Health communication to rural populations in developing countries: with special reference to Malawi

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HEALTH COMMUNICATION TO RURAL POPULATIONS IN DEVELOPING COUNTRIES; WITH SPECIAL REFERENCE TO MALAWI

By
Joseph Jabulani Uta

A Doctoral Thesis submitted in partial fulfilment of the requirement for the award of Doctor of Philosophy of Loughborough University of Technology

September, 1993

Supervisor: Dr R.P Sturges

DEDICATION

To my mother, wife and children
ACKNOWLEDGEMENT

I am most grateful to my supervisor Dr R.P. Sturges for his advice and encouragement which inspired me to carry on with the work to this final stage. His willingness to help and patience are very much appreciated. I would also like to thank my director of research Professor A.J. Meadows for his advice and encouragement. I also thank Mrs H.J. Dyer who was my supervisor during the early stage of this study.

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ABSTRACT

The findings of KAP studies and health reports indicate that in spite of continuing efforts by developing countries like Malawi, to raise health awareness among their peoples, the majority of the people remain inadequately informed and are generally found to lack basic knowledge about most prevalent diseases. As a result most people are unable to participate fully in primary health care activities.

Two parallel surveys were carried out: (i) on activities of providers of information; and (ii) on information-seeking behaviour of a sample of the public. A health knowledge test was conducted to a sample of the public in order to assess their levels of Aids and bilharzia awareness.

On matching the findings from the two surveys the following deficiencies were identified. The major cause of problems was that information provision was fragmented. Conflicting messages were given by different agencies which appeared to compete with each other. Distribution and access to the available information was also found to cause problems.

Lack of research-based knowledge among health information providers about information needs and information-seeking
behaviour of the people they are planning services for compounds the problems of information provision.

Potential solutions include coordinating all activities of health communication from top-to-bottom (i.e. from planning to implementation at the community level). Efforts towards strengthening extension services, consolidating and repackaging of information, and consolidating of health grey literature are argued to be appropriate. Promoting use and marketing of the available information among the rural populations, is also argued to be appropriate.
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Chapter One

BACKGROUND AND SCOPE

1.1 Introduction

This is a study of health communication to rural people in developing countries, with special reference to Malawi. It is intended to study how health information is communicated to people, which agencies are involved, and what problems, if any, are considered to frustrate the efficient provision and diffusion of health information.

The broad aims of the study are to investigate the problems of disseminating health information to rural communities in Malawi; and to find ways which might lead to effective and efficient transfer of information into rural communities.

The specific aims are:

(a) To identify and analyse the problems which are found to hamper the effective and efficient communication of health information to rural populations;

(b) To identify the sources which the people perceive to be their trusted sources for health information;
(c) To match the characteristics of information provision (in (a) above) with the information-seeking patterns of the population (in (b) above);

(d) To review the hypothesis that radio health messages are often ignored because they are badly timed or are in a wrong language;

(e) To validate the need for packaging/repackaging of some information in forms which rural communities can use it effectively; and

(f) To assess the levels of Aids and bilharzia awareness among the Malawian rural population.

The scope of the investigation covers the general trends of disseminating health information in developing countries and the underlying problems. Special attention is given to Malawi. Examples and comparisons are drawn from trends and developments in several African countries and Asia, mainly India, as portrayed by the literature.

The methods employed to achieve the above aims and which it is expected will also bring out other related issues on the topic into perspective are as follows:-

(a) To examine the previous research efforts on the topic by focusing on the following areas:-
(i) Research into information needs;
(ii) Targeting of audiences;
(iii) Primary sources, and information repackaging;
(iv) Extension services; and
(v) Promotion of information use and marketing.

(b) To carry out a survey of activities of the agencies which provide public health information in Malawi in order to obtain some essential baseline information regarding their objectives; information they expect people to know about particular diseases; channels and language of communication; types of information resources; and whether they individually cooperate with each other in this area of activity.

(c) To carry out a community survey to establish which sources of information they perceive to be reliable or trusted for information on health matters (their information-seeking behaviour).

(d) In addition, to conduct a knowledge test on Aids and bilharzia to find out how much the people know about these diseases, mainly about their causes, modes of transmission, and prevention.

The interest to pursue research in this field was prompted by the findings of some KAP surveys (knowledge, attitudes
and practices) carried out in Malawi, and government health studies which reached the conclusion that official health information was not filtering into communities sufficiently enough to enable people to play a more active role in primary health care activities in their communities. Despite reaching these conclusions the agencies have made little effort to investigate the root cause of the problem.

Kishindo (1989) concluded that although Aids awareness was high, 'it can be argued that more needs to be done to educate the public on the cause and modes of transmission'. Kamwendo and others (1986) reached a similar conclusion by saying 'a coordinated effort is necessary so that people are not given messages from different government services at once'. The ineffectiveness of health education efforts is given in the National Health Plan, 1986-1995 (Lilongwe: Ministry of Health, 1986) as 'health education planners have not studied the needs of the community well enough in planning and carrying out their programmes'. All these observations add up to the problems which need to be examined in more detail.

Further interest was also prompted by personal observations made in the course of providing an information service to health workers in Malawi, and also by involvement with adult literacy work. Below are some of the observations:-

(a) Many offices of Ministry of Health and of health
agencies in different parts of the country were found to be keeping large quantities of health information materials which should have been sent out to people in villages.

(b) Although many posters and other visual materials were produced by government and voluntary agencies hardly any were in sight in the rural areas. The few posters that could be seen were concentrated in hospitals, health centres, and in urban centres.

(c) There was no evidence that audio-visual materials were being used in the rural areas, or films shown using mobile projectors. On the other hand, it was found that agricultural extension was more active in this way.

(d) Villages did not seem to be visited regularly by health workers or health extension workers, which meant that people had limited contact with health personnel.

(e) Members of Village Health Committees were generally found to lack the necessary information support to assist them in their work.

(f) Distribution of information resources to rural areas appeared to be a problem for both Ministry of Health
and the other agencies. They seemed not to pay much attention as to whether the materials reached their destinations. Bottlenecks appeared to occur at the offices of District Health Inspectors and District Commissioners.

1.2. Background

The aims of health education are to bring about behavioural change in health practices and risk reduction. Kelly and Lewis (1987) quote K.C. Pang of Hong Kong University as saying that health education "is a method of conveying to the community the knowledge that is necessary for the prevention of disease, and the opportunity to lead a full normal life, physically, mentally and socially".

Information plays a vital role in health education in that it assists people to be aware of health matters and enables them to respond positively to health policies and to comply with medical advice and treatment. The theoretical basis upon which information is emphasised is illustrated by the 'medical model of health education' below (Fig. 1).

Fig. 1

Medical Model of Health Education

Information

Knowledge
Attitudes

Behaviour

Better health


Cust (1979) says that the model above entails 'Giving information which results in new knowledge and insights, which in turn leads to a more positive attitude to health and then to new healthy behaviour'.

There should be a continuous two-way communication between the provider and the consumer so that both understand the problems which are being addressed. Constant interaction ensures that information about health programmes, problems, and plans pass in both directions. It also develops a sense of participation in health programmes.

Lack of sufficient information among the majority of Third World population is only one of the major problems which are seen to retard health development.

1.2.1 Barriers to achieving improved health
The health status of a nation depends on a variety of factors: economic, social and environmental, most of which are beyond the control of the man in the village. Lack of political will towards health care can affect the level of funding for health services. Social amenities like housing, sanitation services, education, safe drinking water, and other social programmes are also important factors in the sense that they all impinge on health.

"Health depends upon a complex weave of environmental, behavioural and economic factors and socio-cultural variables and processes including family relationships and power relationships within the community". (Timaeus, et al 1988).

This underlines the fact that health development needs to be considered in the context of other socioeconomic factors including education.

(a) Economic factors

The poor level of health facilities now evident in many of the developing countries is said to be largely caused by economic problems, lack of political will to allocate resources for health more equitably between the urban and the rural areas, and due to poor planning. (Muhondwa 1986; Bailey & Phillips 1990). The poor situation in Zambia as described by Freund (1986) is not unique to that country
alone, it is typical of most Southern African countries, including Malawi.

"The Zambian health care system is presently in a state of a crisis. The patient/physician ratio has fallen, recurrent and capital expenditures continue to decline, drugs and equipment are in short supply and PHC implementation is facing serious problems".

Because of economic constraints most developing countries are not able to provide adequate health care facilities. This results in overcrowding at health centres, shortage of drugs and equipment. Often people in remote areas have to travel long distances to seek treatment. High birth rate is the other factor because it creates pressure on existing health care facilities.

(b) Nutritional factors

The effects of insufficient nutrition make people to be susceptible to many preventable communicable diseases in the developing countries. The contributing factors are poor harvests caused by drought or poor farming practices, and high cost of food which most people cannot afford. Baylies (1981) describes the effects of insufficient nutrition on developing countries by saying,

"Lack of nutrition debilitates people in the most basic
sense, severely affecting the quality of their lives and forestalling whatever economic and social contribution they might otherwise make... Because of 'generally debilitated state of many Africans, they are highly susceptible to parasitic and communicable diseases, whooping cough, measles and so forth'.

For the information worker this implies the need to make more effort in providing information which not only treats different diseases but also information on various aspects of human endeavour. Nutritional problems cannot be ignored.

(c) Socio-cultural factors

Certain cultural values and beliefs and individual attitude can be a barrier on health care. Some people will refuse to have any form of immunization on religious or cultural grounds. Certain eating habits deprive children or women of particular nutrients. Msukwa (1981) observes that there are some tribes in Malawi which do not feed eggs to children because they believe eggs are bad for children's health.

In view of these barriers large sections of the populations tend to concentrate on self-care or depend on traditional healers in their communities. Kickbusch (1989) refers to self-care as 'unorganized health activities and health related decision making by individuals, families, neighbours, friends, colleagues at work; it encompasses
self-medication, self-treatment, social support in illness, first aid in a natural setting.

1.2.2 Factors which affect provision of information

There are a number of factors which can affect provision of consumer health information. Although based on observations and experiences from industrialised countries, planning for health information services in developing countries should take into account the following factors:

(a) Supply and demand

One of the most important factors to consider when planning an information service is the attitude of the potential users, how they perceive the information which is coming from outside their environment, and whether the information enriches the knowledge they already have locally. People are more likely to seek health information from an external source if they are convinced that the information will assist them in one way or the other. It is a marketing reality.

Rees (1982), Inlander (1991) and others write of the rising health information consumerism in USA from 1960's which prompted health authorities and information providers to pay more attention to providing public health information services. The outcome of such demand led to the evolution
of the consumer health information phenomenon. Marshall (1984) refers to consumer health information as information on health and medical topics relevant to the general public. MacDougall and Brittain (1992) say that consumer health information services 'comprise a huge new growth area within healthcare information provision'.

In many African and Asian societies in which oral tradition is strong, people tend to turn to elders, opinion leaders, or traditional healers on a variety of issues including health. Traditional healers play an important role in the lives of African and Asian societies, especially in the rural areas where health care facilities are not readily available.

While the demand for mediated health information in western countries is generally apparent, it should not be taken for granted that the same is the case in developing countries. Most people are not used to seeking information outside their own communities. Therefore, more effort is required in marketing the information which is conveyed through the usual conventional channels. Without denigrating their informal sources of information people should be made aware of the available alternative information sources. They should be encouraged to seek information from outside their community as well to complement the information they obtain from the informal sources (relatives, friends, etc), or to enrich the knowledge they already have on particular
(b) Education and Literacy

Empirical evidence shows that people with more education or of higher socioeconomic status are more likely to use the currently available print-dominated health information than people with little education or with a lower socioeconomic status. (Tichenor et al. 1970; Ettema 1983). This means that the majority of Third World populations are not able to use the vast amount of printed health information which is now available. It would require extensive use of printed media and repackaging of some of the information just to ensure that much of the information is of potential use and value to the majority of the population. The levels of education and literacy would also have to be considered. Therefore, decisions regarding the design of messages and formats, decisions on the choice of style of presentation and communication channels would need to be weighed against the educational and socioeconomic background of the people.

(c) Language

Language is an important factor. While western societies generally have the advantage of one dominant language, e.g. English for Great Britain and the United States of America, most developing countries have numerous competing languages and dialects. Therefore, any attempt to satisfy the needs
of the different language groups would demand enormous resource inputs. There are not many developing countries which can afford to do this. For instance, a small country like Malawi has nine major tribal languages. Although Chichewa is the national language not everyone can speak it fluently or write or read in it well.

(d) Accessibility of existing information

It is assumed that the wish of every information provider is to see that the information he provides is accessible to as many people as possible. Therefore, siting of access points and methods of dissemination are important factors in enhancing access to information. Most rural people live in widely distributed communities, often isolated and hard to reach. Physical isolation is not all, however, in reference to the situation in USA Freimuth and Mettger (1990) describe the "hard-to-reach" as people who have a low socioeconomic status, chronically uninformed, illiterate and information poor, whether they live in isolated communities or in urban communities.

It is more difficult than this to define who is information poor and who is not in less developed countries. Most people in Africa and Asia do not entirely depend on usual conventional channels of conveying information as printed and audio-visual materials, or radio and television. These can be measured in terms of airtime, transmission time or
volume of printed materials. But most people in Africa and Asia use the oral tradition methods and informal sources for their information needs. These cannot be measured in the same way.

McAnany (1978) says "The assumption is that public information with potential value reaches everyone. The rural poor are isolated for much of public information by a series of filters that makes reaching them more difficult than reaching other groups; thus they are often physically isolated, illiterate, perhaps speaking the dominant language poorly if at all, without radio, and suspicious of information coming from a government long exploitative or at least negligent of their needs".

The mere transfer of information through the mass media and various channels does not guarantee that the information will be used. There are no simple solutions. More efforts are required for research into the methods of information transfer to rural communities in countries like Malawi, and on information marketing strategies since the majority of the population have little experience with the conventional information resources.

1.2.3 Traditional medicine

It is appropriate to mention something about traditional medicine because of its important in the lives of most
people in Africa and Asia. Traditional healers serve as useful information providers for most people, especially about treatment of mental illnesses and self-care. World Health Organization defines the traditional healer as follows:

"A traditional healer is a person who is recognized by the community in which he lives as competent to provide health care by using vegetable, animal and mineral substances and certain other methods based on the social, cultural and religious background as well as on the knowledge, attitudes and beliefs that are prevalent in the community regarding physical, mental and social well-being and the causation of disease and disability."

(WHO, Primary Health Care, Alma Ata 1978).

A two-way communication between health care professionals and traditional healers can help to bridge the gap between the 'modern' and 'traditional' practices. Communication between the two practices would make referral of patients easy, and open the way for systematic scientific analysis of some of the plants, herbs and roots which are used by traditional healers so as to learn from them and to ensure the safety of patients.

Health education programmes of most developing countries have, in the guise of modernization, generally played down or ignored the role of traditional medicine in the lives of
the majority of the people. Empirical evidence suggests that most people in Africa and Asia use traditional medicine. It is not uncommon to find people using both 'modern' and 'traditional' medicine simultaneously for the same illness (Kimani 1981; Wolffers 1989).

In spite of the World Health Organization urging its Third World member states to consider incorporating some aspects of traditional medicine into their health care delivery systems very little has been done in that direction (AFRO, Evaluation of the strategy for health for all by the year 2000, 1987). Zimbabwe might be one of a few countries to have enacted the appropriate legislation. The Traditional Medical Practitioners Act, 1981 provides for a council to register and regulate traditional healers. Loewenson (1989) mentions that 'two training colleges for traditional health sector and research into medical properties of traditional medicines has been carried out. In programmes such as the MOH (Ministry of Health) training of traditional midwives, the strong community contact within the traditional health sector has been utilized and supported by training impetus encouraging safe referral and treatment practices. This has encouraged communication between the two health sectors'.

The preceding discussion indicates that there is need for more research into the methods of disseminating information to the rural people of the less developed countries. These countries are not short of information, it is available in
abundance. The problem lies with the organization and the transfer methods of the available information, and ensuring that the information is used effectively by all segments of the population.

This investigation is relevant because it attempts to bring to light the problems which are considered to hinder the effective and efficient provision of health information to the rural populations of developing countries like Malawi. The study is the first of its kind in this field.

1.3 Previous research efforts

The literature on the topic indicates that very little progress has been made by both health professionals and information workers in researching the information needs of the rural people. Failure to impart health information to the people effectively and efficiently is largely due to lack of knowledge about the information needs of the people for whom they are planning information services or information campaigns. Information workers who have called for improvements in the dissemination of information have not followed their calls with research into these problems.

(i) Research into information needs

Most of the research that has been done is related to rural development or rural information needs. Naturally, elements
of health have been included in such studies by virtue of the fact that health is a vital facet of the development matrix.

Research into information needs has been a subject of debate for many years. Voos (1969) points out to the difficulty of studying information needs and information seeking behaviour among people who have no previous experience with information systems,... 'users' expressed desires for information and their habits of search are conditioned by previous experience with information systems'. Indeed, to ask a rural Malawian whether he would use an information service if it were available would be unrealistic because such services do not exist. The same question asked to a rural man in UK would yield a definite response. This argument is put into perspective by Rogers (1983) who argues that 'one cannot actively seek an innovation until one knows that it exists'.

In his appraisal of public library performance in Nigeria Adimorah (1983) suggests that 'Further research is needed on the information needs of Nigerians and their information gathering habits to enable public library directors to plan society-based services and create a true library tradition'.

The Rural Development Information System Research (RUDIS) in Badeku Village, Ibadan, Nigeria is a major contribution
to the efforts of studying rural information needs. Aboyade (1984) one of the key researchers in the project indicates that the team encouraged the villagers 'to seek information that would enable them to help themselves in their efforts to improve their lot, as government could not possibly meet all their demands'. While recognizing the existence of the informal information exchange system within the community, Aboyade and colleagues suggest the need for more effort in motivating people to seek information from alternative sources in addition to that which they obtain locally through the informal system.

Kempson's literature review 'Rural community information services; a literature review and guidelines for developing services' (1990) prepared under Unesco auspices attempts to give an overview of the efforts made towards improvement of information provision to rural communities in developing countries.

The question of the right methods of gathering data about information needs of rural people crops up quite often. On the use of questionnaires Aboyade (1984) questions their suitability among un-educated people whom she says 'tend to give the type of reply they feel the questionnaire will want to receive'. Obviously, this is not entirely true for much depends on the way the questions are framed and on the topic of inquiry. Use of a structured interview schedule (since the survey population is presumed illiterate) can be
effectively employed to seek information like 'perceived sources of information' or ask respondents to indicate the person(s) they would first turn to for help when they are ill.

Richards (1979) suggests 'participant observation as the most effective way of studying the 'thought patterns' of a community. Davis (1980) suggests five options: 'participant observer, continuous observation, communication sampling, general communication surveys, or network surveys'. Whether information workers in the developing countries have the skills to apply these methods is a different matter.

The interest to develop 'indigenous knowledge' would depend on research skills of information workers. Mchombu (1991) and others have reiterated the need for African countries to integrate indigenous knowledge with the conventional information resources but fail to suggest how that should be done. Morin-Labatut and Akhtar (1992) say 'indigenous knowledge is traditional in the sense that it is rooted in the past, within a specific culture and environment, which accounts for the fact that is also referred to as local or indigenous knowledge'. There is general consensus that indigenous knowledge is dynamic, it grows, it adapts, and it accommodates innovations.

Although health communication through interpersonal channel involving health workers is considered to be more effective
most developing countries lack sufficient numbers of staff to cover their populations. Hence the need to consider the potential of other channels. Waitzkin (1985) in his study on the information giving behaviour of doctors to patients says that 'Doctors spent little time informing patients..., under-estimated patients' desire for information'.

Bosompra (1989), a mass communication specialist, is one of the few people to focus on health information dissemination to rural people in Ghana. He observed that dissemination of health information to rural communities was inadequate and that the little information that was disseminated was not fully utilized. Some of his findings were that 'respondents relied equally on conversation with family members and friends on the one hand and radio on the other, for information on selected health topics'. Bosompra concluded that health messages were not being properly or accurately conveyed.

The most difficult part of health communication is that of ensuring that the source of the information is reliable and that the receiver (the public) believes that way too. This problem can be corrected where 'formal' sources are used but it is difficult to do so with informal sources. For instance, how does one go about correcting the rumour that is going round in a village that Aids is caused by shaking hands? These examples underline the need to research on the information needs of the audience for which the information
service or campaign is being planned. Ogunsheye (1981) observes that 'The information the citizen receives from the informal channels are often based on unrecorded experience, gossip, rumours, hearsay and half truths'. This is a valid point in such specialized topics as health.

Mchombu's study (1992) on rural information needs in Malawi is the latest research effort in this area. Among others things, the results of his survey show that health problems rank high above all the other social problems which people thought were retarding their development efforts. In his analysis, Mchombu shows that in Village 1 of his survey of 253 respondents 59% cited health problems, followed by farming problems with 30%. In Village 2, 30% cited health problems, followed by social problems with 12%. These results show the importance of health in people's lives.

(ii) Targeting audiences

Health education programmes and information campaigns in developing countries are generally focused towards women, and specifically mothers and young children. Examples are MCH, child survival programmes, immunization, nutrition and child spacing or family planning. It is appropriate in view of the great influence women have on family health habits.

In reference to the situation in India Nayar (1987) says that it is justifiable to concentrate health education programmes to women because 'they exercise great influence on the health habits of their families, as well as their
friends and neighbours'.

In some situations the opposite view is held. Stycos (1955) in his survey on birth control in Puerto Rico contends that health educators and information providers must first establish the influential decision-maker in the family on the particular health topic which is covered. He found out there was a communication block between husband and wife on such matters as birth control and when such a situation exists 'it is a waste of effort to concentrate on the women in public health clinics. Since men are usually the least interested in birth control, appeals to them must be much more forceful if they are to be effective'.

Most child spacing programmes in developing countries have had little impact because they concentrate on women alone and yet men are the influential decision-makers on such matters. Cultural influences inhibit the majority of women in Africa from discussing such matters as family size or use of contraceptives with their husbands. Women in western countries may not have similar inhibitions.

The same can be said of child nutrition. Men may be slow to respond to nutritional advice because they are not included in nutrition education programmes. Their compliance with nutritional advice is essential because of their influence in the family unit and because of the fact that most men have to provide for their families.
The other dimension concerns children over the age of five who have completed the Under-5 clinic programmes. Children are often forgotten by information programmes. Demographic trends show that children form about 50% of the Third World population (Demographic Yearbook, 1992). Nicaragua Health Fund founded in 1985 has made considerable progress in community-based preventive and primary health care involving children, popularly known as the child-to-child approach. The Nicaragua Health Fund Newsletter of July 1991 (no. 16) reports of creating 'little health workers' and indicates that 'A wealth of materials, comics, activity sheets, games, puppet shows has been developed to teach older children how to care for their health and development of their younger siblings and other children in their communities'.

In Nicaragua children are encouraged to write health poems about health topics as the 'terrible bacteria cholera' using their own experiences. An information unit known as the Centre for Health Information and Advisory Services (CISAS) is maintained. The Fund has been able to attract people like David Werner, author of 'Where there is no doctor', a handbook on first aid and self-care which is widely available in developing countries.

Freund (1986) reports of a system of health data collection involving school children in Luampungu area in Zambia which
he says has resulted in rising interest in health matters by pupils and parents in the area. The system serves as a useful method of informing health workers about the health status of the people in the surrounding villages.

(iii) Primary sources and packaging/repackaging

The choice of primary sources appropriate for communicating health information to illiterate populations has been talked about a lot but little research into the problem has been done. Most change agencies involved in production and dissemination of health information for this category of potential users have continued to concentrate on print forms. Aboyade (1981, 1984) points out the difficulty of bringing about 'appropriate information to people who cannot benefit from the conventional modes of information transfer'.

The other problem is that of identifying, collecting, and organizing the grey literature in the health sector. Most information workers are unable to cope with the management of these information resources.

The importance of packaging and repackaging of information for rural communities has been written about in many papers and has been discussed in many conferences (COMLA, SCECSAL and others) but very little has actually been done to package and repackage information in most parts of Africa.
(Mchombu 1985; Aboyade 1984, 1987; Kaniki 1991). The reason for repackaging and consolidating information is to make it usable by the targeted users. The need for information repackaging in developing countries is much greater because the majority of the population are illiterate and therefore are unable to use most of the available print-dominated information.

Saracevic and Wood (1981) in their standard handbook give some practical guidelines on planning and implementation strategies for what they call 'consolidated information'. They define 'consolidated information' as a "text(s) or message(s) purposefully structured from existing public knowledge to affect the private knowledge and decision of individuals who otherwise may not be able to effectively and efficiently access or use this knowledge from the original amounts or in the original structure and form". The process of consolidating information requires knowledge of the potential users; selection and analysing of the information sources; restructuring the content (packaging and repackaging); and dissemination.

Saracevic and Wood provide guidelines for providers of information on procedures and techniques of repackaging and consolidating information. Later Saracevic (1986) observes that the real problem related to the use of information is not overabundance, but the fact that information is not being packaged in a form useful to decision-makers (at
whatever level) providing a synthesis, evaluation and/or summary of alternate choices'. Indeed the purpose of communicating information to rural communities is to assist them to make informed choices and decisions on health matters.

Rahnema (1982) suggest information services based on audio tapes to preserve and disseminate local culture and knowledge. Obviously lack of electricity in villages would make such aspirations difficult to realize. Omo-Fadaka (1982) proposes more use of the mass media. Rosenberg (1993) argues that it is harder to provide information sources to people who are not used to conventional sources of information, and calls for more efforts in repackaging information for the benefit of such users.

Mchombu (1991) has urged African countries to give more attention to creating their own knowledge and information base which, he says, should be 'designed in such a way that it can incorporate the oral indigenous knowledge'. Mchombu is suggesting some form of packaging and repackaging of information in formats which people can use the information effectively. There is also a sense of patriotism here.

(iv) Extension services
Extension is defined as "Giving of training and learning opportunities to adults in the fields of agriculture, health, and social welfare, and income-generating
For the purpose of this study reference will be made from time to time to the developments in agricultural extension services because extension work in the agriculture sector is well developed. This is appropriate because extension work in both sectors are similar in principle and their linkages in developing countries are recognized (Lipton and de Kadt 1988).

The fundamental importance of health extension has been demonstrated in many health education studies. Extension services facilitate the information transfer from the top (health educators, planners, etc) to the people. In this process extension workers act as a bridge between the technical and policy level on one end and the people on the other. Extension services can be used effectively to impart information and innovations to people in developing countries provided they are carefully planned and managed, they are well resourced and are appropriately staffed.

The problems of education and illiteracy in developing countries make the use of extension workers cost-effective in the sense that they assume some of the roles which would otherwise be undertaken by professionals. Extension workers have the advantage that they can relate the official and technical knowledge with the indigenous knowledge within

The report on Community Education and Participation in the Slow Sand Filtration Project (1978) argues that the role of the community worker (extension worker) is that of a 'guide and stimulator of dialogue' and justifies this view by saying that 'His role is not to teach but to explore the needs and conditions of the community, together with the community members'. There is always the danger that there will be some extension workers who exert their officialdom over the community they serve. It is therefore important to impress on the extension workers that their role is that of a bridge between the government or the agency they work for on the one hand and the people on the other.

In some cases extension workers have been used for economic reasons. In other cases they have been used to fill the gap created by the shortage of health professionals. For these workers to be effective in their work they need to have adequate training and orientation on the programme goals and objectives, they need to be provided with the necessary resources, and need to be regularly supervised. Most important is the need to have motivated extension workers.

Extension services and use of extension workers is relevant to most developing countries because they generally have a shortage of professional manpower to meet the national health care demands. Therefore, nurses, paramedical staff
and health extension workers form the backbone of health care in most of these countries. Loewenson (1989) makes reference to the situation in Zimbabwe, 'in 1981 a national Village Health Workers (VHW) programme was established aimed to train multipurpose community health workers, selected by and based in their own villages, each covering about 500 people'.

The success of extension services depends on the calibre of the extension workers. Byrnes and Kerry (1971) hold the view that 'the relevance of the extension worker's response depends upon his competence: the quality of being adequate or sufficient for the purpose'. McKee (1985) indicates that 'health educators have put much thought and devoted much research into campaigns directed towards the general public but hardly any effort has been spent in briefing the key workers' (home visitors, community health workers, etc). There is some truth in what Byrnes and Kerry are saying. The training that is given to health extension workers, especially volunteer health workers, is generally basic and minimal and is not often followed by refresher courses or frequent supervision.

'Agriculture-health linkages' by Lipton and de Kadt (1988) is an elaborate work on extension services in agriculture and health and how their respective goals can be linked for the common benefit of rural communities. Many examples are given, mainly about experiences in India. The Indian
Council of Agricultural Research (ICAR) sponsors 'extension programs to transfer the technology to farmers. These programs also provide excellent opportunities for interaction between researchers and extension workers' Cernea, et al (1984). There is no reason why the health sector cannot emulate the examples that are evident in the agricultural sector.

(v) Promoting information use

There is a gap in the efforts aimed at promoting the use of information and marketing in the developing countries. The problem is compounded by the fact that providers of health information have to compete with commercial advertising for products which are said to have adverse effects on health, e.g. cigarettes (Royaltey 1988).

It has been said that African societies are not oriented to reading for pleasure or for furthering their knowledge except for passing an examination. This is doubtful. If this is the case then there is more need for promoting and marketing health information. Marketing of information ought to be user-oriented (Cronin 1981; Nawe 1993).

On the basis of the observations and discussions of the previous research efforts in this field it is evident that wide gaps exist in the following areas: Research into the information needs of rural communities, information-seeking
behaviour of potential users, research into methods of harnessing indigenous knowledge, information consolidation and repackaging techniques, and information marketing, to name a few.

Summary

This chapter has covered the broad aims and the background of the study. Previous research efforts on the topic have been reviewed. Problems of disseminating information to predominantly illiterate population have also been highlighted. Some justification has been given regarding the relevance and importance of the study.
2.1 Introduction

Malawi is a small country with an area of 119,140 sq.km., of which 20% is water comprising Lake Malawi (21,000 sq.km) and three smaller lakes, Chilwa, Chiuta and Malombe.

According to the 1987 census the population was estimated to be 8.5 million, with an estimated annual growth rate of 3.2%. Almost 50% of the population is under the age of 15 years. The average household size is 4.5. Over 90% of the population lives in rural areas and is mainly engaged in subsistence farming. The literacy rate is estimated to be 30% (Encyclopaedia of the Third World 1992).

There are nine major tribal groups each with its own language. These are Chewa, Lomwe, Mang'anja, Nkhonde, Ngoni, Sena, Tonga, Tumbuka, and Yao.

House and Zimalirana (1992) identify six causes which are said to attribute to poverty in Malawi: low levels of human capital; nutrition and health status; basic education; training and cognitive skills. They point out that rapid population growth is continuing to exert pressure on social
amenities which results with overcrowding at social service points like hospitals, health centres, and so forth.

2.2 Health Care Delivery System

The Ministry of Health (MOH) is responsible for the country's health care delivery system, including planning, programme implementation, monitoring and evaluation and supervision of health care programmes. The second largest provider of health care accounting for 20% of the national total, is through church and voluntary agencies which operate under the umbrella of the Christian Health Association of Malawi (CHAM). The Local Government Ministry provides health services through town and city councils. The Army and the Police also provide health services for their personnel and their families.

The goals of the Ministry of Health are:-

"To raise the level of health for all of its people through a sound health service delivery system capable of promoting health; preventing, reducing and curing disease; protecting life; and promoting general well-being and increasing productivity."


It is reported in the current national health plan that the
medium-term target as at 1986 was to achieve a drop in early childhood mortality by 33% over a five year period ending 1990; to achieve improvement in maternal child care; and impacting on the extent and severity of illness due to major causes of morbidity among persons from the age of five and above through the primary health care approach. The primary health care strategy is currently in place. It is envisaged that community volunteers will be provided for each defined community, with one referral health post for every 2,000 population, and a health centre for every 10,000 population. At the time of writing this thesis it is not known if any of the above targets have been fulfilled.

Malawi's health care delivery system is decentralised and operates at district, regional, and national levels. Health care is delivered at five levels or services points.

(a) Community level

It is an outreach service provided by mobile clinic. It covers under-5 care, health education, immunization, prenatal and postnatal care. Curative care is very limited.

(b) Health centres/rural hospitals

Provide maternal and child care, nutrition clinics, food preparation demonstrations and outreach service. They are manned by a medical assistant, an enrolled nurse-midwife, and a health surveillance assistant.
(c) **District hospitals**
Provide outpatient and inpatient care, maternity, pediatrics, prevention and laboratory services. They act as referral centres for health centres or rural hospitals. They are manned by doctors, nurses and a wide range of paramedical staff.

(d) **Central hospitals**
Offer specialist care. They act as referral centres for district hospitals and also as teaching hospitals.

(e) **Special hospitals**
Offer specialised care for mental, leprosy and TB cases.

2.3 **Primary Health Care Approach**

Malawi, like other developing nations which are in the process of implementing primary health care (PHC), has focused its attention towards increasing health care activities at the community level, using local volunteers to assist in the delivery of health care and as intermediaries through whom to channel health education and information campaign programmes to rural communities. Implementation of primary health care is largely based on the principle of multisectoral approach involving not only the health sector but as well as other developmental
sectors of government and non-government agencies. At the government level the main actors are the Ministries of Health, Agriculture, Local Government, and Women and Children's Affairs and Community Services, and Departments of Information, Water, and Fisheries. The non-government agencies include church and voluntary agencies, and local offices of international agencies like Unicef and World Health Organization.

Many of the agencies have their own field staff working in villages, mainly in preventive care. The available evidence shows that there is a lack of coordination among the field staff of different agencies operating at the grassroots level. Naturally, some people are left confused when conflicting messages are given by different agents.

Working closely with these field staff, mainly staff of the Ministry of Health, are community-based volunteers. For the purpose of coordination, a committee is appointed in each village (Village Health Committee) composed of the village headman, opinion leaders, retired individuals and a primary school teacher who acts as the secretary. These committees are encouraged to liaise their activities with a local area committee called Local Development Committee (LDC) which coordinates all development activities in the area (health, agriculture, rural water supply, etc). This committee is responsible to the District Commissioner's committee called District Development Committee (DDC) on which the LDC's are
This arrangement of committees is supposed to facilitate "top-bottom/bottom-top" communication and coordination of activities at the district level. There is no evidence of whether the effectiveness of this type of communication set up has been evaluated although in theory the idea looks excellent. In an ideal situation this kind of set up would be expected to enhance a two-way communication, especially in planning and implementation of health programmes and in problem solving.

The other cadres of volunteers are Village Health Workers and Traditional Birth Attendants (TBA's) who are supervised by staff of the Ministry of Health. Traditional birth attendants are based in their own community and handle all maternity cases. Usually they receive some basic training and are supplied with a kit for use in their work. They are encouraged to refer complications to local health centres which in turn refer cases they cannot handle to district hospitals. Some members of Village Health Committees have expressed the problems of delays in getting patients to the next referral unit, and generally of transport problems.

2.4 Status of Traditional Medicine

The role of traditional medicine in health care in Africa and Asia was discussed generally in Chapter 1. This section
relates to the practice of traditional medicine in Malawi and reviews the attitude of the government towards its open practice. The government has not officially endorsed the integration of traditional medicine or defined its status in relation to the health care delivery system. This is so despite the knowledge that traditional medicine is used widely by both the educated and uneducated sections of the population. There are reports of health staff advising some terminally ill patients to return to their homes to try the traditional methods (bwelerani kumudzi mukayese zachikuda).

Some disease control agencies have advocated the use of traditional healers. Wolff and Malewezi (1989) support the involvement of traditional healers in the control of schistosomiasis and express the view that,

"Traditional healers, local political leaders, chiefs and elderly people, etc. will have to be involved at all levels of planning and implementation of schistosomiasis control activities".

Morris (1986) has identified different forms of traditional healing practices in Malawi and explains that the practice is widely used in the country. The different types which he identifies are:

-Sing'anga or ng'anga (traditional healer)
-Ufiti (witchcraft)
-Matsenga (sorcery)
-Ulosi (diviner)

Morris implies that every person in Malawi knows a variety of herbs to cure common ailments. He goes on to say that people only turn to someone with specialist knowledge when their complaint gets serious 'they will visit a sing'anga or herbalist. Such people are found in almost every village in Malawi and they are locally well known for their curing abilities...'. This underlines the extent to which this practice is used in the country.

While traditional healers are widely used for cure, one is not sure about the other types (amfiti, amatsenga, alosi) because they tend to be secretive. Generally they cause confusion among people because they believe that illness is caused by a person or a ghost of someone who died sometime. Traditional healers are the most widely used for cure, while the others mentioned above are secretive and one does not know what to expect from them. Herbalists usually have stalls in market places where they sell herbs, roots and all kinds of medicines (mankhwala or muti). There are some who call themselves "African doctors" and operate clinics, sometimes with in-patient facilities. African doctors often advertise in local papers or radio.

Some traditional healers are dishonest and can cause
problems for people. Not long ago some traditional healers claimed to have the cure for AIDS. These practitioners attracted many people from all walks of life and there were cases of patients absconding from hospital wards to go and try their luck. The government was quick to stop these healers from practising, branding them liars, quacks and thieves who are stealing money from people. In spite of the government's acceptance to establish a register of these practitioners there is reluctance to endorse its open practice alongside the modern practice.

Some members of the Chemistry Department of the University of Malawi and the National Herbarium and Botanic Gardens of Malawi have started to collaborate with some traditional healers with the aim of studying the plants and herbs they use and possibly analyse them for medicinal properties. For this type of collaboration to make an impact there is need to carry out systematic collection and recording of these plants and herbs and of packaging information about them for use by the traditional healers themselves, researchers and medical practitioners. As mentioned earlier traditional healers play an important role in the lives of many people in Africa and Asia, but the practice is shrouded by secrecy and as we know most practitioners are reluctant to share information.

2.5 Disease patterns
The current national health plan (National Health Plan, 1986-1995. Lilongwe: Ministry of Health, 1986) indicates that the most common diseases among children are measles (16.2%); pneumonia (13%); nutrition deficiency (11.2%); malaria (10.1%); anaemia (9.1%); diarrhoeal diseases (8.4%); tetanus (4.2%); diseases of the nervous system (1.6%); accidents and injuries (1.5%); and tuberculosis (0.5%).

The frequent causes of outpatient visits for persons aged five and above are: malaria (26.8%), respiratory infections (15.8%), abdominal complaints (8%), traumatic conditions (5.7%), skin diseases (5%), eye diseases (4.7%), diarrhoeal diseases (4.6%), sexually transmitted diseases (4.2%), diseases of limbs and joints (4%), and dental diseases (2.5%).

The problem of Aids is taken seriously in the country and both the government and non-government agencies continue to increase their efforts to educate and inform people about the severity of the disease and about the need for people to change their sexual behaviour in order to control the spread of the disease. It is difficult to obtain reliable statistical figures locally, and the estimates given by foreign reports are equally unreliable because they are not based on any systematic investigation but speculation.

Bilharzia is endemic in all parts of the country, and
according to Wolff and Malewezi (1989) the disease poses a threat to over 80% of the Malawian population. World Health Organization (1990) points out that schistosomiasis is generally not recognized by people as a primary problem because it causes very little apparent mortality; most people do not know the cause; and they do not know how the disease can be prevented.

"In its various forms it (bilharzia) frequently leads to serious physical, social and economic disability and together with the other major parasitic diseases, can seriously weaken the productivity capacity of the developing countries".

(WHO, Health Education in the Control of Schistosomiasis, 1990).

Human behaviour is critical for the control of both Aids and bilharzia in the sense that both require effective and long-term health education intervention. The objective of most health education programmes is two-fold: to persuade people to change certain behavioural patterns, and/or to inform people about particular health problems or diseases. The government concedes that most communicable diseases which cause infant and child mortality are preventable. The government also observes that the problems which hamper its efforts of raising the health status of the population are:-
(a) Problems of access to health care facilities in rural areas;

(b) Inadequate information on health matters;

(c) Nutritional deficiency (although there is plenty of food in the country most people, particularly children lack sufficient calories due to certain eating habits); and

(d) High birth rate which puts pressure on existing health facilities.

2.6 Health Education and Information Campaigns

The Health Education Unit (HEU) of the Ministry of Health is charged with the responsibility of raising national health awareness and it fulfils this function by providing information about various diseases, and by supervising the informational role of public health inspectors. The mission of the Health Education Unit is:

"To increase public awareness, facilitate community involvement and participation, and promote activities which will foster health behaviour and encourage people to want to be healthy and to do what they can individually and collectively to maintain health and seek help when needed."
In addition, there are a number of specialised health education programmes among which are the Aids Control Programme, Bilhrazia Control Programme, Expanded Programme of Immunization (EPI), and Maternal and Child Health programme (MCH). These programmes include some elements of health information and their staff are involved in health education. The information resources they use also contain some information on health.

The other government ministries which disseminate public health information are the Department of Information, Ministry of Local Government through health departments in towns and cities, Ministry of Agriculture through the Extension Aids Branch, Ministry of Women and Children Affairs and Community Services, and Ministry of Works.

Several non-government agencies also disseminate public health information. These include, Malawi Broadcasting Corporation, Committee of Health Association of Malawi (second largest provider of health care after Ministry of Health), Red Cross of Malawi, Unicef, Christian Service Committee of Malawi, World Vision International, and others.

The Health Education Unit attributes its failure to reach
more people to the following factors:

(a) Inadequate mastery of skills and techniques in information education by the majority of those involved in disseminating health information;

(b) Inadequate coverage of the target population which should be reached with the necessary health information and appropriate technologies to help them handle their problems;

(c) Shortage of qualified health educators at different levels to handle the task of organizing, promoting and directing health education programmes and activities to reach the target populations;

(d) Lack of adequate facilities to produce and distribute appropriate health information and education materials to reach target groups, especially those in high risk categories;

(e) Lack of sufficient knowledge about social, cultural, economic, behavioural, environmental and service-related aspects of the priority problems;

(f) Absence of effective mechanism to coordinate the efforts being made by different sectors and organizations to inform and educate the people on
health;

(g) Absence of effective managerial skills in health information and education programmes and activities; and

(h) The inferior status and weak structure of the Health Education Unit within the Ministry of Health and the absence of a career structure for health educators.


The cause of most problems which are listed above seem to be lack of information expertise to handle the information aspects. There is not appropriate infrastructure to promote access and use of the information which is provided by the Unit and the other agencies. There is need for more effort towards improving the system of disseminating information to rural populations. There is also need to consolidate and package information in forms which the majority of the people can use it effectively.

Information workers in developing countries like Malawi can play an important part in the efforts of improving health communication. The main areas of need are the systematic collection and organization of information resources and
repackaging some of the information for different social groups of the population. The fact that information is conveyed to the public in a fragmented manner is in itself a major problem. Fig. 2 shows the pattern of information flow into communities. It will be noted that information is coming from different directions in an uncoordinated manner.

**Health Information Flow:***

- **NOH & Health Agencies**
  - Mass Media
    - (Malawi Broadcasting Corp.)
    - (Boma Lathu (newspaper))
    - Characteristics:
      - Relies on Agencies
      - Lack health expertise
      - More political focus
      - Use Chichewa & English
  - Health Ext. Workers
    - (Public Health Worker)
    - (KHC Worker)
    - (Health Surv. Ass)
    - (VHW/TBA's/VHC/etc)
    - Characteristics:
      - General lack of inf. resources
      - Lack information training
      - Lack expertise to interpret health messages
      - Infrequently supervised
      - Compete with Non-Health Ext. Workers
      - Isolated from central offices
  - Informal Sources
    - (Traditional Healers)
    - (Opinion Leaders)
    - (Family/Friends)
    - Characteristics:
      - Mixed: literate/illiterate
      - Some health knowledge
  - Non-Health Ext. Workers
    - (Agric. Ext. Worker)
    - (Comm. Dev. Worker)
    - (Social Worker)
    - (Primary Teacher)
    - Characteristics:
      - Lack health focus
      - Limited health knowledge
      - Lack information training
      - Compete with each other
  - General Public (Target Audience)
    - Characteristics:
      - Majority cannot read or write
      - Plural languages
      - National language not spoken by all
      - Isolated & hard-to-reach
      - Limited access to radio
Chapter Three

METHODOLOGY

3.1 Introduction

The prerequisite for designing a suitable research protocol is the need to define in detail the objective of the study, population to be studied, method of data collection, and resource requirement.

The research objective was described in Chapter 1 as to investigate the problems of disseminating consumer health information in Malawi; and to propose some suggestions and strategies which might lead to some improvements.

Information user needs and behaviour are an important part of library research to establish actual information needs and information-seeking behaviour of the population for whom the information service are being planned. Martyn (1974), Busha and Harter (1980), Chen and Hernon (1982) and others, all stress the need for community surveys to assess user needs and information-seeking behaviour of users, and the importance of using acceptable research methodologies.

Phillips (1971) states that "...the survey constitutes a method of data collection that utilizes interview or questionnaire techniques for recording verbal behaviour of
respondents. It constitutes an effective tool for getting at cause-and-effect relationships."

The methodology adopted for conducting the investigation and for gathering the required data depends on the aims of the research and the characteristics of the population to be studied. In this case, the interview method was adopted for the survey on information-seeking behaviour of the sample of the rural population because the population from which the sample was drawn was predominantly illiterate.

In order to achieve the stated objectives it was necessary to obtain some reliable baseline information relating to the way consumer health information is disseminated in the country and about activities of the agencies involved. Some of the specific information that was sought included:

(a) Information about the activities of the agencies which produced and/or disseminated information, and how they went about to fulfil their objectives;

(b) Information about the information-seeking behaviour of the public;

(c) Some feedback on the levels of Aids and bilharzia awareness among the public.

In order to fulfil both the main and specific objectives of
the investigation it was considered appropriate to carry out two parallel surveys in Malawi. One survey was designed to obtain the relevant information from the providers of public health information; and the other was designed to obtain information about the information-seeking behaviour from a random sample of the public.

The two surveys (for providers of health information and for consumers of health information) are interrelated and dependent on each other. One cannot objectively assess the information-seeking behaviour of a population without first having the background knowledge of the way information is conveyed to that population. Similarly, any attempt to plan an information service must be based on the needs of the potential user, in which case decisions must be based on the information-seeking behaviour of the population. The required information would range from the perception of the population towards information coming from outside their community, the population's ability to use the information which is provided to them, and how accessible would the information be to the population.

It is important, therefore, that the required data should be collected systematically, using a recognized methodology for the purpose of rationalising whatever generalizations are considered applicable to the stated objectives of the investigation.
Different survey methods of collecting data were used for each of the surveys. The research methods applied for each survey are presented in two sections: Section A relates to the survey of providers of consumer health information; and Section B to the survey on information-seeking behaviour of a sample of the Malawian rural population.

Section A

SURVEY OF AGENCIES PROVIDING CONSUMER HEALTH INFORMATION IN MALAWI

3.2 Purpose

The aim of the survey was to obtain some reliable baseline information relating to the way consumer health information is disseminated nationally, and about the activities of the agencies which are involved in providing public health information. Such background information is essential for planning of information services.

One or a combination of two or more data collection methods are often used in information research. In this case a combination of questionnaire and interview method was employed because of the need to ensure that reliable data was collected as quickly as possible within the available time. The other factor which was taken into consideration
was that most of these agencies had no previous experience with surveys of this nature. Therefore, it was important that the method that was chosen had to allow for probing for more information where it was appropriate. Some of the information that was sought from the agencies included:

(a) **Their aims for providing information.**

(Their objective in providing information, and what information they expect the public to know about particular diseases);

(b) **Target audiences.**

(Targeted audiences, e.g. children, mother-and-child, particular high risk group, etc);

(c) **Health topics covered.**

(General health awareness, Aids, child immunization, bilharzia, etc);

(d) **Type of information resources used and/or provided.**

(health booklets, media presentations, posters, etc).

(e) **Channels used for disseminating information.**

(Face-to-face communication, radio, printed material, other methods, etc); and

(f) **Collaboration with other agencies.**

(Whether or not individual agencies cooperated with
other agencies engaged in similar work).

3.2.1 Method of gathering data

The Ministry of Health was asked for a list of agencies involved in production and/or dissemination of consumer health information in the country. The aim was to cover all the agencies involved in this activity.

Questionnaires were sent to the agencies one week ahead of the interview appointment, with the advice that they should not complete them until the time of the interview with the researcher. This was meant to give the agencies sufficient time to study the questionnaire and to give them the opportunity to seek clarification from the researcher on the aspects that they were not sure about before they completed the questionnaire.

The researcher requested to interview at least one senior officer from each agency, preferably one at policy-making level. The aim was to ensure that the information obtained was reliable and that it reflected the agency's policy.

One week was allocated for the interviews, 6-11 April, 1992. One week was sufficient because head offices of all the agencies are based either in Blantyre or Lilongwe. The data analysis and discussion of this survey are discussed in Chapter 4.
Different survey methods of collecting data were used for each of the surveys. The research methods applied for each survey are presented in two sections: Section A relates to the survey of providers of consumer health information; and Section B to the survey on information-seeking behaviour of a sample of the Malawian rural population.
Section B

SURVEY ON HEALTH INFORMATION-SEEKING BEHAVIOUR
OF A RANDOM SAMPLE OF MALAWIAN RURAL POPULATION

3.3 Purpose

The objective of the survey was to find out from a sample of respondents which sources of information they perceived to be reliable or trusted for information about health matters. In addition, respondents were to be asked some questions about two health topics, Aids and bilharzia, in order to establish their levels of awareness about the two diseases, mainly about their causes, modes of transmission and prevention.

The interview method of data collection was adopted because of the probability that a high proportion of respondents were likely to be illiterate given the fact that Malawi has a literacy rate of 30%.

A structured interview schedule was considered appropriate for ensuring that responses were obtained in a consistent manner and therefore making the task of coding and analysing simpler. Responses were based on the recall of the respondents.
Health knowledge testing is a technique used in mass communication studies to establish knowledge levels of respondents about specific health topics and for testing respondents' claim for knowledge.

3.3.1 Variables and their interrelationships

The independent variables were: sex, age, educational level and language of respondents. While the gender variable does not need explanation it is necessary to say something about the other independent variables.

(a) Sex Variable
This is a straightforward male/female distribution.

(b) Age Variable
The age variable was categorized in age groups of 15-25; 26-35; 36-45; 46-55; and 56+. This pattern of age grouping is common in health-related social surveys. Respondents were asked for their age, rather than date of birth because of suggestions by several studies that people who are illiterate (mainly in Africa) tend to remember their age rather than their date of birth. For the purpose of analysing data of this study the age groups will be categorized into three: 15-35 years as the younger age group; 36 years and above as the older age group; and those who did not know their age.
(c) Education Variable

The education variable was categorized as follows:

- Never been to school
  (assumed that the person cannot read or write).

- Primary education up to standard 7.
  (assumed to read or write with some difficulty).

- Standard 8 primary certificate.
  (assumed to read and write well in Chichewa).

- Secondary education and above.
  (can to read and write both in Chichewa and English).

The education variable is important for assessing the proportion of respondents who are unable to benefit from the bulk of the existing printed information because they cannot read or write. For the purpose of analysing the data of this study the education variable will be categorized into two: those without any schooling and those with some schooling.

(d) Language Variable

The language variable was considered important because, as noted earlier, Chichewa is the national language and all official communication is conducted in that language
and/or English the official language. The problem is that Malawi has nine major tribal languages and numerous dialects all of which differ from Chichewa.

The dependent variables were expected to be the sources of information which respondents perceived as their reliable or trusted sources for information on health matters, e.g. health centre, radio or family members/friends, etc.

It was considered inappropriate to ask for respondents' opinion as to whether they found the information being disseminated to them to be suitable for their health needs. It would be far-fetched to expect respondents to articulate the correlation between a specific episode of information intervention and the level of health status they may be enjoying at a given period of time. It is common knowledge that there are many factors which contribute to the health status of a community and that the information component is just one of them.

3.3.2 Population to be studied

Provision of consumer health information to rural people is of crucial importance because over 90% of the Malawian population lives in rural areas. People living in urban areas are relatively better provided with health facilities and have access to more health care workers than are rural people. Health country reports of most developing countries
show a concentration of more and better health facilities and personnel in urban areas than in rural areas which are often without good access road network. Furthermore, urban populations are more likely to have access to safe drinking water, better sanitation services and a variety of social amenities which impinge on the health of the people.

3.3.3 Selection of study area

Zomba was selected from the country's 24 districts of the country as the study area. Zomba district was selected for the following reasons:

- Several epidemiological and KAP studies had been carried out in Zomba district in recent years and therefore the researcher was certain of finding some essential baseline information for his study.

- Although bilharzia is endemic in many parts of Malawi, the choice of Zomba was considered appropriate because it is one of the designated areas for the Ministry of Health Bilharzia Control Project. Some studies on Aids have been carried out in the district as part of the national programme.

- In socio-cultural terms, Zomba district was considered a suitable study area because its population is composed of several large tribal groups, namely Yao,
Ngoni, Lomwe, Mang'anja, and Magololo.

- Zomba as the seat of the university provided some logistical support for the researcher, such as library facilities, cheap accommodation, reprographic and typing facilities and possibility of hire of vehicle for field trips during the survey.

Zomba district is made up of five traditional authority (TA) areas: Chikowi, Kumtumanji, Malemia, Mlumbe and Mwambo. Traditional Authorities are what used to be called chiefs in the past and are the effective traditional rulers of their traditional areas in the district. Traditional Authorities work very closely with District Commissioners who are the official representatives of the head of state in the Office of the President and Cabinet. In Malawi the administrative structure is such that every village falls within the jurisdiction of a Traditional Authority or Chief.

Two Traditional Authority areas, Malemia and Mwambo, were selected from the five areas by random process when it became clear that it was not feasible to include all the five areas due to constraints of resources and time. A set of census maps obtained from the Statistical Office were used to select the enumeration areas and to map out villages for the survey. The enumeration areas (EA's) were used as clusters from which to select villages. An
enumeration area has a population of 1,000+250 persons.

A cluster method was applied at this level of selecting the survey area because of its advantage of economy. It was feasible to cover villages spread over a wide area irrespective of how remote they were or the size of their inhabitants. The limitations of the cluster method like lack of typicality were recognized. But, this problem was to be solved by spreading the clusters across the two selected traditional authority areas. It was hoped that some diversity would be achieved which would yield valid data for the study in spite of the sample being relatively small.

<table>
<thead>
<tr>
<th>Malemia T.A</th>
<th>Mwambo T.A</th>
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<tbody>
<tr>
<td>Chimbalanga</td>
<td>Chande</td>
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<td>Kapyepye</td>
<td>Chilole</td>
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<td>Mbuliwa</td>
<td>Kathebwe</td>
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<td>Mtweice</td>
<td>Mandawala</td>
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<td>Nampwanga</td>
<td>Mbilima</td>
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<td>Nyani</td>
<td>Nambwale</td>
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<td>Savula</td>
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<td>Shapala</td>
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</table>

The only way of knowing how many households there are in a village is to ask the village headman himself or herself.
The researcher, equipped with an introductory letter from the District Commissioner for Zomba, visited the selected villages prior to the survey. These preliminary visits gave the researcher the opportunity to familiarize himself with the area. The visits were also useful for mapping out the households from which respondents were to be interviewed. A household is defined as 'several members of the family sharing the same food although they may sleep in separate houses (The Dictionary of Demography 1985).

On average, the villages that were selected were found to have between 60 and 75 households comprising about 120 dwelling units. Houses are generally clustered together based on family relationship (parents, adult children, cousins, in-laws, grand-parents, etc).

3.3.4 Pilot study

A pilot study was carried out on a small sample of people at Naisi in Zomba District. The purpose of the study was to test the appropriateness of the survey instrument before carrying out the main survey.

As a result of the study some questions were modified. The original idea of tape-recording interviews was abandoned when it was discovered that people were reluctant to have their responses recorded mechanically. For the same reason
names of respondents were not recorded on the interview schedule.

The pilot study proved useful for refining the interview schedule, particularly as the original questions were in English. It was not possible to carry out a reliability test due to constraints of time and resources. The advice given by programme managers of the Aids Control Programme and the Bilharzia Control Programme, and by a lecturer in the Department of Chichewa and Linguistics of University of Malawi was helpful in the refinement of the questions.

3.3.5 Time frame

The survey was planned for three months, between April and June 1992. The length of the time frame was dictated by time and resources available to the researcher.

3.3.6 Data collection

The survey method of data collection was considered most appropriate amongst other methods which would equally have served the purpose better, for instance, the 'participant observation' method. The survey method was selected because of the need to cover a larger sample and of its advantages when the interview technique is used.

The interview schedule based on structured questions was
administered to respondents who were either the household head or his/her spouse or the adult child found at the selected household. The interview technique was considered most appropriate because it was envisaged that most of the respondents would be illiterate. This assumption was based on the fact that Malawi has a low literacy rate as has been noted earlier. The interview schedule was in for sections:

Section 1: Sought demographic data of the respondents (i.e. independent variables) of sex, age, education, and language.

Section 2: Asked respondents to indicate information sources which they perceived to be reliable or trusted for information about health matters.

Section 3: Asked questions about radio ownership and/or access to radio health messages.

Section 4: Asked questions about two health topics (Aids and bilharzia), regarding the causes and prevention.

Responses were ticked in the corresponding boxes of the interview schedule by the interviewer. Every effort was made to ensure that consistency of recording responses was
maintained throughout the exercise.

3.3.7 Method of analysis

Descriptive statistics were applied to establish features of central tendency and relationships between dependent and independent variables, using Minitab Statistical Package. Chi-square was used where appropriate to test agreement or differences of observations yielded by the survey. The main observations were as follows:-

(i) To observe response frequencies of sources of health information perceived by respondents;

(ii) To observe gender differences in choice of sources of health information by respondents;

(iii) To observe the patterns of responses by sex, age, and education independent variables.

(v) To observe how much respondents knew about the two health topics, Aids and bilharzia, regarding their causes and prevention.

3.3.8 Problems and Limitations

More time was spent in trying to obtain government
clearance for the field survey to be carried out in Malawi. Clearance had to be obtained from the government and from the Ministry of Health because the topic is health-related. It was also necessary to obtain clearance from the District Commissioner for Zomba in whose area the survey was to take place.

Some villages were visited more than once because on first or second visits the village headman was away or there was a funeral or wedding in the village. These are some of the problems which should be expected when conducting field research in Africa which are not common in industrialized societies.

Travelling between villages took a considerable amount of time, most especially to villages without access roads to which the researcher had to walk or cycle.
Chapter Four

ANALYSIS AND DISCUSSION OF FINDINGS OF THE SURVEY
OF CHANGE AGENCIES INVOLVED IN DISSEMINATING
HEALTH INFORMATION IN MALAWI

4.1 Introduction

The purpose of the survey was to obtain essential baseline information about the way health information was conveyed to the public and about the operations of the agencies involved in the information transfer process. Some of the specific information which were sought included:

- Health topic(s);
- Objective of the information campaign;
- Information which people were expected to know;
- Target audiences;
- Type of material and methods of dissemination;
- Language of health messages; and
- Whether individual agencies coordinated their efforts with those of other agencies involved in similar work.

The data gathering methodology was discussed in Chapter 3. Fourteen out of the twenty agencies known to communicate health information nationally were covered. That accounted
for 70% of the national total.

- Health Education Unit of the Ministry of Health.
- AIDS Control Programme.
- Bilharzia Control Programme.
- Christian Health Association of Malawi (CHAM).
- Christian Service Committee of the Churches of Malawi.
- Lilongwe City Health Department.
- Mzuzu City Health Department.
- Red Cross Society of Malawi.
- Department of Information (Ministry of Information and Tourism).
- Community Development Section (Ministry of Women and Children Affairs and Community Services).
- Malawi Broadcasting Corporation.
- World Vision International.
- Unicef.
- World Health Organization (Malawi).

4.2 Findings

Responses from the agencies are summarised in Table 1. The Table shows names of agencies, their chosen health topics, the objective for providing information, target audience, language of communication and information resources.
### Table 1: Summary of Findings

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<tr>
<th>Agency</th>
<th>Topic</th>
<th>Aims</th>
<th>Target Lang</th>
<th>Comm/Mod</th>
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<tbody>
<tr>
<td>HEU/MCH</td>
<td>General Health</td>
<td>Education</td>
<td>All Chi</td>
<td>H/talks</td>
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<td>Prevention</td>
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<td>BCP</td>
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<td>Plays</td>
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<td>CSC</td>
<td>MCH</td>
<td>Education, Mother Child</td>
<td>Mother Chi</td>
<td>Seminar</td>
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<td>Immunization, Prevention</td>
<td>Child</td>
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<td>Mzuzu City</td>
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<td>MLN Red Cross</td>
<td>STD</td>
<td>Prevention, on blood</td>
<td>Adult Chi</td>
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<td>Films</td>
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<td>MIT</td>
<td>Family Health</td>
<td>Education, Mothers Family</td>
<td>All Chi</td>
<td>H/talks</td>
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<td>Family plan</td>
<td>Eng</td>
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<td>MBC</td>
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</table>

### Key to Agencies

- **HEU/MCH**: Health Education Unit, Ministry of Health
- **BCP**: Bilharzia Control Programme
- **CHAM**: Christian Health Association of Malawi
- **CSC**: Christian Service Committee of Churches of Malawi
- **MBC**: Malawi Broadcasting Corporation
- **MIT**: Ministry of Information and Tourism
- **MNCAC**: Ministry of Women and Children Affairs and Community Services
- **NACP**: National AIDS Control Programme
- **WVI**: World Vision International

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**Note:** The table provides a summary of the findings related to various agencies and their specific topics, aiming to highlight the communication and promotion strategies used. It includes details on the language targeted and the methods employed (e.g., print, films, radio, etc.). The key to agencies clarifies the abbreviations used in the table.
4.3 Discussion of findings

Table 1 summarises the findings of the activities of the agencies regarding their aims, methods of dissemination, language of communication and information resources. Most programmes were directed to all social groups of the population although they tend to concentrate on women and young children.

Three major observations are made from the analysis in Table 1. First, it is obvious that most programmes have a leaning towards women and young children rather than men and grown-up children (e.g. MCH, immunization, nutrition, child spacing or family planning).

Second, there are duplications in the coverage of topics between the agencies. All the agencies, except the health departments of the cities of Lilongwe and Mzuzu, provide national programmes. Such duplication is more evident at the village level where extension workers from different agencies can be found to be doing the same work but separately.

4.3.1 Coordination
The Health Education Unit (HEU) of the Ministry of Health is responsible for health education and information campaign programmes in the country. In principle, the Unit is expected to lead and coordinate all activities in this area and to provide guidance to the other agencies which are involved in dissemination of public health information. It was obvious that individual agencies planned their own programmes without regard of what the other agencies were doing.

Only the two specialised disease control agencies for Aids and Bilharzia were found to be well structured and staffed. Although both programmes operate under the auspices of the Ministry of Health, they are autonomous in every sense. A large part of their funding comes from external sources under bilateral cooperation, and between them they have more resources at their disposal than the Health Education Unit or the other agencies combined.

The evidence gathered during the survey showed that there was considerable duplication of efforts and wastage of resources in the whole operation of providing information to the public. The major causes were lack of coordination mechanisms and a defined policy within the health sector (Ministry of Health) to give direction to all those involved in disseminating consumer health information. The main instances in which duplication was obvious were choice of health topics, selection of target population,
selection of catchment areas and planning of visits to villages by extension workers.

The manner in which resources were used was generally found to be wasteful. In one example, four agencies (Health Education Unit, Christian Council of Malawi, Christian Health Association of Malawi, and Community Development Section) were all found to be providing nutrition education programmes concurrently in the same catchment area. Clashes of this nature would have been avoided had there been some coordination.

The frontline extension workers representing different agencies seemed to compete with each other. There were reports of conflicting messages given and people were left confused as to which piece of information to take seriously and which one to ignore. Kamwendo, et al (1986) points out this problem in her study on schistosomiasis. It is hard to imagine how the efforts of all these agencies can be maximised for the benefit of the majority of the Malawian rural population in the absence of a formal policy and infrastructure to facilitate the flow of information into communities in a coordinated manner.

4.3.2 Language of communication

Chichewa and English are respectively the national and official languages of Malawi. All official public notices
and announcements are conveyed in either one or both languages, depending on the population that is targeted. The state radio, Malawi Broadcasting Corporation, only broadcasts in Chichewa and English.

It was confirmed during the survey that all information material (print material, audio-visual aids, poster captions, etc) used for health education were written in Chichewa language. Where English was also used the information was meant for the urban population which is presumed to be literate.

The World Health Organization (Malawi) and Unicef to some extent were the only ones distributing material written in English. Usually, these offices act as clearinghouses of publications produced by their parent organizations and the main publishing languages are English, French and Spanish.

Only three agencies were found to include one or two other languages in addition to Chichewa and English. The Mzuzu City Health department (located in Northern Region) included Tumbuka which is the major language of that region. The Lilongwe City Health Department included some Arabic. The Aids Control Programme included information in Tumbuka and Portuguese. This was the only agency which favoured use of more languages of the country. There are more than 1.5 million Tumbuka speakers in the country,
covering the whole of the Northern Region. The numbers of Mozambican refugees were estimated to be over 1 million before their repatriation began end of last year.

Respondents were generally reluctant to discuss the question of plural languages. Debate on use of other language in official communication is a sensitive issue which most people prefer not to talk about. It was argued that health extension workers based in non-Chewa areas were available to reinforce messages in local languages or dialects. Obviously this is not the right way of imparting innovations.

The long-term consequences of the policy as it stands are that some sections of the population are bound to be deprived of some valuable information because of language differences. The fact that the mass media and the bulk of the printed information resources are in only two languages is a barrier in itself for some sections of the population. Some of the possible long-term consequencies for this policy are hard to imagine. These are some of the anticipated consequencies:

(a) Recording of innovations in languages other than the national and official languages is not likely to flourish because of lack of infrastructural support (lack of publishing and marketing avenues, lack of financial support, etc);
(b) Sharing of innovations in print and audio-visual forms, as well as dramatic presentations through the mass media (radio), across language barrier will be curtailed;

(c) There is the potential danger that some population sections could ignore certain valuable information simply because the information is in a different language; and

(d) Some languages are bound to be under-represented in recorded forms (print, radio scripts, poster and picture captions, etc) because the existing policy does not encourage their proliferation. Recording of oral tradition will suffer.

Although the question of language choice is controversial, we are aware that it is difficult to run a country on two or more languages. The problems are more complex when one tribal language is chosen to be the national language. The situation in Cameroun where English and French are used is a typical example. Tanzania succeeded because Kiswahili does not belong to any one tribal language: it is a mixture of words from different tribal languages, Bantu, Arabic, as well as English (e.g. motokala = motor car). Kenya is moving towards the same direction although Kiswahili there is not as developed as in Tanzania.
The language variable has been discussed in more detail for the simple reason that it has far reaching implications on information providers who have to cater for different competing languages in developing countries. There is the need to consolidate some information so that people who speak other languages can also benefit from the available information campaign programmes.

4.3.3 Methods employed to disseminate information

The main methods employed to disseminate health information were: face-to-face communication using health workers and health extension workers; the mass media (newspapers and radio); and printed and audio-visual material, including posters and pictures. Use of mobile public address vans was found to be minimal. Bad roads were given as the reason for not using the vans.

(a) Face-to-face communication

All but one agency (1 out of 14) maintained teams of extension workers in rural areas whose duties included teaching of health education, providing information and organizing health-related community activities.

In terms of numbers, Ministry of Health maintains the largest workforce, comprising trained extension workers,
volunteer health surveillance workers and Traditional Birth Attendants. The second largest workforce of health extension workers is that of the cooperating churches and voluntary agencies which provide health care under the umbrella of the Christian Health Association of Malawi (CHAM). Town and city councils provide most of the health extension workers in urban centres.

The large numbers of non-health extension workers based in rural areas belong to the Ministry of Agriculture and Community Development Section of the Ministry of Women and Children Affairs and Community Services and a few health-related projects. Although the main foci of these agencies are agricultural extension, rural development and social mobilization, they all include some elements of health, mainly nutrition, sanitation, safe drinking water, immunization and child spacing.

One major issue which raised some questions concerned the calibre of most extension workers in terms of level of training and orientation to the work they were doing, often without frequent supervision. The general feeling was that there was need for the various agencies to organize coordinated training or orientation programmes for their extension workers in order to avoid the danger of them giving conflicting messages to the public, and most importantly to familiarize them with the range of materials that they have to handle in carrying out their
work. There was need to impress on the extension workers that they were not competitors but were there to work towards a common goal -- to raise health standards and public health awareness.

The representative from the Health Education Unit made reference to a survey carried out by the Unit in 1991 to test how well extension workers knew and could interpret health messages they were expected to impart to members of the public. A high proportion were found to lack confidence in interpreting messages depicted on posters. Most of the extension workers could not use audio-visual aids with confidence or operate a simple projector (Survey Report on Education, Information and Communication, Health Education Unit 1991).

(b) Mass Media

Mass media includes radio, television and newspapers. Malawi has no television, and that leaves radio and newspapers only.

(i) Radio

Only three agencies used the radio to disseminate health information regularly: Ministry of Health which was coordinated by the Health Education Unit; Ministry of Agriculture, coordinated by the Extension Aids
Branch; and Community Services Section of the Ministry of Women and Children's Affairs and Community Services.

There were general complaints, especially from the Health Education Unit and the two specialised agencies for Aids and bilharzia, that the time allocated for health-related messages on the radio was inadequate. Less than 12 hours per week were devoted to health topics out of 133 hours per week of broadcasting. Even then broadcasts of messages, and sometimes programmes, were erratic and did not appear as scheduled programmes.

The state radio only has one channel, and a big chunk of broadcasting time is devoted to political issues and party political songs. Furthermore, Malawi Broadcasting Corporation has no health or medically trained personnel on its staff to plan and present health messages or programmes in a manner that would appeal to listeners.

(ii) Newspapers and magazines

There are six newspapers and magazines which include health-related news in Chichewa. Usually, they contain long articles on specific diseases and brief messages, and advertisements of pharmaceutical products.

Boma Lathu

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It is a free monthly Chichewa newspaper published by the Department of Information in collaboration with Community Services section of the Ministry of Women and Children Affairs and Community Services. The paper contains a wide coverage of topical health news and reports of activities taking place in various parts of the country. Over 60,000 copies are produced monthly for distribution to villages through the Ministry of Health units.

Za Achikumbi
It is a free monthly newsletter produced by Agricultural Extension Aids Branch to promote agricultural extension. The newsletter contains health news, mostly on nutrition, breastfeeding and weaning, personal hygiene, and safe drinking water. The magazine is distributed by extension workers during agricultural field days. These events attract many people.

Moni Magazine
It is a monthly Chichewa magazine published by Likuni Press and it costs KL.00 (14p). The magazine often includes health news: long articles as well as brief messages. Circulation is curtailed by cost.
Odini
It is a monthly Chichewa magazine published by Montfort Press and costs K1.00 (14p). Like Moni Magazine, Odini regularly includes health news in the form of feature articles on specific diseases or brief messages. It is widely circulated in villages through the church.

Malawi News Weekend Edition
This is a weekly English paper with a Chichewa inset, published by Blantyre Print at a cost of K1.00(14p). The paper also includes articles on health topics and brief messages, and reports of health-related activities taking place in various parts of the country.

Police Magazine
It is a bi-monthly magazine in both English and Chichewa produced by the Police Force. Although its focus is on force activities, the magazine covers news of general interest including health. The cost of K3.00 (44p) also curtails its wider circulation in rural areas.

(c) Print material

A wide range of printed materials are used for teaching people about health and for general dissemination with
the aim of raising public health awareness.

What some of us cannot understand is why, in spite of the knowledge that Malawi has a low level of literacy, agencies are continuing to produce and disseminate more printed messages than audio-visual formats, posters or other visual materials. For instance, the researcher collected ten leaflets written in Chichewa and some with an English section, all on Aids. New literates would find some of them difficult to read. Presentation of facts is not consistent in some of them.

This somewhat uncontrollable rate of Aids information production is not only typical in Malawi but is common elsewhere. In most cases users cannot cope with the sheer volume of flimsy materials which are pushed to them. Corea (1991) tells of a complaint from a Sri Lankan, 'Flimsy bits of information inundate and confuse us'.

Posters, pictures and other illustrated material were used more in health education and information campaign programmes. In the absence of any empirical evidence it is difficult to know whether people perceive these sorts of materials appropriate as sources of information or whether they are able to decipher the intended meanings from them.
Evaluation of individual posters and other types of similar materials is outside the scope of this study. But, it should be emphasised that this is an area which needs to be studied systematically, preferably using a selected number of posters on a controlled/experimental community over a period of time. A Kenyan student is currently studying this aspect in Kenya.

The Department of Information was the only agency which used billboard advertising of health messages, mainly about AIDS and immunization. Billboard advertising was found to be more common in towns and cities than it was in the rural areas. Experience suggests that billboard advertising is mostly used by large firms for sales promotion. Most advertised products in Malawi and in neighbouring countries are beer, cigarettes, soaps and cars. It is difficult to find a firm that is willing to advertise a health message unless the message was linked to a product, e.g. cough mixture.

(d) Audio-visual material

Audio-visual materials were sparingly used and not readily accessible in rural areas. Their use was mainly in urban areas because of availability of electricity. It was found that where audio-visual materials were available they were mostly used for training of health workers themselves than they were used for members of
the public. The answer would be "we use these for the training of our own staff"; "these are difficult to use in villages, there is no electricity, etc".

Throughout the period of the survey the researcher did not come across any vans going round the villages to deliver health messages. People indicated that they had not been visited by public address vans for many years. On the other hand, the vans which were seen regularly were those of agricultural extension teams delivering agricultural messages, showing films or presenting puppet shows. Perhaps these are some of the examples that the health sector can emulate.

(e) Traditional communication methods

Traditional communication methods of drama, role-play, songs and folklore were increasingly being used for teaching health education and imparting health messages in rural areas. This was the only area in which there was evidence of cooperation, involving Ministry of Health, Ministry of Education and Culture, Unicef and Department of Fine and Performing Arts of University of Malawi (Kalipeni and Kamlongera 1987).

People in villages are not only encouraged to take part in these activities but are also involved in planning, in selection of themes and composing songs which convey
health messages. The Ministry of Health has a musical band which travels across the country playing songs that convey health messages. Some local bands in villages have been sponsored to compose traditional songs to play in their communities for a small fee and recording rights.

At the time of the survey the most popular themes were Aids (edzi), child spacing (kulela) and immunization of children (katemera). A Malawi band won the Commonwealth Youth Service Award for 1993 and the following comment appeared in the 1993 June/July issued of Commonwealth Currents:

"An award also went to the Chisomo Cha Mulungu Band of Malawi. Through songs and plays that the 11 members have composed and written themselves, the group serves as an outreach programme to inform rural communities about the dangers of diseases, including HIV/AIDS, as well as promoting development in agriculture, forestry and fisheries."

One hopes that use of traditional communication methods of songs, drama, role-play and folklore in Malawi will be maintained as permanent features. These methods were used in several African countries several years ago but most of them did not continue due lack of support. Most did not make any lasting impact on the people.
University of Malawi's Department of Fine and Performing Arts has successfully applied this concept in its drama and music courses. The main feature of the programme is the "Travelling Theatre" which takes students to many parts of the country to perform. A joint pilot study carried out at Liwonde by the department, Ministry of Health, and Unicef, involving university students and villagers in the area proved successful and popular as a means of teaching people about health issues (Kalipeni and Kamlongera 1987).

4.3.4 Information resources (material)

It was discovered during the survey that not all agencies involved in health education and information dissemination produced their own material. All but four agencies (Aids Control Programme, Bilharzia Control Programme, Unicef and WHO) obtained their material from the Health Education Unit of the Ministry of Health. This implied that not all the agencies involved in providing information were actually contributing to the growth of information resources. They were merely enhancing distribution of the resources from the same one source.

Table 1 above shows that a wide variety of materials are used: print material, audio-visual material, audio and video tapes, films, and others. There was evidence showing
that most materials were used by health workers for their own training. Very rarely were they used in the villages to reinforce health talks given to the public. There was no evidence to suggest that some materials were left with people in villages after health talks. If some materials were left with the people, preferably with members of Village Health Committees or village headmen, it is likely that over a period of time these materials would accumulate to sizeable collections which people could use from time to time.

A representative of the Health Education Unit concurred that most of the materials which the Unit distributed were not displayed in public places where people could see them. Most materials, especially posters were found displayed in offices, treatment rooms or in clinics. Reference was made to a survey carried out by the Unit in 1991 whose aim was to find out the extent to which posters were accessible to members of the public. The findings of that survey are shown in Table 2 below.

Table 2

<table>
<thead>
<tr>
<th>Displayed material</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>in offices</td>
<td>30%</td>
</tr>
<tr>
<td>in waiting rooms</td>
<td>15%</td>
</tr>
<tr>
<td>in wards</td>
<td>10%</td>
</tr>
<tr>
<td>in areas where clinics</td>
<td>8%</td>
</tr>
</tbody>
</table>
are held (MCH, immunization).

The findings of the survey, though based on evidence from one unit, confirm what had been observed during the survey that most materials are displayed or left lying in offices or working rooms in health institutions. This is an area which needs to be re-examined if people are expected to benefit from the large volume of material that are produced and disseminated by these agencies.

The problem that is often overlooked is that many rural areas in Africa generally lack suitable display facilities for pinning posters where they can remain for some time. In most villages the only suitable areas are outside a school or under a tree where village gatherings take place. Usually posters deteriorate fast due to moisture, bird droppings, or people tearing some bits to roll tobacco. This means that someone in the community must assume the responsibility of replacing the posters regularly. In order to avoid that problem members of Village Health Committees, village headmen or school teachers resort to displaying these posters in their houses.

The problem of maintaining up-to-date records of materials distributed to various parts of the country was expressed
by members of the Health Education Unit. None of the other agencies confirmed that they maintained up-to-date records either. It seemed that the agencies were more concerned with the quantities of materials they produced or sent out to the people, rather with finding out whether the materials reached the targeted areas or how the materials were used by the people. There were reports of certain areas being over-supplied while others were under-supplied.

4.3.5 Distribution of material

Most agencies mentioned the problems of transporting their resources to various parts of the country, especially to the isolated areas. It was not surprising to find that most community-based health workers were complaining of not being able to replenish their stocks of resources when they have run out. They also complained that they were the last to know of any new materials that were issued by their agencies because of being far away from the main offices.

Further enquiries revealed that the distribution system worked up to the offices of the District Health Inspector. But from there distribution to Traditional Authority areas was erratic, and it depended on the Traditional Authority's (chief) messenger dropping in for collections on his weekly errands between the chief's headquarters and the District Commissioner's offices. In that way he would carry a few small boxes of materials to the villages. These messengers
use bicycles and some have to travel long distances which means they can only carry very little at a time.

Large quantities of health material are lost or sold before they reach their final destination. Offices of District Health Inspectors visited by the researcher during the survey were found littered with piles of material (posters, booklets, newspapers, pictures, etc). The problems of distribution not only affected the people but also the community-based health workers as we noted earlier.

4.3.6 Personnel and Training

It was found out that not one of the 14 agencies employed staff trained in information work or sought professional advice in information handling and dissemination. It will be remembered that lack of expertise in information skills was identified as one major factor hampering the efforts of the Health Education Unit.

The majority of extension workers received no orientation or any form of training in handling of information material which they were required to use in their work. A better arrangement would have been to provide orientation courses for extension workers from different agencies in order to familiarize them with the range of information resources and train them in interpreting health messages correctly. Coordinated training programmes involving workers from the
different agencies would help to develop a common sense of purpose among the extension workers. This is essential when they are in the field where they have to work as a team rather than as competitors.

4.4 Public access to health information

There are no health information services accessible to the public in Malawi. The only opportunity people have is that they can write to the radio station to ask health questions which are answered in a programme called "Akuyankhani a Dokotala". Presentation is not satisfactory at all because people are not given answers to their questions immediately, answers to questions are given hastily so as to cover more questions during the allocated time of fifteen minutes, and answers are often not given in an appealing manner because the presenters are not appropriately trained in medical work.

We have no statistics giving the extent to which printed easy-to-read health materials are used by the public. All we know is that some of these materials are stocked by the National Library Service and are available in rural areas where the Service operates library centres or village libraries. Library centres are a collection of materials housed in a village school, church or community hall and are run by community-based volunteers who are frequently supervised by staff of the National Library Service.
Two main primers used in literacy classes contain elements of health information relating to immunization, advice on compliance with treatment, nutrition and hygiene. "Tigawane Nzeru; buku lowerenga" (1985) produced by the National Literacy and Adult Education Programme is targeted at new literates. The other primer "Zengerezu adalinda kwawukwawu" (1992) produced by the same institution contains ten health topics. But, the information is presented in such a way that it is contrasted with the practice of traditional medicine where the latter is portrayed as devilish.

The position now is that members of the public have no access to any form of health information apart from that which is given by Ministry of Health and health-related voluntary agencies. Therefore, more effort is required to provide more access points within the communities.

4.5 Summary

The survey revealed that dissemination of consumer health information in Malawi is fragmented and uncoordinated. It was also observed that lack of policy and information infrastructure within the health sector made it difficult to disseminate information to rural communities in a coordinated manner (see Fig. 1 in chapter 2).

Lack of trained personnel in information work in all the
agencies was seen as a major handicap. The majority of extension workers employed by the agencies to work in rural areas did not receive adequate orientation or training to familiarize them with the range of information resources, how to interpret messages from posters or pictures, and in handling audio-visual media and equipment.

Distribution problems were the main causes of frustration for most agencies. Most of the resources did not reach the targeted audiences or if they did they arrived very late. On the basis of these findings it is concluded that there is urgent need to improve the system of disseminating health information for the public in Malawi. Improvements can only come about after initiatives have been taken by government (Ministry of Health), relevant change agencies, as well as information workers, to re-examine the entire system of health information transfer. The immediate need is for a definite policy to coordinate the activities of providing health information to the population.
Chapter Five

ANALYSIS AND DISCUSSION OF FINDINGS OF
THE SURVEY ON INFORMATION-SEEKING BEHAVIOUR

5.1 Introduction

The research methodology used for gathering data for this survey was discussed in Chapter 3. A survey was conducted of 275 randomly selected sample of rural Malawians. The aim was to study their health information-seeking behaviour (i.e. their sources of health information). The survey also included a knowledge test on two health topics, Aids and bilharzia. A "split half" technique was used whereby half of the sample (+-5) was asked questions about Aids and the other half (+-5) was asked about bilharzia.

The purpose of the survey was to gather some relevant data on the system of disseminating health information to rural populations and on the health information-seeking behaviour of the Malawian rural population, with a focus on the following aspects:-

(a) The extent to which people are able to access and use the information which is provided by various agencies and the underlying problems;
(b) The sources most perceived by the people as reliable sources for health information;

(c) Differences of perceived health information sources between male and female members of the public;

(d) Problems of access to radio health messages among the rural population; and

(e) Rates of Aids and bilharzia awareness among the rural population.

Table 3
Demographic analysis of respondents

N=275

<table>
<thead>
<tr>
<th>Variable</th>
<th>Distribution</th>
<th>% total</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEX: Male</td>
<td>101</td>
<td>36.7</td>
</tr>
<tr>
<td>Female</td>
<td>173</td>
<td>63.0</td>
</tr>
<tr>
<td>1 (missing value)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGE: 15-25 yrs</td>
<td>59</td>
<td>21.5</td>
</tr>
<tr>
<td>26-35 yrs</td>
<td>52</td>
<td>18.9</td>
</tr>
<tr>
<td>36-45 yrs</td>
<td>31</td>
<td>11.3</td>
</tr>
<tr>
<td>46-55 yrs</td>
<td>27</td>
<td>9.8</td>
</tr>
<tr>
<td>56+ yrs</td>
<td>42</td>
<td>15.3</td>
</tr>
<tr>
<td>Not stated</td>
<td>64</td>
<td>23.3</td>
</tr>
<tr>
<td>EDUCATION: Not been to school</td>
<td>171</td>
<td>62.2</td>
</tr>
<tr>
<td>Up to std 7 primary</td>
<td>79</td>
<td>28.7</td>
</tr>
<tr>
<td>Primary certificate</td>
<td>20</td>
<td>7.3</td>
</tr>
<tr>
<td>Secondary+</td>
<td>4</td>
<td>1.5</td>
</tr>
<tr>
<td>LANGUAGE: Mang'anja</td>
<td>88</td>
<td>32.0</td>
</tr>
<tr>
<td>Yao</td>
<td>163</td>
<td>59.3</td>
</tr>
<tr>
<td>Lomwe</td>
<td>14</td>
<td>7.3</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>1.5</td>
</tr>
</tbody>
</table>
5.2 Interpretation and Discussion of Data

The discussion on the data is presented in three sections based on the main areas of emphasis of this investigation: (a) The perceived sources of health information among the survey sample; (b) Radio ownership and access to radio health messages; and (c) Results of the health knowledge test on two health topics, Aids and Bilharzia.

Chi-square tests will be applied where appropriate in these analyses. Chi-square is considered suitable for frequencies (Gravetter and Wallnau 1991; Ryan, et al 1992).

5.3 Perceived sources of health information

Respondents were asked to state information sources which they perceived to be their reliable and trusted sources of information on health matters. Several possible options were given from which respondents were expected to indicate one or more sources.
Table 4

Distribution of responses

N= 275

<table>
<thead>
<tr>
<th>Source</th>
<th>Freq.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital/clinic</td>
<td>166</td>
<td>60.4</td>
</tr>
<tr>
<td>Health extension worker</td>
<td>76</td>
<td>28.4</td>
</tr>
<tr>
<td>Agric. extension worker</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Social worker</td>
<td>4</td>
<td>1.5</td>
</tr>
<tr>
<td>Literacy class</td>
<td>8</td>
<td>2.9</td>
</tr>
<tr>
<td>Radio</td>
<td>96</td>
<td>34.9</td>
</tr>
<tr>
<td>Family/friends</td>
<td>46</td>
<td>16.7</td>
</tr>
<tr>
<td>Local leaders</td>
<td>4</td>
<td>1.5</td>
</tr>
<tr>
<td>Religious sources</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Newspapers</td>
<td>5</td>
<td>1.8</td>
</tr>
<tr>
<td>Health booklets/posters</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

* most cited sources

Table 4 shows that a high proportion of the respondents (60.4%) perceived the hospital/clinic as their most trusted information source; followed by radio (34.9%); health extension worker (28.4%); and family/friends (16.7%) in the descending order.

The gender analysis of perceived information sources below (Table 5) gives some indication of the different patterns between men and women. The aim is to establish whether the differences that are reflected are significant enough as to warrant changes in targeting specific information or change of communication channels to particular gender group (e.g. men or women). The rate of Aids awareness by sex (Table 19) and rate of bilharzia awareness (Table 25) among the sample are statistically tested later in this chapter.
Table 5

<table>
<thead>
<tr>
<th>Source</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital/clinic</td>
<td>15 (5.5)</td>
<td>150 (54.6)</td>
</tr>
<tr>
<td>Radio</td>
<td>59 (21.5)</td>
<td>37 (13.5)</td>
</tr>
<tr>
<td>Health Extension Worker</td>
<td>28 (10.1)</td>
<td>50 (18.1)</td>
</tr>
<tr>
<td>Family/friends</td>
<td>35 (12.7)</td>
<td>11 (4.0)</td>
</tr>
</tbody>
</table>

Some interesting observations are made from the data. Women cited "hospital/clinic" more than men (54.6%) against (5.5%) for men. Men cited "radio" and "family/friends" more than their women-folk, with (21.5%) and (12.7%) against (13.5%) and (4.0%) respectively. Women scored 18.1% for health extension workers against 10.1% for men.

Tables 6 and 7 show the distribution of perceived sources by age and education independent variables respectively. For the purpose of this study the age variable is in two categories: younger age group (15-35 years); and older age group (36 years and above). The education variable is also in two categories: those who have been to school and those who have never been to school.

Table 6

<table>
<thead>
<tr>
<th>Source</th>
<th>Younger</th>
<th>Older</th>
<th>Not stated</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(15-35)</td>
<td>(36+)</td>
<td></td>
</tr>
<tr>
<td>Hospital/clinic</td>
<td>54 (19.6)</td>
<td>69 (25.0)</td>
<td>43 (15.6)</td>
</tr>
<tr>
<td>Radio</td>
<td>58 (21.1)</td>
<td>28 (10.1)</td>
<td>10 (3.6)</td>
</tr>
<tr>
<td>Extension worker</td>
<td>30 (10.9)</td>
<td>33 (12.0)</td>
<td>15 (5.5)</td>
</tr>
<tr>
<td>Family/friends</td>
<td>23 (8.4)</td>
<td>8 (2.9)</td>
<td>15 (5.5)</td>
</tr>
</tbody>
</table>

100
Table 7

Distribution of perceived sources by Education
N=275

<table>
<thead>
<tr>
<th>Source</th>
<th>No school</th>
<th>Been to school</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Hospital/clinic</td>
<td>124 (45.1)</td>
<td>42 (15.3)</td>
</tr>
<tr>
<td>Radio</td>
<td>37 (13.5)</td>
<td>59 (21.5)</td>
</tr>
<tr>
<td>Extension worker</td>
<td>36 (13.1)</td>
<td>41 (14.9)</td>
</tr>
<tr>
<td>Family/friends</td>
<td>28 (10.1)</td>
<td>103 (37.5)</td>
</tr>
</tbody>
</table>

The discussion which follows is based on interpretation and analysis of data on the most cited sources of information on health matters as shown in Tables 3 to 7. More analyses of the data are made to elaborate certain observations. The role of traditional healers as sources of information is discussed in the context of this study.

5.3.1 Hospital/clinic

<table>
<thead>
<tr>
<th>Source</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital/clinic</td>
<td>15 (5.5%)</td>
<td>150 (54.6%)</td>
</tr>
</tbody>
</table>

There were 54.6% of responses from women for this source, against only 5.5% from men. The impression given by most female subjects was that they received advice/information on health matters during their visits to hospital, clinic or health centre. Most of these were of child-bearing age who had or were attending antenatal/postnatal clinics or Under-5 clinic. In that respect, female respondents largely regarded "hospital/clinic" as their sources of information on health matters.
But, what is difficult to determine from this pattern of responses is how much of the information which respondents claim to have obtained during visits to these health units may have covered in terms of content detail or range of health topics. Health care staff in these health units usually work under so much pressure that they cannot afford more time than is necessary to inform patients or guardians about general health matters other than information about their specific illnesses.

On the other hand, mothers with young children or expectant women who regularly attend antenatal and postnatal clinics or bring their children to clinics for immunization are more likely to benefit from health talks which are given by health workers during the clinic session.

The disparity between male and female respondents in the choice of "hospital/clinic" as a source of information on health matters may be attributed to differences in their patterns of health information-seeking behaviour and their frequency of contact with health care workers or of visits to health care units. This assumption is based on the following observations:-

(i) First, it is most common for female members in Africa and Asia to accompany their sick relatives, regardless of the age of the patient, to seek health care, and to act as guardians when the patient is
admitted as an in-patient. Whichever is the case, the common practice is that health care staff communicate information concerning individual patients (diagnosis or treatment) to relatives who are with the patient, rather than to the patients themselves (Freund 1986; Nayar 1987).

(ii) Second, most primary health care programmes in the Third World tend to concentrate on women and children (e.g. maternal and child care, immunization, nutrition and so forth), and because of this reason it is mothers with young children and mothers-to-be who are drawn to health care units where these services are offered.

The low rating of "hospital/clinic" among male subjects (5.5%) compared to women (54.6%) seems to conform with findings of some studies carried out in other parts of the developing world. For instance, Freund (1986) in his Zambian study found out that men were inclined to have less contact with health care institutions compared to women because they tended not to seek health care for most of their ailments until they became very sick.

Several authors of studies on women suggest that women in developing countries are increasingly becoming involved in decision-making on family issues than the case was in the past. If this is the general trend, coupled with the
observation that women are found to have more contact with health care workers and health care institutions compared with their men-folk, then more effort is required to target health information campaigns to men (Hafkin and Bay 1976; Hay and Stichter 1984).

Table 6 showed that more respondents in the older age group (36 years and above) 69 (25.0%) cited this source; while in the younger age group there were 54 (19.6%) respondents. It is noted in the table that 43 (15.6%) respondents did not know their age. This poses a problem. However, for the purpose of the analysis there is the option of sharing the 43 respondents equally between the two age groups; thus, bringing the totals to 27.4% for the younger age groups, and 32.8% for the older age group. Table 7 showed that more respondents who had never been to school cited this source 124 (45.1%), and those who had some schooling, 42 (15.5%). The rates of Aids awareness by age group and educational level are analysed in Tables 20 and 21, while the rates of bilharzia awareness by the same independent variables are analysed in Tables 26 and 27. Statistical tests are applied to all the tables.

5.3.2 Radio

"Radio" ranked second (34.9%) after "hospital/clinic" among the most cited sources of information about health. Those who indicated "radio" were 55% male and 38% female.
In response to the question of whether they owned a radio which was "working" on the day of the interview, 43.6% indicated that they did. The ratio of radio ownership between male and female subjects was 55.4% for men and 36.9% for female subjects. It is possible to assume that among the women who claimed to own a radio some were joint owners with their spouses, although there would have been some who were sole owners.

Based on the numbers of respondents who indicated they owned a radio (43.6%), it can be assumed that the response rate of 34.9% for "radio" as a source of health information is significant. Table 6 showed that 58 (21.6%) respondents in the younger age group cited this source, while there were 28 respondents (10.1%) in the older age group. There were 10 respondents (3.6%) who did not state their age. When the ten are shared equally between the two age groups the results are 63 (22.9%) for the younger age group, and 33 (11.9%) for the older age group.

The analysis of the "radio" source by education (Table 7) shows that 37 (13.5%) respondents with no schooling cited this source; while those who had been to school were 59 (21.5%).

The effects of language (independent language variable) on the recall rate of radio health messages are discussed later (Table 16). Some comparison is made between two local
languages, Mang' anja and Yao.

The researcher had expected that "radio" would rank very low among female subjects because of the tendency among men in Malawi to gather around under a tree or at a particular spot to chat and/or listen to radio for entertainment. The assumption is that in households which own a radio men tend to have more access to the radio than their women-folk, who after fieldwork continue to do housework, go to fetch water or tend to the children.

Mchombu (1991), in his survey on information-seeking patterns of rural Malawians says that people tended to listen to radio for extension/advisory programmes more than they did for entertainment. His results show a mean score of 30% from a combined sample of 528 respondents citing extension/advisory programme, against 24.5% for music and entertainment. This is a puzzling result. It is not clear what Mchombu means by 'extension/advisory programme'. His conclusion that people mostly listen to radio for current affairs or extension/advisory messages does not conform with the evidence of casual observation or with empirical evidence from studies done elsewhere which suggest that people largely listen to radio for entertainment regardless of their socioeconomic status. There is nothing in this study to support Mchombu's conclusions and indeed the implications are quite the opposite of what he seems to suggest.
5.3.3 Health Extension Worker

Although "health extension worker" (28.5%) ranked well below "hospital/clinic" (60.4%) and slightly below "radio" (34.9%), the findings show very little difference between male and female responses for health extension worker as a source of information about health (10.1%) male and (18.1%) female.

The different roles of health extension workers and of health care workers who are based in health care units were explained to the respondents before starting the interview so as to avoid confusion of interpretation of the different roles between field staff and hospital-based staff.

Table 8

Health extension worker source by gender

<table>
<thead>
<tr>
<th>Source</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health extension worker</td>
<td>28 (10.2%)</td>
<td>50 (18.2%)</td>
</tr>
</tbody>
</table>

That there were fewer responses for "health extension worker" than hospital/clinic and radio may signify the fact health extension workers are not in frequent contact with people in rural areas. From talking to people during the survey the researcher got the impression that they were not frequently visited by health extension workers. It was evident that most health extension workers concentrated their efforts in urban areas which, ironically, were better
provided with health facilities.

The fact that less than one third of the sample interviewed perceived health extension workers to be their source of health information should be a matter of concern to those agencies which largely utilize field extension staff to impart health information to the public. On the other hand, this result might be considered good, bearing in mind the fairly communication ineffectiveness of extension workers was caused by lack of training or information support.

5.3.4 Family/friends

"Family/friends" ranked fourth among the most cited sources with 16.7% responses of the total survey population. The gender analysis shows that three times more men than women cited this source.

Table 9

<table>
<thead>
<tr>
<th>Source</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family/friends</td>
<td>35 (12.7%)</td>
<td>11 (4.0%)</td>
</tr>
</tbody>
</table>

This is a striking result. The researcher had expected that more women might have cited family/friends more than they did because in a typical village situation women tend to spend most part of the day together. They would either sit around to share village gossips, plait their hair, pound
maize, or go out to fetch water or firewood. Sometimes they
would eat communally.

Perhaps it was the emphasis put on "trusted/reliable"
sources which may have deterred most women from indicating
family/friends as their source in preference for "radio"
and "hospital/clinic" which are generally perceived to be
authentic sources in studies done elsewhere.

The age distribution (Table 6) shows that 23 (8.4%) younger
age groups cited this source, and 8 (2.9%) from the older
age group. 15 respondents (5.5%) did not know their age.
When the 15 respondents are shared equally between the two
age groups the results are 30.5 (11.2%) for the younger age
group, with 15.5 (5.7%) from the older age group.

The distribution by education (Table 7) shows that 28 (10.1%)
respondents with no schooling; and those with education
were 103 (37.5%).

Bosompra (1989) points out in his study that although his
sample generally indicated to trust health information
disseminated by health workers and through the radio, they
"... had the least trust in what came through 'town criers'
or conversation with family members and friends."
5.3.5 Local leaders

Local leaders ranked very low among the sources of health information, with only 1.5% out of the 275 respondents. The result was striking considering the status and important role of local leaders in their villages, especially village headmen and their counsellors.

It is natural, when you consider it carefully that very few people would readily have thought of a local leader as a potential source of information on a health-related matter. People are more likely to turn to someone with medical background for their health-related enquiries.

The other factor is that in post-independent Malawi the role of chiefs and village headmen has been eroded deliberately in order to give prominence to local political activists who can be instrumental in mobilizing people for political ends. The power and authority which chiefs and village headmen held twenty or thirty years ago is no longer there. It is rare to find a village headman preside over the affairs of his/her subjects without the involvement of a local political party person, who often assumes a much higher profile.

It is interesting to note from Mchombu's study (1991) on information-seeking behaviour of rural people carried out in Malawi how almost similar questions administered to the
same sample yielded different results. When asked to indicate the person they would turn to for advice on issues of general nature, there were 13% responses for local leaders from a survey population of 530 respondents. But, when the same sample was asked to indicate the person they would trust to inform them about what needs to be done in the community or regarding their welfare, a high score of 72.5% was realized.

Although Mchombu's study did not focus on a health topic per se, the impression drawn from his study shows some similarity with findings of this study which suggest that not many people are likely to turn to their local leaders (e.g. village headman) for specialized information like health. On the other hand, local leaders are perceived to be reliable sources of information of general nature within the community: customs and procedures, referral advice, important events, or interpreting government policy.

5.3.6 Comparison with findings of other studies

Some comparison can be made between the findings of this survey and the findings yielded by Bosompra (1989) in his survey on dissemination of health information to rural dwellers in Ghana.
Table 10  Comparative analysis of perceived information sources (Bosompra/Uta)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital/clinic</td>
<td>60.4</td>
<td>28.4</td>
</tr>
<tr>
<td>Health extension worker</td>
<td>22.0</td>
<td>34.9</td>
</tr>
<tr>
<td>Radio</td>
<td>27.5</td>
<td>16.7</td>
</tr>
<tr>
<td>Family/friends</td>
<td>27.8</td>
<td>1.5</td>
</tr>
<tr>
<td>Local leaders</td>
<td>13.7</td>
<td></td>
</tr>
</tbody>
</table>

Bosompra focused his study on four health topics, namely cholera, immunization, oral rehydration therapy (ORT) and Aids. His survey was carried out on two village samples of Vume N=80 and Kpotome N=45. In order to rationalise the comparison, the mean score of the results of Bosompra's study is used since it covered two separate communities.

Although Bosompra's sample is smaller and he did not provide for a possible response of "hospital/clinic" as Uta did for his study, the results of both studies show pretty considerable similarities in terms of the order of perceived sources of health information. It must be pointed out that Bosompra uses the term "town crier" which is not commonly used in Southern Africa. Essentially, town criers function as spokesmen for chiefs or village headmen. The gender distribution is not discussed in this comparison because Bosompra does not provide the relevant analysis. He concurs that announcements made by 'town criers' are often of a general nature rather than topical, and they include matters like dates for health talks, mobile clinic visits,
agricultural field days, or self-help activities.

Some comparisons made between the findings from this study (Uta) in Malawi and from Bosompra's in Ghana show some similarities of health information-seeking patterns among the samples in terms of their perception of what they consider to be reliable or credible sources for information about health matters. If we are to base our assumptions on these comparisons and on the basis of findings from studies done elsewhere, it is feasible to conclude with some degree of confidence that most people perceive the hospital/clinic as the most reliable source of health information, followed by radio, health extension workers, and family/friends in that descending order.

Further comparison is drawn with the findings of a study on "Knowledge, attitudes and beliefs on AIDS" carried out by Kishindo (1989) in Malawi on a sample of 2,000 rural-based respondents.

<table>
<thead>
<tr>
<th>Source</th>
<th>Kishindo (1989) (N=2,000)</th>
<th>Uta (1992) (N=275)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital/clinic</td>
<td>67.8</td>
<td>60.4</td>
</tr>
<tr>
<td>Radio</td>
<td>50.4</td>
<td>34.9</td>
</tr>
<tr>
<td>Health extension workers</td>
<td>18.8</td>
<td>28.4</td>
</tr>
</tbody>
</table>

Table 11 above shows considerable similarities of health information-seeking behaviour patterns between the two
studies. The same pattern is evident when compared to the study by Kishindo (1989) in terms of the order of sources of health information that are perceived by the respective survey populations.

Certain interesting observations can be deduced from the comparative analysis of data yielded by this study and that yielded by Kishindo. First, it is important to note that both studies were carried out within the same broad catchment area, the only major differences are the sample sizes (Uta had 275 respondents while Kishindo had 2,000), and the time difference of three years between them. Bearing these factors in mind, the analysis in Table 11 can be interpreted to show the following trends:

(a) The results of the studies by Kishindo (1989) and Uta (1992) are broadly similar.

(b) There maybe a decline in the proportion of people who perceived "radio" as a source of health information during the three year period between 1989 and 1992 (Kishindo showing 50.4%, and Uta showing 34.9%). If this really is a decline not just a variation between the two studies, it is hard to establish the cause which might have led to the decline in the choice of radio as a health information source.

One possible explanation is that less and less people
had access to radio because of the rising cost of radio and batteries which meant that only a few could afford to own a radio or afford the cost of batteries for most part of the year. For instance, in Malawi the cost of one battery in 1989 was 28 Tambala, and by August 1993 the cost had risen to K3.20 which is eleven times more expensive.

(c) The proportion of people perceiving "health extension workers" as a sources of health information seems to have increased by more than 50% between the period 1989 and 1992. If this is a genuine increase it could signify that either there has been an increase in the numbers of field extension workers or that extension work intervention has been improved considerably at the village level.

Lack of up-to-date statistics of the numbers of health extension workers employed during the period and lack of access to previous schedules of outreach visits by health extension workers to villages in the area make it difficult to establish whether this supposition is true. It could perhaps merely be the cumulative effect of the efforts of extension workers over a long period that have led to more people to cite health extension workers compared to findings in Kishindo's study of three years before.
There is need to explore other options which could lead to improvements in the way health information is disseminated to the public. It has been established that health care institutions (hence, health care staff) are perceived to be valuable sources of health information by the majority of people.

More efforts are required to improve access to radio health messages, most especially in the rural areas. But access to radio alone cannot suffice unless health professionals are brought in to the broadcasting station to design messages and programmes and are involved in radio presentations. Professionals are more likely to present health messages in a balanced and more interesting manner so as to appeal to more people.

Efforts could also be made to upgrade extension work at the village level by providing more training and supervision to the community-based extension personnel. The survey on "Information, education and communication" carried out by the Health Education Unit of the Malawi Ministry of Health in 1991 revealed a considerable lack of health knowledge about certain health topics among health workers. It was also reported that the majority of health workers were not familiar with most of the existing information resources, especially charts, posters, and audio-visual material. Most of the workers covered by the survey were found to face difficulties in operating a simple projector.
Some of the findings yielded by the survey showing lack of sufficient health knowledge among health workers which are compared with levels of health knowledge among the public in Table 12 below.
### Table 12

Comparison of AIDS awareness between health workers and the public

<table>
<thead>
<tr>
<th>Causes</th>
<th>Health worker (N= 98)</th>
<th>Public (N= 87)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq. (%)</td>
<td>Freq. (%)</td>
</tr>
<tr>
<td>HIV</td>
<td>44 (46.3)</td>
<td>14 (16.0)</td>
</tr>
<tr>
<td>Small organisms</td>
<td>24 (25.2)</td>
<td>7 (8.0)</td>
</tr>
<tr>
<td>Don't know</td>
<td>14 (14.7)</td>
<td>31 (35.6)</td>
</tr>
</tbody>
</table>

Mother-to-child mode of transmission 23% 20%

Source: Survey on information, education and communication by Health Education Unit, Malawi Ministry of Health, 1991.

#### 5.3.7 Traditional healers as sources of information

The omission of "traditional healers" among the possible sources of information on health matters in the interview schedule may be viewed as a weakness of this aspect of the study. Provision for traditional healer was considered in the draft questionnaire that was sent to Malawi when government clearance was being sought to carry out the survey in the country. It was suggested during the approval process that since the practice of traditional medicine had not been officially sanctioned and permitted to operate alongside "modern" medicine, it would not be appropriate to include this aspect in the survey.

It should be mentioned that a low score for traditional healers is not an isolated case. Several researchers on the practice of traditional medicine in Africa (Kimani 1981) in Kenya; (Warren 1982) in Ghana for example, say...
that not many people are prepared to admit openly their association with traditional medicine for fear of becoming a laughing stock in their community. Such fear stems from long years of colonial administration, missionaries, educators, post-independent governments, etc, branding the practice of traditional medicine as something evil or some form of witchcraft.

It was not until recently, after World Health Organization accepted the idea of integrating traditional medicine with modern services, that some developing countries, including Malawi, began to show some interest in the activities of local herbalists and traditional healers. Although there is no evidence of total integration of the two practices in any of the developing countries, some countries have so far established registers of such practitioners, e.g. Malawi is reported to have registered 5,000 (Wolff & Malewezi 1989); Zambia 10,000 (Freund 1986); and Zimbabwe is reported to have registered 12,000 (Mutizwa-Mangiza & Helmsing 1989).

In the case of Malawi, the practice of traditional medicine has not been officially endorsed by government in spite of having established a register of practitioners. It is known within the government circles that the majority of people use traditional medicine alongside modern services.

It should be pointed out that the interview schedule used in this survey was not restrictive in terms of the range of
sources that respondents were allowed to choose from. The list of options in the interview schedule was not read out to respondents during the interview, therefore any mention of traditional healer would have been entered against the "other" response box and verified during analysis of the data.

The only major problem encountered by the researcher was to convince respondents that he was not a government agent investigating their health behaviour. It is possible that such suspicions may have deterred some people from saying anything which had to do with traditional medicine.

Nevertheless, in spite of the fact that no mention was made of traditional medicine, the results of this study do not conclusively disprove the general consensus that traditional medicine is used widely in the developing world, most especially in Africa and Asia. (Heggenhauden 1980; Freund 1986; Morris 1986; Golomb 1988).

It is also possible that if a different survey method had been used, say like the 'participant observation' method in which the researcher becomes part of the community being investigated, such suspicion might have been alleviated. This could then have produced different results regarding the attitude of the people towards traditional medicine.
5.4 Access to radio health messages

The investigation further considered the aspects of radio ownership and access to radio health messages among the respondents. It was observed earlier that 'radio' ranked second among the most perceived sources of information on health matters, accounting for 34.9% (Table 5).

Respondents were asked whether they owned a radio which was in working order during the last 24/48 hours up to the time of the interview. Respondents were asked this question and subsequent questions relating to radio health messages in order to find out how much they could recall of the health messages they claimed to have heard during that period of time.

The other reason was to see how their response relates to the hypothesis that "radio health messages are often ignored because they are badly timed or are in a wrong language".

Table 13  Radio Ownership

<table>
<thead>
<tr>
<th>Own radio</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>120</td>
<td>155</td>
</tr>
</tbody>
</table>

N=275

The 120 respondents who claimed to have had a working radio were asked if they were aware of having heard a radio
health message during the last 24/48 hours. 56 respondents indicated they had.

The 56 respondents who indicated that they were aware of having heard a radio health message during that period were further asked if they could remember the topic or content of the message. Respondents were not restricted to give one response for the simple reason that different health messages are broadcast each day. The responses are given in Table 14 below:

Table 14

Recall of radio health messages
N=56

<table>
<thead>
<tr>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cannot remember topic/content</td>
<td>67.9</td>
</tr>
<tr>
<td>Aids (edzi)</td>
<td>44.6</td>
</tr>
<tr>
<td>Bilharzia (likodzo)</td>
<td>0</td>
</tr>
<tr>
<td>Immunization (katemera)</td>
<td>12.5</td>
</tr>
<tr>
<td>Child spacing (kulera)</td>
<td>37.7</td>
</tr>
</tbody>
</table>

The 64 respondents who indicated that they were not aware of having heard any radio health messages during that period were asked to think of reasons, if any, of why they may have missed any messages. Their reasons (alibi) are given in Table 15 below.
Table 15
Reasons given by respondents not aware to have heard any radio health messages
N=64

<table>
<thead>
<tr>
<th>Reason</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at home</td>
<td>51.6</td>
</tr>
<tr>
<td>Entertaining visitors</td>
<td>3.1</td>
</tr>
<tr>
<td>Have no batteries for radio</td>
<td>37.5</td>
</tr>
</tbody>
</table>

Obviously, the problem with this aspect of the question is that the respondents may have heard the message but ignored it or not remembered it or blocked out such message. In any case the problems of timing health radio broadcast and cost of batteries are typical examples of barriers to radio health messages for some sections of the population in developing countries. The language factor can also be a barrier.

Table 16
Effects of language on recall of radio messages

<table>
<thead>
<tr>
<th>Language</th>
<th>Recall</th>
<th>cannot recall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mang'anja</td>
<td>25 (9.1%)</td>
<td>63 (22.9%)</td>
</tr>
<tr>
<td>Yao</td>
<td>63 (22.9%)</td>
<td>100 (36.4%)</td>
</tr>
</tbody>
</table>

A statistical test was applied to Table 16 and there was a significant difference between Mang'anja and Yao speakers in terms of their rate of recall of messages they claimed.
to have heard on the radio. It should be noted that radio broadcasts are in Chichewa and/or English. The possible explanation for the difference could be that Yao people are generally socially adaptable and are keen to learn other languages. The Mang'anja are generally conservative. This implies the need to provide for most local languages on the radio.

Although it is generally agreed that "radio" has greater advantages over the other media or communication channels because of its potential to reach large and spatially dispersed audiences, it is realized that the degree of its potential, as is noted in this study, can be affected by certain characteristics of the targeted audiences, such as socioeconomic background, cultural and linguistic factors.

The timing of radio broadcasts of health messages is also crucial for the target audience. In this case 51.6% of respondents who own a radio missed most of the radio health messages which may have been broadcast during that specific period of time because they were engaged in other things outside the home. Experience has shown that most rural Malawian spend most part of the day away from home, either working in the field, doing self-help projects, collecting firewood or water in the case of women, or collecting materials for houses, grain-stores or animal stalls. Most people are likely to miss health messages aired between 6.00 a.m. and 5.00 p.m.
Table 4 showed that "radio" ranked second among the most cited sources. In spite of radio ranking high, the survey revealed that only 120 respondents actually owned a radio. We know that most people cannot afford to buy a radio, let alone sufficient sets of batteries to run their radios for the whole of the year. It is also likely that a radio may not be a priority expenditure when most people have other very pressing needs. Uledi-Kamanga, et al (1992), in their survey of the Malawi Broadcasting Corporation Radio Listenership, estimated that there were 2,843,000 radio sets in the country. This estimate is based on a sample of 6,427 households of which 23% indicated to own two radios and 9% more than two. For a population of 8.5 million this number is small. It was mentioned earlier that the cost of batteries for radios are too high for most people.

The interesting observation from the data is that among the respondents who claimed to have heard some health messages on the radio 24/48 hours prior to the interview, as many as 67% could not remember what the messages were about. This observation is consistent with the conclusion reached by Atkin (1979), a mass communication researcher, 'that radio and television messages tend to be passively consumed, as a result of which the retention rate is reduced more quickly than information acquired through the print media which allows for active consultation, re-reading and contemplation'.
The fact that 44% of the respondents could remember having heard radio messages about Aids underlines the emphasis which is given to this disease in the country compared to other serious diseases like malaria, measles or diarrhoea. A disease like bilharzia which is said to pose a threat to more than 80% of the Malawian population (Wolff & Malewezi, 1989) is hardly mentioned on the radio.

From the data reviewed so far it is clear that access to radio is greatly reduced down to less that half of the population investigated. Although in theory radio has the advantage of reaching more people it is important to remind ourselves that not every one in developing countries has access to a radio, therefore, exposure to radio health messages must not be taken for granted. India seems to have addressed the problems of access to radio by providing what are popularly known as 'community radios' which are issued to villages for communal listening of developmental issues. Countries like Malawi where only a few people can afford to own a radio or cost of batteries can emulate the example set by India. In that way radio as a health communication channel is likely to make more impact on rural populations.

5.5 Health knowledge

The test was considered appropriate for three reasons:-

(i) To provide a basis on which to measure levels of
awareness about Aids and bilharzia through a systematic investigation;

(ii) To provide a basis against which to measure the impact of the existing information campaigns of the National Bilharzia Control Project and the National Aids Control Programme.

(iii) To identify specific problems associated with the dissemination of Aids and bilharzia information.

It must be pointed out that these two diseases were selected from among ten or so priority diseases that are identified by the Malawi government in order to facilitate a systematic investigation which could be compared with other studies.

It will be remembered that the "split half" technique was used for part of the interview schedule. 136 respondents were asked questions about Aids, while 139 respondents were asked questions about bilharzia.

5.5.1 Responses on Aids

Aids causes

Out of the sample of 136 respondents, 27 gave the "don't know" response to the question, What causes Aids? Therefore the 27 respondents did not respond to subsequent questions
of the interview schedule. These constituted 19.9% of the total sample, and consisted of 7 men and 20 women. The analysis below is based on 109 respondents.

Table 17

(i) Analysis of responses on CAUSES of Aids

N= 109

<table>
<thead>
<tr>
<th>Response</th>
<th>Freq.</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexual promiscuity</td>
<td>104</td>
<td>48</td>
<td>56</td>
</tr>
<tr>
<td>Contaminated blood</td>
<td>14</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Poor sanitation</td>
<td>6</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Shaking hands with sufferer</td>
<td>5</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Sharing needled/razors</td>
<td>28</td>
<td>20</td>
<td>8</td>
</tr>
<tr>
<td>Aids prevention</td>
<td>157</td>
<td>80</td>
<td>77</td>
</tr>
</tbody>
</table>

Aids prevention

From the sample of 136, 10 respondents gave the "Don't know" response to the question, How can you avoid catching Aids? Therefore, the ten respondents did not give any responses to the subsequent questions in the interview schedule. The ten respondents accounted for 7.3% of the total sample and consisted of 2 men and 8 women.
Table 18
(ii) Analysis of responses on PREVENTION of Aids
N= 126

<table>
<thead>
<tr>
<th>Response</th>
<th>Freq.</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoid sexual promiscuity</td>
<td>123</td>
<td>55</td>
<td>68</td>
</tr>
<tr>
<td>Avoid shaking hands with sufferer</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Never share needle/razor</td>
<td>27</td>
<td>18</td>
<td>9</td>
</tr>
<tr>
<td>Avoid blood transfusion</td>
<td>10</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Use condom with casual partners</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>164</td>
<td>77</td>
<td>87</td>
</tr>
</tbody>
</table>

(a) Don't know/not sure response
The disparity between the numbers of respondents who indicated no knowledge of causes (27) and prevention (10) may show some anomaly on face value. But, when these data are looked at in the context of the pattern in which information about Aids is disseminated in Malawi, it becomes clear that because more emphasis is focused on prevention (rather than on causes as much), an increasing number of people were becoming more aware about prevention than the causes. In other words, people are more exposed to information on prevention than on causes.

By simple calculation, the smaller numbers of respondents (10) reveal increasing awareness about the prevention of Aids than the higher figure of 27 who showed themselves to be uncertain about the causes.

This implies that the providers of information about Aids
should consider balancing both the causative and preventive aspects of the disease to assist people to relate the cause with the preventive requirement or to assist people to articulate the relationship between what is said to be the cause and the appropriate preventive action.

(b) Sexual contact response

Under normal circumstances one would expect the response rate for "sexual promiscuity" as a cause to correspond with the response rate for "Avoid sexual promiscuity" as a prevention. Tables 17 and 18 above show that 19 more respondents were aware of the prevention factor than the causative factor. In this case 104 respondents (76.4%) cited sexual promiscuity as a cause, while 123 respondents (90.4%), nineteen more cited restraint from sexual promiscuity as a preventive measure.

This disparity brings us back to the question of which aspect of the information campaign about the disease is emphasised: causes or prevention. In Malawi, the preventive overtones are apparent in most of the health messages both on radio and print material: "Pewani chiwerewere pofuna kulewa matenda a edzi" (Refrain from sexual promiscuity in order to reduce incidences of Aids).
(c) Needles/razor blades response

When the Aids information campaign was launched in Malawi the health messages focused on risk factors of promiscuous sexual behaviours. It was not until 1990 that the risks of use and re-use of unsterilized needles (syringes) and razor blades were included in the information campaign. It was suspected that the risk factors might be high in a number of circumstances:

i) That there may be some quacks giving injections in remote areas where it is hard to track them.

ii) That some traditional healers were likely to use one razor blade on several patients to open up cuts where medicine (usually in powder form) can be administered as a remedy (kutemera mankhwala).

iii) That unsterilized razor blades may be used in circumcision of boys in areas where it is the custom.

iv) That the same needles were used to pierce ears among girls (kuboola mapilikano).

v) That people may be careless in the use of razor blades in barber shops.

The response rate of 28 respondents (20.6%) who cited
"sharing of needles/razor blades" as a potential risk factor and 27 respondents (19.8%) who considered refraining from sharing such implements as a precaution can be interpreted as a positive indication that the message is slowly reaching the people. The fact that the difference between the causative and preventive responses is minimal may be taken to mean a balanced emphasis of the messages in terms of scope of the risk factors and preventive factors.

The rate of 76.4% responses showed that respondents were aware that Aids was transmitted through promiscuous sexual contact, followed by sharing of needles and razor blades with 20.6%; contaminated blood 10.2%; and poor sanitation with 4.4%, in that order.

A high proportion of respondents (19.8%) were not sure or did not know what caused Aids, and 7.3% of the respondents showed some uncertainty as to how the disease can be prevented.

The survey revealed that there was a considerable degree of misconception among the people about what caused Aids. Such misconceptions are universal, even among the educated population. For those who can read there is so much information being generated worldwide about Aids. Indeed there is a lack of consensus about the causes, the extent of the potential danger and availability of remedies. There are cultural and political biases in the literature as well.
Some anxiety was expressed by respondents about blood transfusions. 10.2% of responses cited blood transfusion as a cause, while 7.3% indicated that they would not accept a blood transfusion.

General Observation of Aids Awareness

Further analyses are made to show some relationships between the observed level of Aids awareness and the independent variables of sex, age, and education. Table 19 gives the gender analysis of Aids awareness in order to establish if there are significant differences between men and women.

Table 19

Rate of Aids awareness by gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Correct Response Freq.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>148 (53.8%)</td>
<td>151 (54.9%)</td>
</tr>
</tbody>
</table>

A statistical test was applied to the table above and it showed no significant differences between the two sexes. If anything, there is need to concentrate the efforts of information provision to both sexes, especially men by directing information in work places, mosques, and other places where men frequent.
Table 20

Comparison of AIDS awareness by education

<table>
<thead>
<tr>
<th>Correct Response Freq.</th>
<th>No schooling</th>
<th>With schooling</th>
</tr>
</thead>
<tbody>
<tr>
<td>151 (54.9%)</td>
<td>145 (52.7%)</td>
<td></td>
</tr>
</tbody>
</table>

A statistical test was applied to the table above and it showed no significant differences between the respondents who had some schooling and those who had never been to school. This implies that efforts should continue targeting both the educated and uneducated sections of the population of the country.

Table 21

Comparison of AIDS awareness by Age Group

<table>
<thead>
<tr>
<th>Correct Response Freq.</th>
<th>Young (54.9%)</th>
<th>Old (38.2%)</th>
<th>Age not stated (13.5%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>151</td>
<td>105</td>
<td>37</td>
<td></td>
</tr>
</tbody>
</table>

A statistical test was applied to the data above and it showed significant differences between the young and old on one hand, between the young and those who did not state their age, and between the older groups and those who did not state their age. This implies the need for more effort in the planning of targeting strategies to ensure that all age groups of the population are catered for equally, or to
ensure that specially designed programmes are planned for specific groups according to their needs.

(d) Comparison with findings of other studies

Interesting elements are revealed by this study which show similar tendencies with the findings of other studies. This is so in spite of the fact that the studies referred to did not focus on information dissemination techniques as such. A comparison with the findings by Kishindo (1989) in his survey on "Knowledge, attitudes and beliefs on AIDS" is shown in Table 22 below.

Table 22

Comparative analysis of rate of AIDS awareness (Kishindo/Uta)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) On cause</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not sure/don't know</td>
<td>29.3%</td>
<td>19.8%</td>
</tr>
<tr>
<td>Sexual promiscuity</td>
<td>49.5%</td>
<td>76.4%</td>
</tr>
<tr>
<td>Contaminated blood</td>
<td>3.4%</td>
<td>10.2%</td>
</tr>
<tr>
<td>(b) On prevention</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not sure/don't know</td>
<td>17.8%</td>
<td>7.3%</td>
</tr>
<tr>
<td>Avoid sexual promiscuity</td>
<td>30.6%</td>
<td>90.4%</td>
</tr>
<tr>
<td>No sharing of needles</td>
<td>14.1%</td>
<td>19.8%</td>
</tr>
<tr>
<td>Always use condom with casual partners</td>
<td>4.3%</td>
<td>2.2%</td>
</tr>
</tbody>
</table>

A comparison of data yielded by this study and Kishindo's
brings to light some interesting observations to providers of consumer health information in Malawi. Both studies covered the same broad catchment area except that they were carried out three years apart. Kishindo does not provide a gender analysis and for that reason the comparison does not show the gender differences.

Although the difference of samples sizes between the two studies (Kishindo v Uta) is very wide, the results suggest some improvement in the rate of Aids awareness during the period 1989 and 1992. It is natural, therefore, that the proportion (in percentage terms of the two samples) of respondents who indicated insufficient knowledge of Aids should show a downward trend, which is a positive sign that "over time" information on Aids is filtering through into communities.

The diffusion rate of information about use of condoms into communities generally appears to be slow. The proportion of respondents (in percentage terms of samples) citing condoms as a protection is insignificant in both Kishindo's study (4.3%) in 1989, and Uta's study (2.2%) in 1992. Experience has shown that promotion of condoms in African societies has not been without controversy on both moral and religious grounds.

Bennett (1987) points out that discussion on sexual behaviour, including promotion of the use of condoms, is
generally "...not acceptable for traditional information channels in African or Asian societies". He further points out that in India and Thailand promotion of condoms was well received because it was based on family planning goals rather than sexual behavioural control.

The evidence provided by this study is that AIDS awareness is high due to radio and contact with health institutions. But, there are still some misconceptions among us about the origins and causes of the disease. This implies that those responsible for designing messages should intensify their information campaigns by providing information which gives consistent messages focusing on modes of transmission and prevention.

Further evidence of misconceptions about the disease is shown in the survey by Wilson and others (1989) carried out in three provinces of Zimbabwe among pupils drawn from 12 secondary schools. From a sample of 1,532 pupils, 75% of them cited condom as a reliable protection. But when asked about causes, 40% believed that the disease could be contracted from toilet seats, and 55% cited mosquito bite.

Another example of misconceptions and/or misinformation about the disease is shown in the range of responses from a small sample of 33 respondents carried out by Feldman and others (1987) in Rwanda. 10 (out of 33) who did not mention known modes of transmission mentioned things like, spread
through the air; by loaning clothes; by eating together; and by drinking from the same glass.

Having discussed the scenario based on the findings of this and other studies, it is worth evaluating the causes which may have led to a relatively slow rate of Aids information diffusion into our communities based on personal experience and observations made in the country over the years. The first major factor is that the government was slow to react to the warning from health agencies about the disease. What is not clear is whether the government decided to maintain silence for political reasons or did so to avoid creating scare and panic among the population. The consequence was that it took a long while before health agencies came out in the open with their Aids control programmes.

Second, the older generation were hard to talk to about the disease because they claimed to have experienced a disease with symptoms similar to Aids years before. They were quick to tell health workers that, "there is nothing new you can tell me about this disease, this is "KANYERA" and sufferers would lose weight, appetite, and so forth. At the same time there was outcry when school children were targeted because culture does not allow discussion of sexual matters between older people (health workers) with younger people. Cultural inhibitions have had their effect on the rate of awareness about the disease through interpersonal communication.
Third, AIDS education messages on leaflets and posters in particular give the impression that AIDS can be contracted in a drinking environment (bars, night clubs, shebeens) more than anywhere else. This has given false impression that bar girls are the only people one should be careful about. Indeed there is the problem of prostitution. Some bar and night club owners keep dozens of prostitutes on the pretext that the girls are employed to serve customers. The problem of homosexuality is not depicted at all as a risk factor in the health education programmes. Yet it is known that homosexual tendencies are universal.

Very little effort appears to be made to target children and adults in schools and colleges. Schools, colleges, youth clubs, religious centres and other similar places are potentially suitable areas for packaged information and for displaying posters on AIDS education and control. Out of the numerous posters available in Malawi only one poster was found to depict a school scene where pupils are seen discussing AIDS prevention. The rest of the posters depict a bar scene.

5.5.2 Responses on Bilharzia
Bilharzia control is approached through four avenues:—
(a) Immunization (praziquentel);
(b) Snail control (spraying, molluscicides);
(c) Treatment (chemotherapy); and
(d) Health education.
Health education emphasises teaching of human behaviour in the use of water, and risks of contact with water in ponds, marshes, swamps and rivers where snails which are hosts of bilharzia parasites thrive. It also emphasises use of latrines, risks of urinating in water sources and risks of drinking unboiled water from rivers or shallow wells.

A sample of 139 respondents were asked questions relating to causes and prevention of bilharzia. Respondents were asked if they knew what caused bilharzia. This question was reinforced by a follow up question which went as follows: "under what circumstances are you likely to contract bilharzia" (Kodi mungagwire matenda a likodzo m'njira yanji?). The latter part of the question was meant to remind respondents about risks of contracting bilharzia through water contact by swimming in ponds or stagnant water or standing in ponds or rivers when fishing.

The water contact responses which may appear to readers as preventive measures are highlighted below in Table 23 to distinguish them from the rest of the responses.

Bilharzia causes
From the sample of 139, 30 respondents gave the "Don't know" response to the question, What causes bilharzia? Therefore, they did not give responses to the subsequent questions in the interview schedule. The analysis below is based on 109 respondents.
Table 23

(i) Analysis of responses of CAUSES of Bilharzia

N= 109

<table>
<thead>
<tr>
<th>Response</th>
<th>Freq.</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drinking unboiled water</td>
<td>77</td>
<td>26</td>
<td>51</td>
</tr>
<tr>
<td>Swimming in ponds/stagnant water</td>
<td>28</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Urine-contaminated water</td>
<td>22</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Stepping in ponds/river with bare feet</td>
<td>22</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Poor sanitation</td>
<td>19</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>Bewitched</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Hereditary causes</td>
<td>2</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Other (malnutrition)</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>172</td>
<td>63</td>
<td>109</td>
</tr>
</tbody>
</table>

Bilharzia prevention

From the sample of 139, 25 respondents gave the "Don't know" response to the question, How can you avoid catching bilharzia? These respondents did not give other responses. The 25 respondents represented 17.9% of the total sample, and there were 5 male and 20 women. The analysis below is based on 114 respondents.
Table 24

(ii) Analysis of responses on PREVENTION of Bilharzia

N = 139

<table>
<thead>
<tr>
<th>Response</th>
<th>Freq.</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boil drinking water</td>
<td>94</td>
<td>34</td>
<td>60</td>
</tr>
<tr>
<td>Use latrines</td>
<td>24</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>Refrain from urinating in water source</td>
<td>28</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Use pail when washing in river</td>
<td>9</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Never step in ponds/river with bare feet</td>
<td>11</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Other (eating well)</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>167</td>
<td>61</td>
<td>106</td>
</tr>
</tbody>
</table>

(a) Don't know/not sure response

It is observed that 30 respondents were not sure about the causes of bilharzia, and 25 were not sure about how the disease could be prevented. The assumption is that the "don't knows" would be equal. It is difficult to establish the reason for the discrepancy.

As high as 21.6% of the responses show lack of knowledge or doubt about what causes bilharzia. Further analysis shows a cumulative 35.5% of responses associating the disease with water contact (i.e. during swimming 20.1%; walking in ponds or rivers with bare feet 15.9%).

(b) Water Contact

In spite of more respondents associating bilharzia with water contact (35.9%), none made any mention of snails
which are intermediary hosts of bilharzia parasites. Here we are faced with the problem of visual perception. Usually, snails which are drawn on posters for teaching the public about bilharzia appear to be much bigger, and often of a different colour, than the snails we are used to seeing in our rivers or ponds.

People are encouraged to use latrines in order to minimize the spread of bilharzia parasites by infected people. The essential thing here is that use of latrines is an integral part of general sanitation. The difficulty lies with how to dissuade people from washing in slow running rivers without using pails to scoop the water, or standing in rivers/ponds with bare feet when fishing. The problem is compounded by several factors: general lack of piped water and facilities for washing in villages; most people cannot afford the cost of water-proof boots or proper angling kits both of which are essential tools for fishing.

This implies that any attempt to persuade people to adopt certain behavioural change must be accompanied by some infrastructural and economic considerations as discussed above.

(c) Boiling of Drinking Water

It was expected that more respondents would indicate drinking of unboiled water as the cause (55.3%) and the
need to boil drinking water as a precaution (67.6%) for the simple reason that boiling of drinking water is emphasised in nearly all health talks on communicable diseases. It is almost certain that if the same sample was asked a question about causes and prevention of a disease like diarrhoea something approaching 100% of the respondents would have made reference to the need to boil water.

For providers of health information this implies the need to improve methods of disseminating information about safe water: boiling of drinking water, caring for wells, use of pails, and snail control, most of which might be ignored in a western society where piped water, water treatment works and sewerage services are common.

General Observations on Bilharzia Awareness
Further analyses are made to relate the observed level of bilharzia awareness with the independent variables of sex, age and education.
Table 25

Rate of Bilharzia awareness by gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responses</td>
<td>120 (43.6%)</td>
<td>195 (70.5%)</td>
</tr>
</tbody>
</table>

A statistical test was applied to Table 25 and it showed a significant difference between the two groups. This implies the need to balance the targeting of bilharzia information to both sexes. Men generally seem inadequately informed.

Table 26

Comparison of Rate of Bilharzia awareness by education

<table>
<thead>
<tr>
<th>Correct Response Freq.</th>
<th>No schooling</th>
<th>With schooling</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>92 (33.5%)</td>
<td>99 (36%)</td>
</tr>
</tbody>
</table>

A statistical test was applied to the data above and it showed no significant differences in the rate of awareness between respondents who had some schooling and those who had never been to school. This implies that bilharzia information is filtering into the community systematically covering both the educated and the uneducated audiences.
Table 27

Comparison of Rate of Bilharzia Awareness by Age

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Count (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Young</td>
<td>96 (34.9%)</td>
</tr>
<tr>
<td>Old</td>
<td>114 (41.5%)</td>
</tr>
<tr>
<td>Age not stated</td>
<td>58 (21.1%)</td>
</tr>
</tbody>
</table>

A statistical test was done on the data above and it showed there were no significant differences between the younger age groups and the older age group on the one hand, and between the younger age group and those who did not state their age, and between the older age group and those who did not state their age. This could imply that bilharzia information is filtering into the community systematically covering all age groups.

(e) Comparison with other studies

Table 28 below shows a comparative analysis of three data sets yielded in this study and two other studies carried out in Southern Africa.
Table 28

Comparative analysis of bilharzia awareness (Kamwendo/Ndamba/Uta)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N=60</td>
<td></td>
<td>N=439</td>
<td>N=139</td>
</tr>
<tr>
<td>Not sure/don’t know</td>
<td>40.0</td>
<td>34.2</td>
<td>21.6</td>
</tr>
<tr>
<td>Water contact</td>
<td>60.0</td>
<td>78.9</td>
<td>51.7</td>
</tr>
<tr>
<td>Sanitation (toilets)</td>
<td>-</td>
<td>10.0</td>
<td>-</td>
</tr>
<tr>
<td>Snails</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Obviously, Kamwendo's sample is far too small and therefore any attempt to interpret the data yielded by her study or compare her findings with findings of other studies must be treated with caution. In spite of this weakness, the data yielded by Ndamba and others (1989) do provide some basis on which to make rational comparisons in our assessment of the general pattern.

Ndamba mentions that bilharzia affects more than 2 million people in Zimbabwe. We noted earlier that the disease poses a threat to more than 80% of the 8.5 million population of Malawi (Wolff & Malewezi 1989).

The general picture portrayed by the data shows that a high proportion of the respondents lacked sufficient knowledge or had some doubts about the causes of bilharzia (Kamwendo 1986 (40%); Ndamba 1989 (34.2%); and Uta 1992 (21.6%).

Both Kamwendo (1986) and Ndamba (1989) recommend that more
effort is required to improve health information campaign programmes relating to bilharzia, especially the role of snails as intermediary hosts of bilharzia parasites.

In another study carried out in Zimbabwe by Chandiwana and others (1991) they found out that 'although the people probably observed snail hosts in their natural streams they visited, in most cases they were unaware that snails played an essential role in the transmission process'.

All the three studies compared above point out to the need to enhance information provision on bilharzia, especially information on the involvement of snails. Generally, people are found not to be able to articulate the link between the disease and the snails which are found in their rivers and ponds.

We know from experience that bilharzia will continue to be endemic in Malawi because most of the development projects, like irrigation, dams, and waste damping grounds create suitable environment for bilharzia parasites to thrive. Areas around Lake Malawi, Lake Chilwa and Lake Malombe are natural habitats for snails. It is unfortunate that in most cases planners of these projects choose to ignore their social implications for the people in the surrounding area.

This is particularly important because the whole of the African Rift Valley shows this problem and in addition
there are areas around the Aswan High Dam in Egypt, the Akosombo Dam on Volta River in Ghana, the Kariba Dam in Zimbabwe and numerous others on the African continent (Farley 1991).

5.3 Comparison between Aids and Bilharzia awareness

A comparison of the levels of Aids and bilharzia awareness in the survey population is necessary for the purpose of assessing which information episode is more effective than the other. Table 29 below shows a comparative analysis of the rates of awareness based on the respondents' answers.

Table 29

<table>
<thead>
<tr>
<th>Disease</th>
<th>Aids</th>
<th>Bilharzia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responses</td>
<td>299</td>
<td>315</td>
</tr>
</tbody>
</table>

A statistical test was done to the data above and it showed that there was no significant difference between the levels of Aids awareness and bilharzia awareness in the survey population. There are two possible explanations for this result. Both the Aids Control Programme and the Bilharzia Control Programme are well resourced and are supported by external agencies in the form of personnel, equipment, and vehicles. Their intervention strategies seem to be well planned and executed. They use both the conventional and traditional oral communication methods. From that respect
it could be said that both programmes are making an impact on the nation.

It was observed in Chapter 3 that almost all the agencies involved in providing health information in Malawi include information on Aids. Among these are Unicef, City Health Departments of Lilongwe and Mzuzu, the Christian Health Association of Malawi and others. It was also noted that radio coverage of Aids information far surpasses the other serious diseases.

The survey area for this study falls within the designated Bilharzia Control Programme area. This could imply that the bilharzia information is filtering into the community at a good rate. The efforts should continue to be made to ensure that the public are adequately informed about bilharzia, Aids, as well as the other prevalent diseases in Malawi.
Chapter Six

CONCLUSION

6.1 Purpose

The research investigated the general patterns of health communication to rural population in developing countries and the underlying problems. Malawi was the main focus of the study, and for comparative purposes consideration was also given to developments in several countries in Africa and Asia.

Health reports and KAP (knowledge, attitudes and practices) studies of developing countries like Malawi indicate that in spite of government efforts to raise public awareness about health matters among the populations the majority of the people are still inadequately informed about the most prevalent diseases. As a result most people are found to be unable to participate fully in primary health care activities.

Two parallel surveys were carried out in Malawi. The first was conducted to a sample of health information providers. The aim was to obtain some baseline information about the operations of the agencies which provide information: their aim for providing information, the information they expect people to know, target audiences, communication channels,
and range of information resources. The second survey was conducted to a random sample of the rural population to find out from them which sources they perceived to be trusted for information about health matters. In addition the same sample was used for a health knowledge test to find out how much the respondents knew about AIDS and bilharzia.

6.2 Findings

The study revealed that provision of information to the public was uncoordinated and as a result information did not always filter into the population in a systematic manner. The agencies which provided information seemed to be competing with each other and sometimes gave conflicting messages which often lead to confusion among the people.

The four sources which were perceived by most of the survey population of 275 to be trusted were, (a) health care units (hospital/clinic/health centre) with 60.4%; (b) radio with 34.9%; (c) health extension workers with 28.4%; and (d) relatives and friends with 16.7%. This pattern and order of perceived information sources among the rural populations is consistent with that shown in studies by Bosompra (1989) in Ghana, and Kishindo (1989) in Malawi.

Although these sources were cited by most respondents, they were each found to have some limitations. Usually hospital
staff work under immense pressure due to overcrowding and shortage of manpower and as such they are less likely to spend more time than is necessary to inform patients and/or patients' guardians about general health matters except information about their particular illness. It is observed that it is mostly mothers with young children and expectant women who benefit more from this source of information during antenatal, postnatal, and under-5 clinic sessions. Men and older children are found to benefit less from this sources because of their tendency not to seek treatment until they get very sick.

Health extension workers were generally found to lack basic communication skills and information support. Those based in rural areas felt isolated and received less supervision. These results lead us to conclude that the effectiveness of health extension workers was affected by these problems. The public was therefore not getting the maximum benefit from this information source.

Although 16.7% responses indicated the relatives/friends source there are questions about the authenticity of this informal source compared to sources like health care staff or radio. At the same time we are aware of the difficulty of trying to correct information spread through informal sources. Bosompra (1989) reached the conclusion that most people did not perceive information obtained from relatives or friends to be authentic. When faced with the situation
where wrong information is circulating in a community, say Aids can be transmitted by shaking hands with a sufferer, the most that can be done is to convey the correct message forcefully using the conventional methods, opinion leaders and influential people in the community.

In spite of radio being the second most cited source with 34.9%, its impact was found to be curtailed by bad timing of broadcasts, wrong language for the large section of the population, poor presentation of messages by staff with no medical training, and low radio ownership. The results show that although radio has the potential to reach more people who are spatially distributed, its effectiveness depends on the factors that are mentioned above. The fact that Radio Malawi broadcasts only in Chichewa and English deprived sections of the population whose mother tongue is not Chichewa or English access to most health messages. Some of the effects were reflected in the study when 67.9% of the respondents indicated that they could not recall content of health messages they had heard 48 hours prior to being interviewed by the researcher. Airtime allocated for health messages was found to be only 12 hours per week compared to more than 40 hours per week for political messages and songs. Unless adequate time was allocated and presentation of messages was improved, delivery of health messages by radio is likely to have a lasting impact on the population.

The health knowledge test revealed that Aids awareness was
generally high among the population due to intensive health education intervention. Bilharzia awareness was found to be high among the population living within the designated bilharzia control areas. A statistical test showed that there were no significant differences in the levels of Aids and bilharzia awareness among the survey population. This does not suggest that there should be complacency. It was found that most people lacked sufficient knowledge about the causes and modes of transmission of both diseases.

It gives concern to observe that information campaign efforts are concentrated on Aids at the expense of the other equally serious diseases like malaria, pneumonia, measles, and diarrhoea. When asked to recall radio health messages they may have heard recently the respondents gave Aids 44.6%; child spacing 37.7%; and immunization 12.5%. Bilharzia had zero response and yet it is said to pose a threat to over 80% of the Malawian population.

The findings of the study tell us a number of things. Most of the information which is disseminated by various agencies is not reaching the majority of the population. The little information which is filtering through is not utilized fully because either it is in a form that most people cannot use it, it is in a wrong language for some sections of the population, or it is not readily accessible to most people. Because of poor planning and lack of coordination health information is not filtering into the
communities in a systematic manner. Sometimes conflicting messages are given. Naturally most people are left confused, wondering which information to take seriously and which one to ignore or which of the different extension workers is saying the right thing.

6.3 Generalizations

The findings of the study lead us to conclude that the system of communicating health information to the public is far from perfect. It is ineffective and inefficient. These generalizations are based on the evidence gathered and the observations made in the course of this study which show deficiencies in the following areas:

(a) Distribution of information resources to various parts of the country, especially rural areas, leaves much to be desired. Bottlenecks are at offices of District Health Inspectors from where further distribution of the materials to villages and to community-based health extension workers and voluntary health workers is almost nil. In the course of time some materials disappear and can be found in villages being used for wrapping or rolling tobacco.

(b) Much of the print-dominated information is of little use to the population which is predominantly illiterate. Use of audio-visual materials, posters or
information packaged in forms which people who cannot read or who have less education is very minimal.

(c) There is no provision for access points where members of the public can reach or obtain information whenever they have the need. There are not many who can get the courage to go to a health care unit (hospital, clinic) to ask for leaflets or indeed to ask for information on a particular health problem.

(d) There is over provision of Aids information. Those who can read are flooded with numerous bits of information (leaflets, flyers, etc) coming from different agencies and often containing inconsistent factual information.

(e) There is over emphasis on Aids to the extent that the other serious diseases like malaria, measles, pneumonia, diarrhoea, bilharzia, and others are hardly heard about on the radio or covered adequately by health talks or the print media. The only few on-going health education programmes not related to Aids are those provided or wholly funded by external agencies, e.g. the extended immunization programme (EPI), the Malaria Control Programme, and Maternal and Child Health programme (MHC).

(f) Men and children of school going age are not targeted by most health information programmes as adequately as
mothers and young children are. Schools, youth clubs, mosques, work places and other places where these social groups gather often, are hardly targeted for information on health.

(g) Most health extension workers are not trained in communication skills or in the handling of information resources. Most lack sufficient exposure to the range of information resources that are available in the country.

(h) Hardly much effort was made to develop an inventory of the available grey health literature. Lack of such a tool makes duplication inevitable.

6.4 Towards improvements

Government should make it a priority to improve the system of conveying health information to the public and should focus on the need for coordination of all activities in this area of health care. Information provision should be viewed as a strategy for implementing health education programmes rather than as a tool for assisting health education programmes. Priorities should be directed towards the upgrading of the Health Education Unit regarding its status within the Ministry of Health, and the Unit should be provided with the necessary resources and manpower, especially experts in health education, mass communication,
information work, adult education, and art and design, to name a few.

There is need for research into the information needs and the information-seeking behaviour of the population or segments of the population for whom specialised information campaigns are planned. This requires the expertise of information workers, mass communication experts as well as health educators whose expertise in designing and defining of disease control objectives and goals is essential.

Government should make it a priority to make use of more audio-visual materials and posters for communicating health information to the public for the simple reason that the majority of the population cannot read and because of language differences. Among such priorities some attention should be given to the need to consolidate and repackage some information into forms which all social groups of the population can use it effectively, i.e. both the educated and the uneducated. The problems of plural languages should not be ignored.

As part of the improvement programme some effort should be directed towards strengthening health extension work. Such effort should include better training for extension workers in communication skills, interpreting health messages and in the handling of information resources. Such training should also be extended to volunteer health workers like
the traditional birth attendants, village health workers, and members of village health committees. Bearing in mind that health extension workers are the backbone of primary health care in most of the developing countries it is only appropriate that they should be well trained in the work they do and they should be given the necessary information support. They should be supervised regularly and motivated.

Marketing of health information is essential not only for making people aware of the available information but also for ensuring that the available information is used by the targeted populations. Marketing strategies should include regular studies of information needs and studies to find out what information or knowledge different communities already have and how the proposed information intervention is going to enhance the information or knowledge levels of the community.

It is possible that effective health communication can be achieved only if the government and the agencies involved gave priority to the development of appropriate environment among which are the need to coordinate all activities of information provision: planning, production of resources, and dissemination. That would require the government to commit adequate funding for the infrastructure, resources and trained manpower.

The government should give priority to improving the
dissemination methods for conveying health messages to rural populations. The communications channels that are employed should be those that the population is familiar with or has experience with. Like all public services, the methods of disseminating health information should be carefully planned, coordinated and executed. Improvements of this nature might make it possible to reach more people, especially those who live in isolated areas of the country.
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VOOS, H., 1969. Information needs in urban areas; a summary of research in methodology. Rutgers: Rutgers University Press.


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SURVEY OF INFORMATION PROVIDERS

Section A

Particulars of Agency

Name of Agency: .................................................................
.................................................................

Title of Programme(s): ..........................................................
.............................................................
.............................................................

Disease(s) covered: (a) ........................................................
.................................................................

(b) .................................................................

(c) .................................................................

(d) .................................................................

(e) .................................................................
Section B

1. What are the objectives of your organization for disseminating health education information to the public? Explain.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

2. What information do you expect people to know about the disease(s) covered by your programme?

(a) Disease: ............................................

________________________________________________________________________

________________________________________________________________________

(b) Disease: ............................................

________________________________________________________________________

________________________________________________________________________

(c) Disease: ............................................

________________________________________________________________________

________________________________________________________________________

(d) Disease: ............................................

________________________________________________________________________

________________________________________________________________________

3. Are the information materials you use pre-tested before they are disseminated to the public?

Yes ( ) No ( )

3.1 If your answer to Question 3 is No, explain why you have not been able to pre-test the materials.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
4. In which language(s) are the materials you produce/disseminate? Tick where appropriate.

Chichewa ( )
English ( )
Other: specify: ( )

5. In what form(s) is information disseminated? Tick where appropriate.

Health talks ( )
Radio ( )
Booklets/leaflets ( )
Posters ( )
Films ( )
Audio-tapes ( )
Other: specify: ( )

6. How long has your agency been disseminating information on the following diseases? Tick where appropriate.

<table>
<thead>
<tr>
<th>Disease</th>
<th>0-1 yr</th>
<th>1-5 yrs</th>
<th>5+yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bilharzia</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>AIDS</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>Immunization</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>Child nutrition</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>Other: specify:</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
</tbody>
</table>

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Section C

1. When did you last evaluate your health information campaign programme? Tick where appropriate.

Last 12 months ( )
Last 5 years ( )
Never ( )

1.1 If your answer to Question 1 is Never, is there any special reason why your information system has not been evaluated? Explain.

...........................................................................................................
...........................................................................................................

2. Does your agency cooperate in any way with other agencies involved in similar work?

Yes ( ) No ( )

2.1 If your answer to Question 2 is Yes, name the agencies you cooperate with.

(a) ..................................................
(b) ..................................................
(c) ..................................................
(d) ..................................................
(e) ..................................................
(f) ..................................................
(g) ..................................................
(h) ..................................................
(i) ..................................................
(j) ..................................................

2.2. If your answer to Question 2 is No, what are the reasons for not cooperating with the other agencies? Tick where appropriate.

Lack of coordination mechanism ( )
Difficulty of liaising with others ( )
Have not considered that possibility ( )
Other reasons: specify

...........................................................................................................
...........................................................................................................
...........................................................................................................

Thank you for your cooperation in answering these questions
SURVEY ON HEALTH INFORMATION-SEEKING BEHAVIOUR
OF A RANDOM SAMPLE OF RURAL MALAWIANS

(Administered orally in Chichewa)

Section A: Particulars of Respondents

<table>
<thead>
<tr>
<th>SEX:</th>
<th>Male ( )</th>
<th>Female ( )</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE:</td>
<td>15-25 ( )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>26-35 ( )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>36-45 ( )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>46-55 ( )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>56 ( )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not stated ( )</td>
<td></td>
</tr>
<tr>
<td>EDUCATION:</td>
<td>No schooling ( )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Up to Std 7 ( )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Std 8 (old 6) ( )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Secondary + ( )</td>
<td></td>
</tr>
<tr>
<td>LANGUAGE:</td>
<td>Mang'anja ( )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yao ( )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lomwe ( )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other: specify: ( )</td>
<td></td>
</tr>
</tbody>
</table>

Village:--------------------------

T.A.--------------------------

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Section B: Perceived information sources

1. What are your sources of health information?  
(Kodi nkhani za umoyo mumazimva kuchokera kuti?)

- Hospital/clinic/health centre  
  (Chipatala/kiliniki)

- Health extension workers  
  (Wogwira ntchito za umoyo)

- Agric. extension workers  
  (Alangizi a zaulimi)

- Community development workers  
  (Alangizi a chitukuko cham'midzi)

- Adult literacy schools  
  (Sukulu za kwacha)

- Radio  
  (Wailesi)

- Family members/friends  
  (Abale/anzanu)

- Local leaders  
  (Atsogoleri m'midzi)

- Religious agencies  
  (Malo a chipembedzo)

- Newspapers  
  (Manyuzi)

- Health booklets/posters  
  (Timabuku ta umoyo/zokhoma za umoyo)

  Other: specify:-  
  (M'njira zina: muzitchule)

  ----------------------------------
  ----------------------------------
  ----------------------------------

2. Do you have a working radio?  
(Muli ndi wailesi?)

  Yes ( )  No ( )

2.1 Did you hear any radio health message yesterday?  
(Munamva uthenga wa za umoyo pa wailesi dzulo?)

  Yes ( )  No ( )
2.2 If your answer to Question 2.1 is Yes can you recall what the messages was about?
(Ngati mwavomera funso liri pamwambali (2.1), nanga uthenga wake unali wachiyani?)

Cannot remember (Sindingakumbukire)

Aids (Edzi)

Bilharzia (likodzo)

Immunization (katemera)

Child spacing (kulera)

Other: specify:--
(Njira zina: muzitchule)
_______________________( )
_______________________( )
_______________________( )
_______________________( )

2.3 If your answer to Question 2.1 is No, can you think of any reason why you may have missed radio messages?
(Ngati mwakana kunso liri pə 2.1, nanga mudalephera bwanji kumvera mauthenga a umoyo pa wailesi?)

Was not at home (ndinachoka)

Had visitors (Ndinalandira alendo)

Was asleep (Ndinagona)

Poor reception (Wailesi simamveka bwino)

No batteries (Ndinalibe mabatire)

Other: specify:--
(Njira zina: muzitchule)
_______________________( )
_______________________( )
_______________________( )
_______________________( )
Section Cl: Health Knowledge (Aids)

1. Have you heard about AIDS? (Mudamva za matenda a Edzi?)
   Yes ( )   No ( )

2. What are the causes of AIDS? (Kodi magweru a Edzi ndi chiyani?)
   - No idea (Sindikudziwa)
   - Sexual promiscuity (Uhule/chiwerewere)
   - Contaminated blood (Magazi okhala ndi tizirombo)
   - Poor sanitation (Mkhalidwe wopanda ukhondo)
   - Shaking hands with sufferer (Kugwirana dzanja ndi wodwala)
   - Sharing needles/razor blades (Kubwerekana jakisoni/lumo)
   - Sharing clothes (Kuvalirana zovala)
   - Other: specify:- (Njira zina: muzitchule)

3. How can AIDS be prevented? (Tangapewe bwanji Edzi?)
   - No idea (Sindikudziwa)
   - Avoid sexual promiscuity (Kuleka chiwerewere)
   - Avoid shaking hands with sufferer (Osapatsana moni ndi wodwala)
   - Never share needles/razor blades (Osabwerekana jakisoni/lumo)
   - Never share clothes (Osavalirana zovala)
   - Never donate/receive blood ( )

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Always use condom/diaphragm ( )
(kumavala kondomu/dayafaramu)

Other: specify:-
(njira zina: muzitchule)
--------------------------------- ( )
--------------------------------- ( )
--------------------------------- ( )
Section C2: Health Knowledge (Bilharzia)

1. Have you heard about Bilharzia?  Yes ( ) No ( )
(Mudamva za matenda a likodzo?)

2. What causes bilharzia?
(Kodi magwero a nthenda ya likodzo ndi chiani?)

- No idea (Sindikudziwa)
- Drinking dirty water (Kumwa madzi woipa)
- Swimming in stagnant water (Kusambira mu mzithaphwi)
- Urine-contaminated water (Madzi woipa ndi mikodzo)
- Stepping in stagnant water (Kuponda m'madzi wosayenda)
- Poor sanitation (Mkhalidwe wopanda ukhondo)
- Bewitched (Kulodzedwa/ ufiti)
- Born with it (hereditary) (Chibadwa)

Other: specify:-
(Njira zina: muzitchule)

---------------------------( )
---------------------------( )
---------------------------( )

3. How can bilharzia be prevented?
(Tingalewe bwanji matenda a likodzo?)

- No idea (Sindikudziwa)
- Boil drinking water (Kuphitsa madzi akumwa)
- Use latrines (Kugwiritsa nchito zimbudzi)
- Never urinate in river/ponds (Osakodzera mu mtsinje kapena mu zithaphwi)
- Wash in river by using pail

17.9
(Kugwiritsa chidebe posamba ndi kuchapa mu mtsinje)

Never step in river/pond when fishing ( )
(Osaponda m'madzi powedza)

Other: specify:-
(Njira zina: muzitchule)
-----------------------------( )
-----------------------------( )
-----------------------------( )