tr>
<td>17</td>
<td>&quot;Savali Mo Lou Soifumalolina&quot;</td>
<td>Exercise</td>
<td>HEU Staff</td>
<td>Samoan</td>
</tr>
<tr>
<td>18</td>
<td>&quot;Koleni Pei O Manu Samoa&quot;</td>
<td>Exercise</td>
<td>Brian Lima and HEU Staff</td>
<td>Samoan</td>
</tr>
<tr>
<td>19</td>
<td>&quot;The Manu Samoa Flanker&quot;</td>
<td>Alcohol/Smoking</td>
<td>Shem Tafatu and HEU Staff</td>
<td>English</td>
</tr>
<tr>
<td>20</td>
<td>&quot;The Manu Samoa Winger&quot;</td>
<td>Alcohol/Smoking</td>
<td>Brian Lima and HEU Staff</td>
<td>English</td>
</tr>
<tr>
<td>21</td>
<td>&quot;Don't Mix With Rugby&quot;</td>
<td>Alcohol/Smoking</td>
<td>Shem Tafatu &amp; Yaminiasi Gaunovou</td>
<td>English</td>
</tr>
<tr>
<td>22</td>
<td>&quot;Don't Mix With Rugby&quot;</td>
<td>Alcohol/Smoking</td>
<td>Brian Lira &amp; Yaminiasi Gaunovou</td>
<td>English</td>
</tr>
<tr>
<td>23</td>
<td>&quot;Who's This Guy&quot;</td>
<td>Alcohol/Smoking</td>
<td>Shem Tafatu and HEU Staff</td>
<td>English</td>
</tr>
<tr>
<td>24</td>
<td>&quot;O Ai Le La&quot;</td>
<td>Alcohol/Smoking</td>
<td>Brian Lira and HEU Staff</td>
<td>Samoan</td>
</tr>
<tr>
<td>25</td>
<td>&quot;Mitamita O Oe O Le Samoa&quot;</td>
<td>Obesity</td>
<td>HEU Staff</td>
<td>Samoan</td>
</tr>
<tr>
<td>26</td>
<td>&quot;Looking Forward To Your Next Match&quot;</td>
<td>Diabetes/Obesity</td>
<td>Shem Tafatu &amp; Yaminiasi Gaunovou</td>
<td>English</td>
</tr>
<tr>
<td>27</td>
<td>&quot;E Mageso Lou Tino&quot;</td>
<td>Diabetes</td>
<td>School Children</td>
<td>Samoan</td>
</tr>
<tr>
<td>28</td>
<td>&quot;Suga Ua E Puta Tele&quot;</td>
<td>Obesity</td>
<td>Shem Tafatu and HEU Staff</td>
<td>Samoan</td>
</tr>
<tr>
<td>29</td>
<td>&quot;O Se Ma'T Matamia&quot;</td>
<td>Aids</td>
<td>HEU Staff</td>
<td>Samoan</td>
</tr>
<tr>
<td>30</td>
<td>&quot;Protect Yourself&quot;</td>
<td>Aids</td>
<td>HEU Staff</td>
<td>English</td>
</tr>
<tr>
<td>31</td>
<td>&quot;It's Not Who You Are&quot;</td>
<td>Aids</td>
<td>Shem Tafatu</td>
<td>English</td>
</tr>
<tr>
<td>32</td>
<td>&quot;It's Your Body&quot;</td>
<td>Aids</td>
<td>HEU Staff</td>
<td>English</td>
</tr>
<tr>
<td>33</td>
<td>&quot;It's Not Who You Are&quot;</td>
<td>Aids</td>
<td>Brian Lima</td>
<td>English</td>
</tr>
<tr>
<td>34</td>
<td>&quot;E Leai Se Togafiti&quot;</td>
<td>Aids</td>
<td>HEU Staff</td>
<td>Samoan</td>
</tr>
<tr>
<td>35</td>
<td>&quot;Puipui Samoa Mai Le Aids&quot;</td>
<td>Aids</td>
<td>HEU Staff</td>
<td>Samoan</td>
</tr>
</tbody>
</table>

(Source: Health Education Unit 1995)
### Appendix Five: WHO Funding of AIDS Activities in Western Samoa (1994/1995)

<table>
<thead>
<tr>
<th>Targeted Group</th>
<th>Amount (US$)</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tourists and Travellers</strong></td>
<td>1,000</td>
<td>Workshop for tourist industry personnel to educate them about STD/HIV infection</td>
</tr>
<tr>
<td></td>
<td>1,000</td>
<td>Short seminars for sports people who travel abroad to learn about STD/HIV prevention</td>
</tr>
<tr>
<td></td>
<td>1,000</td>
<td>Two day workshop for education officers of government departments and businesses to train in STD/HIV prevention for employees who travel abroad</td>
</tr>
<tr>
<td></td>
<td>1,000</td>
<td>Promotion of STD/HIV prevention activities prior to and during the South Pacific Arts Festival (July, 1995)</td>
</tr>
<tr>
<td></td>
<td>1,000</td>
<td>Development of IECs material and media to support the above activities</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>8,000</td>
<td></td>
</tr>
<tr>
<td><strong>High Risk Groups</strong></td>
<td>3,000</td>
<td>Development and Distribution of IEC materials for people who engage in high risk behaviours, to clinics, bars, nightclubs, GP's and Radio (to promote HIV testing)</td>
</tr>
<tr>
<td></td>
<td>1,200</td>
<td>Provide annual seminar for men who have sex with men to inform and educate about safe practices to adopt</td>
</tr>
<tr>
<td></td>
<td>1,500</td>
<td>Condom promotion, develop media spots, print materials and other strategies to increase the use of condoms</td>
</tr>
<tr>
<td></td>
<td>6,000</td>
<td>Procure and distribute condoms to key suppliers plus STD clinics and family planning clinics</td>
</tr>
<tr>
<td></td>
<td>4,000</td>
<td>Conduct a study with fa'afa'asine to collect baseline information on sexual practices, sexuality and behaviour change in strategies</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>15,700</td>
<td></td>
</tr>
<tr>
<td><strong>General Campaigns</strong></td>
<td>800</td>
<td>Revise school health education curriculum, train teachers and implement new curriculum and materials</td>
</tr>
<tr>
<td></td>
<td>10,000</td>
<td>General public awareness campaigns (i.e World AIDS Day, Produce one poster a year, produce and broadcast one radio message a year, promotion materials)</td>
</tr>
<tr>
<td></td>
<td>10,000</td>
<td>HEU will provide seminar for NGOs outlining NAP goals, proposal preparation and measuring effectiveness</td>
</tr>
<tr>
<td></td>
<td>2,000</td>
<td>Red Cross and Health Department will plan and implement an annual campaign to recruit blood donors</td>
</tr>
<tr>
<td><strong>Blood</strong></td>
<td>500</td>
<td>Conduct annual seminar for staff to provide counselling for blood donors</td>
</tr>
<tr>
<td><strong>Education and Training of Staff</strong></td>
<td>1,500</td>
<td>Conduct annual training in STD clinical management for health workers who see patients in both the public and private sectors</td>
</tr>
<tr>
<td></td>
<td>500</td>
<td>Annual workshop on STD/HIV for antenatal staff</td>
</tr>
<tr>
<td></td>
<td>500</td>
<td>Convene annual NACC meeting</td>
</tr>
<tr>
<td><strong>Administration</strong></td>
<td>1000</td>
<td>Secretarial assistance for NAP</td>
</tr>
<tr>
<td></td>
<td>4,000</td>
<td>HEU costs</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>47,600</td>
<td></td>
</tr>
<tr>
<td><strong>Miscellaneous Expenses</strong></td>
<td>7,167</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>78,467</td>
<td>(NZ$ 124,967)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(WS$ 191,030)</td>
</tr>
</tbody>
</table>

(Source: WHO 1994a:4-5)
Appendix Six: WSFHA Produced Pamphlet

MANATUA

- E taraa ona uifu'a areia le totope faasauli o le tane i le pau fai usaga i le taimi tonu o le a faaionoia ai se feusaiga.

- E vai le faaasogaina o le pau fai usaga ma ia tafoa taraa.

- Faaterene ia ia aua nei mana.

- Mo nisi faamatalaga auliliu poa se faasouaiai fai e se fia mausi, faafonouia vai e loa le Faalapotoponga ma le Sifisa Manuia o Aiga i Sanoa, luma ane o le Maleri o Ta i Aipa, telefonu - 24566.

Pau Fai Usaga A Tane

Tuvalu ma Woleasina a le
OREA MO LE SOPPELA MANUOA O AIGA I SANOA
WESTERN SAMOA FAMILY HEALTH ASSOCIATION
P.O. Box 5628, Apia, Western Samoa. Phono: 25 948

O le a le Pau fai Usaga a Tane

O le maeaia (auaia) lua mo aiga faasauli o faasogaina a tane i le taimi e fiazinai ai se feusaiga. O lelei pau e fanisi mai i se pau mei mei maunifoli lava. E faamotuiafa (fanofa) ai le tolofa faasauli o le tane i le taimi e le fiazinai ai se feusaiga.

O le a luma Aiga

O lelei pau fai usaga ma ia tana so o le tane pe a faamotuia mai i le taimi o faasouaia ma le masi a e sua o a. O le tana o le tama so aua i le talano fanasi o le tina ma o le a faase a loa ona pulpuia le tina mai se maitaiga.

O a ni le taraa i le faaasogaina o le pau fai usaga

- E pulpuia ai tina mai se maitaiga.

- E aiga tele e pulpuia mai faaionoia le pipipi o faasauli e pipipi i feusaiga e pai o le ma'ari ale B, ma'i ait, AIDS ma ini.

E taraa tele le utaua ma teutaua i tolagona faaionoia pae saiuga mo le faaasogaina.
Appendix Seven: Example of the Media Portrayal of HIV/AIDS

Suspected HIV positive carrier advised to leave

An Australian visitor who arrived in Western Samoa on Thursday last week, was advised to leave the country when he was found to be HIV positive. The local Customs Department was contacted by New Zealand Customs officials about the HIV carrier coming to Apia.

The person left New Zealand on Polynesian Airlines Flight PH744 intending to spend a recreational period of one week in the country. But his plans could not be fulfilled after speaking to Health officials, where he admitted that he was tested positive with HIV, the virus that causes AIDS.

The advice to leave the country was given to the visitor while he was staying in a local hotel. The hotel, according to a source, did not know the person was an HIV positive victim. The man, who was treated by the hotel like any other guest, was accompanied by a friend. When the staff of the hotel found out about the case, some of them got scared, but kept quiet.

The Customs Department reported the matter to the Police, and also alerted the Health Department. Director General of Health Lolofie Taulealeaumual Dr Eti Enosa, told Savali newspaper that when he was informed of the case, he immediately reported it to the Prime Minister, who was in Savali on Friday. Dr Enosa also informed the manager of the hotel where the person was staying. The manager thanked the Director-General for the information.

According to Dr Enosa, the person admitted that he was tested with AIDS in 1983. This made health officials wonder if the person was telling the truth or not, Dr Enosa said.

However, on Sunday afternoon, the visitor left the country on Polynesian Airlines Flight PH 745 for Auckland where it is believed he will be transiting for a flight to his own country, Australia. His friend will leave the country on Thursday 4 May, the day they had both decided to leave before the discovery of the other party with HIV positive.

(Reported by Jim Wales. Written by Tunumafono A. Alavao).